OUR MISSION

Honor the Heroes of the Game

Preserve its History

Promote its Values

Celebrate Excellence EVERYWHERE
2015-2016 Educational Advisory Panel
<table>
<thead>
<tr>
<th>Lesson</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canton, Ohio and the National Football</td>
<td>FF 1</td>
</tr>
<tr>
<td>League</td>
<td></td>
</tr>
<tr>
<td>Who Was Jim Thorpe?</td>
<td>FF 2</td>
</tr>
<tr>
<td>Gridiron Terminology</td>
<td>FF 3</td>
</tr>
<tr>
<td>National Football League</td>
<td>FF 4-5</td>
</tr>
<tr>
<td>2014 Team Colors</td>
<td>FF 6</td>
</tr>
<tr>
<td>Football Facts</td>
<td>FF 7</td>
</tr>
<tr>
<td>2014 NFL Schedule</td>
<td>FF 8-9</td>
</tr>
<tr>
<td>Football Bingo</td>
<td>FF 10-11</td>
</tr>
<tr>
<td>Touchdown Trivia</td>
<td>FF 12</td>
</tr>
<tr>
<td>Answer Key</td>
<td>FF 13</td>
</tr>
</tbody>
</table>
Each year, approximately 200,000 fans from all over the world visit the Pro Football Hall of Fame in Canton, Ohio. The museum’s guest register reveals that in a year’s time, visitors come from all fifty states and from sixty to seventy foreign countries.

Many wonder why the Hall of Fame is located in this small northeast Ohio city. Often, museums are built in locations that have historical significance to their subject matter. The Pro Football Hall of Fame is no exception. Canton’s ties to pro football began long before the Hall of Fame was built in 1963. On September 17, 1920, a meeting was held in an automobile showroom in downtown Canton. It was at this time that the American Professional Football Association was formed. Two years later, the league changed its name to the National Football League.

Today, fans follow teams like the Dallas Cowboys, San Francisco 49ers, and the Miami Dolphins. But, in 1920, none of those teams existed. Rather, the NFL had teams like the Columbus Panhandles, Dayton Triangles, Rochester Jeffersons, and the Canton Bulldogs.

The Canton Bulldogs were the first real pro football powerhouse. They won the NFL title in 1922 and 1923 making them the league’s first two-time champion.

They were a strong team even before the NFL began because of their star player Jim Thorpe. Thorpe, a Native American Indian, was a tremendous athlete. Not only did he play pro football but he played pro baseball and won two gold medals in the 1912 Olympic Games. Even today, he is considered to be one of the world’s greatest athletes of all time.

While the Bulldogs are no longer around, pro football remembers its early days in Canton, Ohio. Visitors, young and old, enjoy the story of pro football’s history in the city where the NFL began!

The Legendary Jim Thorpe
Who Was Jim Thorpe?

It seems that whenever stories are written about an all-time pro football great, Jim Thorpe’s name comes up. Jim Thorpe was born in a one-room cabin in Prague, Oklahoma, on May 28, 1888. Though he had some Irish and French blood, he was mostly of Sac and Fox Indian heritage. In fact, his Indian name was Wa-Tho-Huk, which means Bright Path.

Though football was his first love, he gained his greatest fame as a track star, winning the decathlon and pentathlon events in the 1912 Olympics, held in Stockholm, Sweden. King Gustav V of Sweden told Thorpe as he presented him with his medals, “Sir, you are the greatest athlete in the world.” But soon afterward, Thorpe was stripped of his records and medals when it was learned that he had played minor league baseball for money in 1911. In 1984 the Olympic Committee decided that this was an unfair interpretation of the then Olympic rules and restored his records and returned his medals to his family.

In 1915, Thorpe’s great abilities and fame led Jack Cusack to offer him $250 a game to play football for the Canton Bulldogs. While that may not sound like much, it was twice as much as most players were making back then. Even Cusack’s friends warned him that he was paying Thorpe too much. Just the same, Thorpe was everything Cusack had hoped he would be -- a great player and a gate attraction. After missing the first two games of the 1916 season because he was playing pro baseball for the New York Giants, Thorpe joined the Canton squad. With Jim playing halfback, the Bulldogs were unofficial World Champions in 1916, 1917 and 1919. (The Bulldogs’ championships are said to be unofficial since no organized pro league existed at the time.)

Many old-timers who actually played against Thorpe claimed he was the toughest man ever to play the game. Legend says that Jim would drop-kick a field goal from the 50-yard line, then turn and kick another 50-yarder in the opposite direction with perfect results-just to show off. Others say he could punt a ball the length of the field. Both are probably exaggerations. In any case, there is no doubt that Thorpe was a superb athlete. All accounts suggest he could run with speed and bruising power. He could pass and catch passes with the best. He could kick with accuracy and strength. And, of course, as players did back then, he played defense too.

By the time the NFL was organized in 1920, the thirty-two-year-old Thorpe, who was already past his athletic prime, was unanimously voted the league’s charter president. However, he managed to play eight NFL seasons with six different teams and his gate appeal continued. Though at times he sparkled like the Thorpe of old, he never really excelled as much in the NFL as he had in his earlier career. In 1928, at the age of forty he finally called it quits. In 1950, the nation’s press honored Thorpe by being named the most outstanding athlete of the first fifty years of the twentieth century. In 1963, he was elected a charter member of the Pro Football Hall of Fame.


If you would like to know more about Jim Thorpe, a good book to read is Jim Thorpe by Bob Wheeler (University of Oklahoma Press, 1979).
**Audible:** A change in plays shouted in code by the quarterback at the line of scrimmage.

**Blitz:** A pass rush by one or more linebackers and/or defensive backs.

**Crossbar:** The horizontal bar of a goal post over which a field-goal or extra point kick must go.

**Defense:** The team without possession of the football.

**Draft:** How college players are picked for the pros. The worst team from the previous year receives the first pick in the draft, the best receives the final pick in each round.

**End Zone:** The 10-yard deep area behind the goal line. You score touchdowns by getting into the end zone with the ball.

**Field Goal:** A scoring kick worth three points, it may be attempted from anywhere on the field.

**Fumble:** A dropped ball by a player who had possession of the football. A fumble can generally be advanced by any player who picks it up.

**Goal Post:** The structures centered at the back of the end zone on either end of the field. They are used as the targets for field goal and extra-point kickers.

**Hang Time:** The amount of time the ball stays in the air after it was punted.

**Interception:** When a defensive player catches a pass intended for the offensive player.

**Interference:** When a defensive player inhibits, by the way of illegal contact, a receiver’s ability to run a pass pattern or catch. It is an automatic first down at the spot of the penalty.

**Lateral:** A sideways or backwards toss of the ball to another player.

**Line of Scrimmage:** An imaginary line that runs across the field where the ball is placed at the beginning of the play.

**Motion:** The lateral movement of one running back or receiver before the ball is snapped.

**Offense:** The team with possession of the football.

**Pocket:** The area of protection for a quarterback formed by his blockers.

**Quarter:** A 15-minute playing period; four quarters make up a game.

**Rookie:** A player in his first season of professional football.

**Safety:** When a player is tackled in his own end zone with the football. It is worth two points for the opposing team.

**Uprights:** The vertical poles of a goal post through which an extra-point or a field goal kick must pass.

**Veteran:** A player with at least one year of professional playing experience.
## American Football Conference
National Football League, 345 Park Avenue, New York, New York 10154

<table>
<thead>
<tr>
<th>Team</th>
<th>Address</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baltimore Ravens</strong></td>
<td>1 Winning Drive, Owings Mills, Maryland 21117</td>
<td>(410) 701-4000</td>
</tr>
<tr>
<td><strong>Kansas City Chiefs</strong></td>
<td>The Univ. of Kansas Hospital Training Complex</td>
<td></td>
</tr>
<tr>
<td></td>
<td>One Arrowhead Drive, Kansas City, Missouri 64129</td>
<td>(816) 920-9300</td>
</tr>
<tr>
<td><strong>Buffalo Bills</strong></td>
<td>One Bills Drive, Orchard Park, New York 14127-2296</td>
<td>(716) 648-1800</td>
</tr>
<tr>
<td><strong>Miami Dolphins</strong></td>
<td>7500 S.W. 30th Street, Davie, Florida 33314</td>
<td>(954) 452-7000</td>
</tr>
<tr>
<td><strong>Cincinnati Bengals</strong></td>
<td>One Paul Brown Stadium, Cincinnati, Ohio 45202-3492</td>
<td>(513) 621-3550</td>
</tr>
<tr>
<td><strong>New England Patriots</strong></td>
<td>Gillette Stadium, One Patriot Place, Foxborough, Massachusetts 02035</td>
<td>(508) 543-8200</td>
</tr>
<tr>
<td><strong>Cleveland Browns</strong></td>
<td>Cleveland Browns Training and Admin. Complex, 76 Lou Groza Boulevard, Berea, Ohio 44017</td>
<td>(440) 891-5000</td>
</tr>
<tr>
<td><strong>New York Jets</strong></td>
<td>Atlantic Health Jets Training Center, 1 Jets Drive, Florham Park, New Jersey 07932</td>
<td>(973) 549-4800</td>
</tr>
<tr>
<td><strong>Denver Broncos</strong></td>
<td>13655 Broncos Parkway, Englewood, Colorado 80112</td>
<td>(303) 649-9000</td>
</tr>
<tr>
<td><strong>Oakland Raiders</strong></td>
<td>1220 Harbor Bay Parkway, Alameda, California 94502</td>
<td>(510) 864-5000</td>
</tr>
<tr>
<td><strong>Houston Texans</strong></td>
<td>Two NRG Park, Houston, Texas 77054</td>
<td>(832) 667-2000</td>
</tr>
<tr>
<td><strong>Pittsburgh Steelers</strong></td>
<td>3400 South Water Street, Pittsburgh, Pennsylvania 15203</td>
<td>(412) 432-7800</td>
</tr>
<tr>
<td><strong>Indianapolis Colts</strong></td>
<td>P.O. Box 535000, Indianapolis, Indiana 46253</td>
<td>(317) 297-2658</td>
</tr>
<tr>
<td><strong>San Diego Chargers</strong></td>
<td>P.O. Box 609609, San Diego, California 92160-9609</td>
<td>(858) 874-4500</td>
</tr>
<tr>
<td><strong>Jacksonville Jaguars</strong></td>
<td>EverBank Field, One EverBank Field Drive, Jacksonville, Florida 32202</td>
<td>(904) 633-6000</td>
</tr>
<tr>
<td><strong>Tennessee Titans</strong></td>
<td>460 Great Circle Road, Nashville, Tennessee 37228</td>
<td>(615) 565-4000</td>
</tr>
</tbody>
</table>

Compiled from 2014 NFL Record and Fact Book
# National Football Conference
National Football League, 345 Park Avenue, New York, New York 10154

<table>
<thead>
<tr>
<th>Team</th>
<th>Address</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona Cardinals</td>
<td>8701 S. Hardy Drive</td>
<td>(602) 379-0101</td>
</tr>
<tr>
<td></td>
<td>Tempe, Arizona 85284</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(602) 379-0101</td>
<td></td>
</tr>
<tr>
<td>Atlanta Falcons</td>
<td>4400 Falcon Parkway</td>
<td>(770) 965-3115</td>
</tr>
<tr>
<td></td>
<td>Flowery Branch, Georgia 30542</td>
<td></td>
</tr>
<tr>
<td>Carolina Panthers</td>
<td>800 South Mint Street</td>
<td>(704) 358-7000</td>
</tr>
<tr>
<td></td>
<td>Charlotte, North Carolina 28202-1502</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(704) 358-7000</td>
<td></td>
</tr>
<tr>
<td>Chicago Bears</td>
<td>Halas Hall at Conway Park</td>
<td>(847) 295-6600</td>
</tr>
<tr>
<td></td>
<td>1920 Football Drive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lake Forest, Illinois 60045</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(847) 295-6600</td>
<td></td>
</tr>
<tr>
<td>Dallas Cowboys</td>
<td>Cowboys Center</td>
<td>(972) 556-9900</td>
</tr>
<tr>
<td></td>
<td>One Cowboys Parkway</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Irving, Texas 75063</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(972) 556-9900</td>
<td></td>
</tr>
<tr>
<td>Detroit Lions</td>
<td>222 Republic Drive</td>
<td>(313) 216-4000</td>
</tr>
<tr>
<td></td>
<td>Allen Park, Michigan 48101</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(313) 216-4000</td>
<td></td>
</tr>
<tr>
<td>Green Bay Packers</td>
<td>Lambeau Field Atrium</td>
<td>(920) 569-7500</td>
</tr>
<tr>
<td></td>
<td>1265 Lombardi Avenue</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Green Bay, Wisconsin 54304</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(920) 569-7500</td>
<td></td>
</tr>
<tr>
<td>Minnesota Vikings</td>
<td>9520 Viking Drive</td>
<td>(952) 828-6500</td>
</tr>
<tr>
<td></td>
<td>Eden Prairie, Minnesota 55344</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(952) 828-6500</td>
<td></td>
</tr>
<tr>
<td>New Orleans Saints</td>
<td>5800 Airline Drive</td>
<td>(504) 733-0255</td>
</tr>
<tr>
<td></td>
<td>Metairie, Louisiana 70003</td>
<td></td>
</tr>
<tr>
<td>New York Giants</td>
<td>Quest Diagnostics Training Center</td>
<td>(201) 935-8111</td>
</tr>
<tr>
<td></td>
<td>1925 Giants Drive</td>
<td></td>
</tr>
<tr>
<td>Philadelphia Eagles</td>
<td>NovaCare Complex</td>
<td>(215) 463-2500</td>
</tr>
<tr>
<td></td>
<td>One NovaCare Way</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Philadelphia, Pennsylvania 19145</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(215) 463-2500</td>
<td></td>
</tr>
<tr>
<td>St. Louis Rams</td>
<td>One Rams Way</td>
<td>(314) 982-7267</td>
</tr>
<tr>
<td></td>
<td>St. Louis, Missouri 63045</td>
<td></td>
</tr>
<tr>
<td>San Francisco 49ers</td>
<td>4949 Marie P. DeBartolo Way</td>
<td>(408) 562-4949</td>
</tr>
<tr>
<td></td>
<td>Santa Clara, California 95054</td>
<td></td>
</tr>
<tr>
<td>Seattle Seahawks</td>
<td>Virginia Mason Athletic Center</td>
<td>(425) 203-8000</td>
</tr>
<tr>
<td></td>
<td>12 Seahawks Way</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Renton, Washington 98056</td>
<td></td>
</tr>
<tr>
<td>Tampa Bay Buccaneers</td>
<td>One Buccaneer Place</td>
<td>(813) 870-2700</td>
</tr>
<tr>
<td></td>
<td>Tampa, Florida 33607</td>
<td></td>
</tr>
<tr>
<td>Washington Redskins</td>
<td>Redskins Park</td>
<td>(703) 726-7000</td>
</tr>
<tr>
<td></td>
<td>21300 Redskins Park Drive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ashburn, Virginia 20147</td>
<td></td>
</tr>
</tbody>
</table>

Compiled from 2014 NFL Record and Fact Book
# Football Facts and Figures

## 2015 Team Colors

<table>
<thead>
<tr>
<th>Team</th>
<th>Colors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona Cardinals</td>
<td>Cardinal Red, Black, and White</td>
</tr>
<tr>
<td>Miami Dolphins</td>
<td>Aqua, Orange, White, and Blue</td>
</tr>
<tr>
<td>Atlanta Falcons</td>
<td>Black, Red, Silver, and White</td>
</tr>
<tr>
<td>Minnesota Vikings</td>
<td>Purple, Gold, and White</td>
</tr>
<tr>
<td>Baltimore Ravens</td>
<td>Black, Purple, and Metallic Gold</td>
</tr>
<tr>
<td>New England Patriots</td>
<td>Blue, Red, Silver, and White</td>
</tr>
<tr>
<td>Buffalo Bills</td>
<td>Royal, Red, White, and Navy</td>
</tr>
<tr>
<td>New Orleans Saints</td>
<td>Old Gold, Black, and White</td>
</tr>
<tr>
<td>Carolina Panthers</td>
<td>Black, Panther Blue, and Silver</td>
</tr>
<tr>
<td>New York Giants</td>
<td>Blue, Red, and White</td>
</tr>
<tr>
<td>Chicago Bears</td>
<td>Navy Blue, Orange, and White</td>
</tr>
<tr>
<td>New York Jets</td>
<td>Green and White</td>
</tr>
<tr>
<td>Cincinnati Bengals</td>
<td>Black, Orange, and White</td>
</tr>
<tr>
<td>Oakland Raiders</td>
<td>Silver and Black</td>
</tr>
<tr>
<td>Cleveland Browns</td>
<td>Brown, Orange, and White</td>
</tr>
<tr>
<td>Philadelphia Eagles</td>
<td>Midnight Green, Silver, Black, and White</td>
</tr>
<tr>
<td>Dallas Cowboys</td>
<td>Royal Blue, Metallic Silver Blue, and White</td>
</tr>
<tr>
<td>Pittsburgh Steelers</td>
<td>Black and Gold</td>
</tr>
<tr>
<td>Denver Broncos</td>
<td>Orange, Broncos Navy Blue, and White</td>
</tr>
<tr>
<td>St. Louis Rams</td>
<td>New Century Gold, Millennium Blue, and White</td>
</tr>
<tr>
<td>Detroit Lions</td>
<td>Honolulu Blue and Silver</td>
</tr>
<tr>
<td>San Diego Chargers</td>
<td>Navy Blue, Powder Blue, White, and Gold</td>
</tr>
<tr>
<td>Green Bay Packers</td>
<td>Dark Green, Gold, and White</td>
</tr>
<tr>
<td>San Francisco 49ers</td>
<td>49ers Gold and 49ers Red</td>
</tr>
<tr>
<td>Houston Texans</td>
<td>Deep Steel Blue, Battle Red, and Liberty White</td>
</tr>
<tr>
<td>Seattle Seahawks</td>
<td>Action Green, College Navy, and Wolf Grey</td>
</tr>
<tr>
<td>Indianapolis Colts</td>
<td>Royal Blue and White</td>
</tr>
<tr>
<td>Tampa Bay Buccaneers</td>
<td>Buccaneer Red, Pewter, Black, and Orange</td>
</tr>
<tr>
<td>Jacksonville Jaguars</td>
<td>Teal, Black, and Gold</td>
</tr>
<tr>
<td>Tennessee Titans</td>
<td>Navy, Titans Blue, Red, and Silver</td>
</tr>
<tr>
<td>Kansas City Chiefs</td>
<td>Red, Gold, and White</td>
</tr>
<tr>
<td>Washington Redskins</td>
<td>Burgundy and Gold</td>
</tr>
</tbody>
</table>

List Compiled from 2014 NFL Record and Fact Book

Pro Football Hall of Fame Youth/Education  FF6  ProFootballHOF.com
Football Facts and Figures

Football Facts

**NFL Players are numbered according to their position:**

- 1-19 Quarterbacks & Kickers
- 20-49 Running Backs & Defensive Backs
- 50-59 Centers & Linebackers
- 60-79 Defensive & Interior Offensive Linemen
- 80-89 Wide Receivers & Tight Ends
- 90-99 Defensive Linemen

**Scoring**

- Touchdown = 6 points
- Field Goal = 3 points
- Safety = 2 points
- Extra point = 1 point
- Two Point Conversion = 2 points

**Game Time**

<table>
<thead>
<tr>
<th>Typical Game:</th>
<th>60 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarters:</td>
<td>4 quarters 15 minutes each</td>
</tr>
<tr>
<td>Halftime:</td>
<td>12 minutes</td>
</tr>
<tr>
<td>Over Time:</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Time Out:</td>
<td>110 seconds</td>
</tr>
<tr>
<td>Play Clock:</td>
<td>40 seconds</td>
</tr>
</tbody>
</table>

**Conferences**

The NFL is divided into two conferences.

- American Football Conference (AFC)
- National Football Conference (NFC)

**Officials**

There are seven officials on the field to enforce, assess, signal penalties and keep game time.


**The Field**

The field measures 120 yards long, 100 yards from goal line to goal line, with a 10 yard deep end zone at each end. The field is 53 1/3 yards wide (160 feet). NFL fields have either grass, Astroturf, or field turf playing surface.

---

ProFootballHOF.com

FF7

Pro Football Hall of Fame Youth/Education
## 2015 NFL Schedule

**All Times Are Eastern**

### WEEK 1
- **Thursday, Sept. 10**
  - Steelers @ Patriots 8:30 p.m.
- **Sunday, Sept. 13**
  - Colts @ Bills 1 p.m.
  - Packers @ Bears 1 p.m.
  - Chiefs @ Texans 1 p.m.
  - Panthers @ Jaguars 1 p.m.
  - Browns @ Jets 1 p.m.
  - Seahawks @ Rams 1 p.m.
  - Dolphins @ Redskins 1 p.m.
  - Saints @ Cardinals 4:05 p.m.
  - Lions @ Chargers 4:05 p.m.
  - Ravens @ Broncos 4:25 p.m.
  - Bengals @ Raiders 4:25 p.m.
  - Titans @ Buccaneers 4:25 p.m.
  - Giants @ Cowboys 8:30 p.m.
- **Monday, Sept. 14**
  - Eagles @ Falcons 7:10 p.m.
  - Vikings @ 49ers 10:20 p.m.

### WEEK 2
- **Thursday, Sept. 17**
  - Broncos @ Chiefs 8:25 p.m.
- **Sunday, Sept. 20**
  - Patriots @ Bills 1 p.m.
  - Texans @ Panthers 1 p.m.
  - Cardinals @ Bears 1 p.m.
  - Chargers @ Bengals 1 p.m.
  - Titans @ Browns 1 p.m.
  - Lions @ Vikings 1 p.m.
  - Buccaneers @ Saints 1 p.m.
  - Falcons @ Giants 1 p.m.
  - 49ers @ Steelers 1 p.m.
  - Rams @ Redskins 1 p.m.
  - Dolphins @ Jaguars 4:05 p.m.
  - Ravens @ Raiders 4:05 p.m.
  - Cowboys @ Eagles 4:25 p.m.
  - Seahawks @ Packers 8:30 p.m.
- **Monday, Sept. 21**
  - Jets @ Colts 8:30 p.m.

### WEEK 3
- **Thursday, Sept. 24**
  - Redskins @ Giants 8:25 p.m.
- **Sunday, Sept. 27**
  - Bengals @ Ravens 1 p.m.
  - Saints @ Panthers 1 p.m.
  - Raiders @ Browns 1 p.m.
  - Falcons @ Cowboys 1 p.m.
  - Buccaneers @ Texans 1 p.m.
  - Chargers @ Vikings 1 p.m.
  - Jaguars @ Patriots 1 p.m.
  - Eagles @ Jets 1 p.m.
  - Steelers @ Rams 1 p.m.
  - Colts @ Titans 1 p.m.
  - 49ers @ Cardinals 4:05 p.m.
  - Bills @ Dolphins 4:25 p.m.
  - Bears @ Seahawks 4:25 p.m.
  - Broncos @ Lions 8:30 p.m.
- **Monday, Sept. 28**
  - Chiefs @ Packers 8:30 p.m.

### WEEK 4
- **Thursday, Oct. 1**
  - Ravens @ Steelers 8:25 p.m.
- **Sunday, Oct. 4**
  - Jets @ Dolphins (London) 9:30 a.m.
  - Texans @ Falcons 1 p.m.
  - Giants @ Bills 1 p.m.
  - Raiders @ Bears 1 p.m.
  - Chiefs @ Bengals 1 p.m.
  - Jaguars @ Colts 1 p.m.
  - Panthers @ Buccaneers 1 p.m.
  - Eagles @ Redskins 1 p.m.
  - Browns @ Chargers 4:05 p.m.
  - Rams @ Cardinals 4:25 p.m.
  - Vikings @ Broncos 4:25 p.m.
  - Packers @ 49ers 4:25 p.m.
  - Cowboys @ Saints 8:30 p.m.
- **Monday, Oct. 5**
  - Lions @ Seahawks 8:30 p.m.

### WEEK 5
- **Thursday, Oct. 8**
  - Colts @ Texans 8:25 p.m.
- **Sunday, Oct. 11**
  - Redskins @ Falcons 1 p.m.
  - Browns @ Ravens 1 p.m.
  - Seahawks @ Bengals 1 p.m.
  - Rams @ Packers 1 p.m.
  - Bears @ Chiefs 1 p.m.
  - Saints @ Eagles 1 p.m.
  - Jaguars @ Buccaneers 1 p.m.
  - Bills @ Titans 1 p.m.
  - Cardinals @ Lions 4:05 p.m.
  - Patriots @ Cowboys 4:25 p.m.
  - Broncos @ Raiders 4:25 p.m.
  - 49ers @ Giants 8:30 p.m.
- **Monday, Oct. 12**
  - Steelers @ Chargers 8:30 p.m.

### WEEK 6
- **Thursday, Oct. 15**
  - Falcons @ Saints 8:25 p.m.
- **Sunday, Oct. 18**
  - Bengals @ Bills 1 p.m.
  - Broncos @ Browns 1 p.m.
  - Bears @ Lions 1 p.m.
  - Texans @ Jaguars 1 p.m.
  - Chiefs @ Vikings 1 p.m.
  - Redskins @ Jets 1 p.m.
  - Cardinals @ Steelers 1 p.m.
  - Dolphins @ Titans 1 p.m.
  - Panthers @ Seahawks 4:05 p.m.
  - Chargers @ Packers 4:25 p.m.
  - Ravens @ 49ers 4:25 p.m.
  - Patriots @ Colts 8:30 p.m.
- **Monday, Oct. 19**
  - Giants @ Eagles 8:30 p.m.

### WEEK 7
- **Thursday, Oct. 22**
  - Seahawks @ 49ers 8:25 p.m.
- **Sunday, Oct. 25**
  - Bills @ Jaguars (London) 9:30 a.m.
  - Vikings @ Lions 1 p.m.
  - Saints @ Colts 1 p.m.
  - Steelers @ Chiefs 1 p.m.
  - Texans @ Dolphins 1 p.m.
  - Jets @ Patriots 1 p.m.
  - Browns @ Rams 1 p.m.
  - Falcons @ Titans 1 p.m.
  - Buccaneers @ Redskins 1 p.m.
  - Raiders @ Chargers 4:05 p.m.
  - Cowboys @ Giants 4:25 p.m.
  - Eagles @ Panthers 8:30 p.m.
- **Monday, Oct. 26**
  - Ravens @ Cardinals 8:30 p.m.

### WEEK 8
- **Thursday, Oct. 29**
  - Dolphins @ Patriots 8:25 p.m.
- **Sunday, Nov. 1**
  - Lions @ Chiefs Patriots (London) 9:30 a.m.
  - Buccaneers @ Falcons 1 p.m.
  - Chargers @ Ravens 1 p.m.
  - Vikings @ Bears 1 p.m.
  - Cardinals @ Browns 1 p.m.
  - Titans @ Texans 1 p.m.
  - Giants @ Saints 1 p.m.
  - Bengals @ Steelers 1 p.m.
  - 49ers @ Rams 1 p.m.
  - Jets @ Raiders 4:05 p.m.
  - Seahawks @ Cowboys 4:25 p.m.
  - Packers @ Broncos 8:30 p.m.
- **Monday, Nov. 2**
  - Colts @ Panthers 8:30 p.m.

### WEEK 9
- **Thursday, Nov. 5**
  - Browns @ Bengals 8:25 p.m.
- **Sunday, Nov. 8**
  - Dolphins @ Bills 1 p.m.
  - Packers @ Panthers 1 p.m.
  - Rams @ Vikings 1 p.m.
  - Redskins @ Patriots 1 p.m.
  - Titans @ Saints 1 p.m.
  - Jaguars @ Jets 1 p.m.
  - Raiders @ Steelers 1 p.m.
  - Falcons @ 49ers 4:05 p.m.
  - Giants @ Buccaneers 4:05 p.m.
  - Broncos @ Colts 4:25 p.m.
  - Eagles @ Cowboys 8:30 p.m.
- **Monday, Nov. 9**
  - Bears @ Chargers 8:30 p.m.
2015 NFL Schedule

**All Times Are Eastern**

**WEEK 10**

**BYES: FALCONS, COLTS, CHARGERS, 49ERS**

**Thursday, Nov. 12**
- Bills @ Jets 8:25 p.m.

**Sunday, Nov. 15**
- Jaguars @ Ravens 1 p.m.
- Lions @ Packers 1 p.m.
- Dolphins @ Eagles 1 p.m.
- Browns @ Steelers 1 p.m.
- Bears @ Rams 1 p.m.
- Cowboys @ Buccaneers 1 p.m.
- Panthers @ Titans 1 p.m.
- Saints @ Redskins 1 p.m.
- Vikings @ Raiders 4:05 p.m.
- Chiefs @ Broncos 4:25 p.m.
- Patriots @ Giants 4:25 p.m.
- Cardinals @ Seahawks 8:30 p.m.

**Monday, Nov. 16**
- Texans @ Bengals 8:30 p.m.

**WEEK 11**

**BYES: BROWNS, SAINTS, GIANTS, STEELERS**

**Thursday, Nov. 19**
- Titans @ Jaguars 8:25 p.m.

**Sunday, Nov. 22**
- Colts @ Falcons 1 p.m.
- Rams @ Ravens 1 p.m.
- Redskins @ Panthers 1 p.m.
- Broncos @ Bears 1 p.m.
- Raiders @ Lions 1 p.m.
- Jets @ Texans 1 p.m.
- Cowboys @ Dolphins 1 p.m.
- Packers @ Vikings 1 p.m.
- Buccaneers @ Eagles 1 p.m.
- Bengals @ Cardinals 4:05 p.m.
- 49ers @ Seahawks 4:25 p.m.
- Chiefs @ Chargers 8:30 p.m.

**Monday, Nov. 23**
- Bills @ Patriots 8:30 p.m.

**WEEK 12**

**Thursday, Nov. 26**
- Eagles @ Lions 12:30 p.m.
- Panthers @ Cowboys 4:30 p.m.
- Bears @ Packers 8:30 p.m.

**Sunday, Nov. 29**
- Vikings @ Falcons 1 p.m.
- Rams @ Bengals 1 p.m.
- Saints @ Texans 1 p.m.
- Buccaneers @ Colts 1 p.m.
- Chargers @ Jaguars 1 p.m.
- Bills @ Chiefs 1 p.m.
- Dolphins @ Jets 1 p.m.
- Raiders @ Titans 1 p.m.
- Giants @ Redskins 1 p.m.
- Cardinals @ 49ers 4:05 p.m.
- Steelers @ Seahawks 4:25 p.m.
- Patriots @ Broncos 8:30 p.m.

**Monday, Nov. 30**
- Ravens @ Browns 8:30 p.m.

**WEEK 13**

**Thursday, Dec. 3**
- Packers @ Lions 8:25 p.m.

**Sunday, Dec. 6**
- Texans @ Bills 1 p.m.
- 49ers @ Bears 1 p.m.
- Ravens @ Browns 1 p.m.
- Seahawks @ Vikings 1 p.m.
- Panthers @ Saints 1 p.m.
- Jets @ Giants 1 p.m.
- Cardinals @ Rams 1 p.m.
- Jaguars @ Buccaneers 1 p.m.
- Chiefs @ Titans 4:05 p.m.
- Broncos @ Chargers 4:05 p.m.
- Eagles @ Patriots 4:25 p.m.
- Colts @ Steelers 8:30 p.m.

**Monday, Dec. 7**
- Cowboys @ Redskins 8:30 p.m.

**WEEK 14**

**Thursday, Dec. 10**
- Vikings @ Cardinals 8:25 p.m.

**Sunday, Dec. 13**
- Falcons @ Panthers 1 p.m.
- Redskins @ Bears 1 p.m.
- Steelers @ Bengals 1 p.m.
- 49ers @ Browns 1 p.m.
- Patriots @ Texans 1 p.m.
- Colts @ Jaguars 1 p.m.
- Chargers @ Chiefs 1 p.m.
- Titans @ Jets 1 p.m.
- Bills @ Eagles 1 p.m.
- Lions @ Rams 1 p.m.
- Saints @ Buccaneers 1 p.m.
- Raiders @ Broncos 4:05 p.m.
- Cowboys @ Packers 4:25 p.m.
- Seahawks @ Ravens 8:30 p.m.

**Monday, Dec. 14**
- Giants @ Dolphins 8:30 p.m.

**WEEK 15**

**Thursday, Dec. 17**
- Buccaneers @ Rams 8:25 p.m.

**Saturday, Dec. 19**
- Jets @ Cowboys 8:25 p.m.

**Sunday, Dec. 20**
- Chiefs @ Ravens 1 p.m.
- Texans @ Colts 1 p.m.
- Falcons @ Jaguars 1 p.m.
- Bears @ Vikings 1 p.m.
- Titans @ Patriots 1 p.m.
- Bills @ Redskins 1 p.m.
- Packers @ Raiders 4:05 p.m.
- Browns @ Seahawks 4:05 p.m.
- Broncos @ Steelers 4:25 p.m.
- Dolphins @ Chargers 4:25 p.m.
- Bengals @ 49ers 8:30 p.m.

**Monday, Dec. 21**
- Lions @ Saints 8:30 p.m.

**WEEK 16**

**Thursday, Dec. 24**
- Chargers @ Raiders 8:25 p.m.

**Saturday, Dec. 26**
- Redskins @ Eagles 8:25 p.m.

**Sunday, Dec. 27**
- Panthers @ Falcons 1 p.m.
- Cowboys @ Bills 1 p.m.
- 49ers @ Lions 1 p.m.
- Browns @ Chiefs 1 p.m.
- Colts @ Dolphins 1 p.m.
- Giants @ Vikings 1 p.m.
- Jaguars @ Saints 1 p.m.
- Patriots @ Jets 1 p.m.
- Bears @ Buccaneers 1 p.m.
- Texans @ Titans 1 p.m.
- Packers @ Cardinals 4:25 p.m.
- Rams @ Seahawks 4:25 p.m.
- Steelers @ Ravens 8:30 p.m.

**Monday, Dec. 28**
- Bengals @ Broncos 8:30 p.m.

**Post Season**

**Wild Card Weekend**
- **Saturday, Jan. 9**
  - AFC and NFC Wild Card Games
- **Sunday, Jan. 10**
  - AFC and NFC Wild Card Games

**Divisional Playoffs Weekend**
- **Saturday, Jan. 16**
  - AFC and NFC Divisional Games
- **Sunday, Jan. 17**
  - AFC and NFC Divisional Games

**Conference Championship Weekend**
- **Sunday, Jan. 24**
  - AFC and NFC Conf. Championship Games

**Super Bowl Week**
- **Sunday, Feb. 7**
  - Super Bowl 50 at Levi’s Stadium, Santa Clara, California
Football Bingo

- Distribute a bingo card to each student.
- Distribute the corresponding football shapes and have students color and cut them out for marking their cards.
- The card can be used for a variety of football learning and the students will love it.
- Examples:
  - Have students write NFL team nicknames on the board and the teacher calls out the city. This can also be done the opposite way.
  - From a selected list label each square on the board with a football term. The teacher reads a definition and they must match the correct term with the definition.
  - List NFL states on the board and the teacher calls the capital of those states.
- Have students help decide the type of Bingo, vertical, horizontal, four corners, whole board, etc.
- HAVE FUN!
Football Bingo

Bingo Markers
Touchdown Trivia

How many questions can you answer correctly without looking up the answers?

15-20 You are the Super Bowl MVP
10-15 You are on a Super Bowl Team
5-10 You made the Playoffs
0-5 Get back on the Practice Field.

Good Luck!

1. What is the color of a referee’s flag?
2. What does a football player wear on his head?
3. What is the name of the position that kicks the extra point?
4. Name the word for a perfectly thrown pass.
5. In England and many other countries’ “football” is the name for this sport. (Think of The World Cup.)
6. Who won Super Bowl XLIX (49)?
7. What is the maximum number of players a football team can have on the field?
8. What do the letters NFL stand for?
9. TD is the abbreviation for what word that scores you six points in the game?
10. What is the NFL championship game called?
11. After whom is the Super Bowl trophy named?
12. After whom is the Super Bowl MVP trophy named?
13. True or False: A football field is 100 yards long from goal line to goal line?
14. How many points is a field goal worth?
15. How many quarters are there in a football game? How many minutes is each quarter?
16. What do the letters AFC and NFC stand for?
17. Which three teams have won at least five Super Bowls each?
18. Dan Marino played for what team? What position did he play?
19. Tom Brady plays for the New England Patriots. What position does he play?
20. How long does a player have to be retired before he is eligible for the Pro Football Hall of Fame?
Football Facts and Figures

Answer Key

Touchdown Trivia
1. Yellow
2. Helmet
3. Kicker
4. Spiral
5. Soccer
6. New England Patriots
7. Eleven
8. National Football League
9. Touchdown
10. Super Bowl
11. Vince Lombardi
12. Pete Rozelle
13. True
14. 3
15. 4, 15 minutes each
16. American Football Conference
   National Football Conference
17. San Francisco 49ers
   Dallas Cowboys
   Pittsburgh Steelers
18. Quarterback, Miami Dolphins
19. Quarterback
20. Five years
Pro Football Hall of Fame
Youth/Education

Family and Consumer Sciences

Activity Guide 2015-2016
<table>
<thead>
<tr>
<th>Lesson</th>
<th>National Standards</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooking with the Pros</td>
<td>14.0 - Nutrition/Wellness</td>
<td>FACS 1</td>
</tr>
<tr>
<td>Determining the Nutritional Value of Foods</td>
<td>14.0 - Nutrition/Wellness</td>
<td>FACS 2-7</td>
</tr>
<tr>
<td>Game Plan for Helping the Teenage Years</td>
<td>12.0 - Development, 13.0 - Relationship</td>
<td>FACS 8-12</td>
</tr>
<tr>
<td>Girls and Tackle Football</td>
<td>12.0 - Development, 13.0 - Relationship</td>
<td>FACS 13-19</td>
</tr>
<tr>
<td>Scoring a Healthy Weight</td>
<td>14.0 - Nutrition/Wellness</td>
<td>FACS 20-21</td>
</tr>
<tr>
<td>Sports Nutrition</td>
<td>14.0 - Nutrition/Wellness</td>
<td>FACS 22-23</td>
</tr>
<tr>
<td>Career Exploration</td>
<td>1.0 - Career</td>
<td>FACS 24-29</td>
</tr>
<tr>
<td>Gaining Yardage with Goals</td>
<td>12.0 - Development</td>
<td>FACS 30-34</td>
</tr>
<tr>
<td>Answer Key</td>
<td></td>
<td>FACS 35</td>
</tr>
</tbody>
</table>
Goals/Objectives:
Students will:
- Investigate recipes in food preparation.
- Demonstrate skill in preparing recipes.
- Demonstrate proper letter-writing skills.

National Standards: 14.0 - Nutrition and Wellness

Methods/Procedures:
- Working individually or in small groups, have students acquire recipes from their favorite football players using sources such as *NBC Sunday Night Football Cookbook* produced by Melcher Media and published by Time Inc. Home Entertainment, which offers “150 great family recipes from America's Pro Chefs and NFL Players.”
- Students may write letters to players (see addresses on pages FF4 and FF5) asking for their favorite recipes and fitness tips. Using correct letter-writing methods, they should proofread each other’s letters, correct any mistakes, and type or rewrite the letter. Have them mail their letters and wait for a response.
- Have students work cooperatively with group members to prepare selected recipes.
- Have the students write a follow-up thank you note to those football players who responded to their inquiries. Include photo of the prepared recipe if possible.

Materials:

Assessment:
- Acceptable performance on all instructional activities.
Goals/Objectives:
Students will:
- Define nutrient density
- Identify valuable nutrients needed for good health and fitness
- Analyze food product labels and recipes for nutritional value using the “Finger Method.”
- Compare empty calorie foods (junk foods), nutrient neutral foods, and nutrient dense foods for nutritional value.

Common Core Standards: 14.0 - Nutrition and Wellness:

Methods/Procedures:
- Using available resources; have students research the functions of the nutrients needed for good health and fitness (i.e. protein, carbohydrates, fats, vitamins, and minerals).
- Explain to students that everything we eat isn’t necessarily good for us and for optimum health and fitness we need to include more nutrient dense foods in our diet. (Nutrient dense foods provide a significant source of protein, vitamin A, vitamin C, the B-complex vitamins, calcium, iron, and fiber with not too much fat and calories.)
- Demonstrate the “Finger Method” of analyzing food product labels and recipes while reviewing the handout “Nutrient Density: Analyzing Product Labels and Recipes for Nutritional Value.”
- Divide the class into pairs. Distribute a food product or recipe to each team and have them use the “Finger Method” to determine its nutritional value. Share responses with the whole class.
- Have students work independently to complete the “Determining the Nutritional Value of Foods” worksheet provided on the following pages.

Materials:
- Nutrition resources such as videos, computer software, textbooks, and internet
- Food products and recipes that provide nutritional information

Assessment:
- Participation in all instructional activities
Nutrient density is a way of categorizing foods that are good for you. Nutrient dense foods have more healthy nutritional characteristics than unhealthy ones. They provide significant source of certain valuable nutrients (vitamin A, vitamin C, B-complex vitamins, calcium, iron, protein, and fiber) while at the same not supplying too much fat and calories.

A fast and easy way to determine the nutrient density of foods is called the “Finger Method.” It can be used on product labels and recipes that provide nutritional information.

The following chart explains the procedure.

<table>
<thead>
<tr>
<th>Labels and recipes that DO NOT report the B-complex vitamins (thiamin, niacin, and riboflavin)</th>
<th>Labels and recipes that DO report the B-complex vitamins (thiamin, niacin, and riboflavin)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Put one finger up for:</td>
<td>Put one finger up for:</td>
</tr>
<tr>
<td>Vitamin A</td>
<td>10%/100 R.E.</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>10%/60mg</td>
</tr>
<tr>
<td>Calcium</td>
<td>10%/100mg</td>
</tr>
<tr>
<td>Iron</td>
<td>10%/1.8mg</td>
</tr>
<tr>
<td>Protein</td>
<td>10%/6g or more</td>
</tr>
<tr>
<td>Fiber</td>
<td>10%/3g or more</td>
</tr>
<tr>
<td>Put one finger down for:</td>
<td>Put one finger down for:</td>
</tr>
<tr>
<td>Total fat</td>
<td>10%/6g or more</td>
</tr>
<tr>
<td>Calories</td>
<td>200 or more per serving</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Put two fingers down for:</td>
<td></td>
</tr>
<tr>
<td>Total fat</td>
<td>30%/18g or more</td>
</tr>
<tr>
<td>Calories</td>
<td>Over 400 per serving</td>
</tr>
</tbody>
</table>

**Final Analysis:**

| Fingers Down | These foods are pure “junk foods”. They have too much fat and/or calories for the nutrients provided. |
| Zero Fingers | These foods are nutrient neutral and are not really good or bad for you. They are either low in fat and/or calories or high in valuable nutrients. |
| Fingers Up | These foods are nutrient dense and are good for you. Valuable nutrients are available without much fat and/or calories. |
## Example #1: Apple Pie

<table>
<thead>
<tr>
<th></th>
<th>Recipe that Does Not report the B-complex vitamins (thiamin, niacin, and riboflavin)</th>
<th>Recipe that Does report the B-complex vitamins (thiamin, niacin, and riboflavin)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories</td>
<td>424</td>
<td>424</td>
</tr>
<tr>
<td>Fat</td>
<td>15 grams</td>
<td>15 grams</td>
</tr>
<tr>
<td>Protein</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Vitamin A</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Calcium</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Iron</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Fiber</td>
<td>Not reported</td>
<td>Not reported</td>
</tr>
<tr>
<td>Thiamin</td>
<td>Not reported</td>
<td>+1</td>
</tr>
<tr>
<td>Niacin</td>
<td>9%</td>
<td>-2</td>
</tr>
<tr>
<td>Riboflavin</td>
<td>9%</td>
<td>-2</td>
</tr>
</tbody>
</table>

- Fingers Up: 0
- Fingers Down: -1 calories
- Fingers Down: -1 fat
- Total: -2

## Example #2: Halibut Asparagus Stir-Fry

<table>
<thead>
<tr>
<th></th>
<th>Recipe that Does Not report the B-complex vitamins (thiamin, niacin, and riboflavin)</th>
<th>Recipe that Does report the B-complex vitamins (thiamin, niacin, and riboflavin)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories</td>
<td>160</td>
<td>160</td>
</tr>
<tr>
<td>Fat</td>
<td>2 grams</td>
<td>2 grams</td>
</tr>
<tr>
<td>Protein</td>
<td>38%</td>
<td>38%</td>
</tr>
<tr>
<td>Vitamin A</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>18%</td>
<td>18%</td>
</tr>
<tr>
<td>Calcium</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Iron</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Fiber</td>
<td>3 grams</td>
<td>3 grams</td>
</tr>
<tr>
<td>Thiamin</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Niacin</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>Riboflavin</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Thiamin</td>
<td>+1</td>
<td>+1</td>
</tr>
<tr>
<td>Niacin</td>
<td>+1</td>
<td>+1</td>
</tr>
<tr>
<td>Riboflavin</td>
<td>+1</td>
<td>+1</td>
</tr>
</tbody>
</table>

- Fingers Up: +1 Protein
- Fingers Up: +1 Vitamin C
- Fingers Up: +1 Thiamin
- Fingers Up: +1 Niacin
- Fingers Up: +1 Riboflavin
- Fingers Up: +1 Fiber
- Fingers Down: 0
- Total: +6
### Example #3: Pear Sauce

**Recipe that Does Not report the B-complex vitamins (thiamin, niacin, and riboflavin)**

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories</td>
<td>15</td>
</tr>
<tr>
<td>Fat</td>
<td>0 grams</td>
</tr>
<tr>
<td>Protein</td>
<td>*</td>
</tr>
<tr>
<td>Vitamin A</td>
<td>*</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>*</td>
</tr>
<tr>
<td>Calcium</td>
<td>*</td>
</tr>
<tr>
<td>Iron</td>
<td>*</td>
</tr>
<tr>
<td>Fiber</td>
<td>1 gram</td>
</tr>
<tr>
<td>Thiamin</td>
<td>*</td>
</tr>
<tr>
<td>Niacin</td>
<td>*</td>
</tr>
<tr>
<td>Riboflavin</td>
<td>*</td>
</tr>
<tr>
<td>*= trace amounts</td>
<td></td>
</tr>
</tbody>
</table>

**Recipe that Does report the B-complex vitamins (thiamin, niacin, and riboflavin)**

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories</td>
<td>15</td>
</tr>
<tr>
<td>Fat</td>
<td>0 grams</td>
</tr>
<tr>
<td>Protein</td>
<td>*</td>
</tr>
<tr>
<td>Vitamin A</td>
<td>*</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>*</td>
</tr>
<tr>
<td>Calcium</td>
<td>*</td>
</tr>
<tr>
<td>Iron</td>
<td>*</td>
</tr>
<tr>
<td>Fiber</td>
<td>1 gram</td>
</tr>
<tr>
<td>Thiamin</td>
<td>*</td>
</tr>
<tr>
<td>Niacin</td>
<td>*</td>
</tr>
<tr>
<td>Riboflavin</td>
<td>*</td>
</tr>
<tr>
<td>*= trace amounts</td>
<td></td>
</tr>
</tbody>
</table>

**Fingers Up:** 0

**Fingers Down:** 0

**Total:** 0
## Determine the nutritional values of the following recipes:

<table>
<thead>
<tr>
<th>Recipe</th>
<th>Calories</th>
<th>Fat</th>
<th>Vitamin A</th>
<th>Vitamin C</th>
<th>Protein</th>
<th>Thiamin</th>
<th>Riboflavin</th>
<th>Niacin</th>
<th>Calcium</th>
<th>Iron</th>
<th>Fingers up:</th>
<th>Fingers Down:</th>
<th>How healthy is this recipe?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lamb Chops Supreme</strong></td>
<td>453</td>
<td>39g</td>
<td>7%</td>
<td>7%</td>
<td>32%</td>
<td>13%</td>
<td>19%</td>
<td>31%</td>
<td>4%</td>
<td>9%</td>
<td>Fingers:</td>
<td>Fingers:</td>
<td>A. Nutrient Dense</td>
</tr>
<tr>
<td><strong>Broiled fish with Dill Sauce</strong></td>
<td>188</td>
<td>8g</td>
<td>6%</td>
<td>2%</td>
<td>43%</td>
<td>4%</td>
<td>6%</td>
<td>23%</td>
<td>4%</td>
<td>6%</td>
<td>Fingers:</td>
<td>Fingers:</td>
<td>A. Nutrient Dense</td>
</tr>
<tr>
<td><strong>Quiche Casserole</strong></td>
<td>375</td>
<td>28g</td>
<td>22%</td>
<td>6%</td>
<td>31%</td>
<td>11%</td>
<td>2%</td>
<td></td>
<td>41%</td>
<td>11%</td>
<td>Fingers:</td>
<td>Fingers:</td>
<td>A. Nutrient Dense</td>
</tr>
<tr>
<td><strong>Vegetable Risotto</strong></td>
<td>150</td>
<td>5g</td>
<td>93 RE</td>
<td>59mg</td>
<td>7g</td>
<td>2g</td>
<td>7g</td>
<td></td>
<td>253mg</td>
<td>2mg</td>
<td>Fingers:</td>
<td>Fingers:</td>
<td>A. Nutrient Dense</td>
</tr>
<tr>
<td><strong>Almond Pumpkin Chiffon Pudding</strong></td>
<td>170</td>
<td>5g</td>
<td>700 RE</td>
<td>2mg</td>
<td>7g</td>
<td>1g</td>
<td>7g</td>
<td></td>
<td>136mg</td>
<td>1mg</td>
<td>Fingers:</td>
<td>Fingers:</td>
<td>A. Nutrient Dense</td>
</tr>
<tr>
<td>Recipe</td>
<td>Calories</td>
<td>Fat</td>
<td>Cholesterol</td>
<td>Sodium</td>
<td>Protein</td>
<td>Calcium</td>
<td>Fingers up:</td>
<td>Fingers Down:</td>
<td>Fingers Remaining:</td>
<td>How healthy is this recipe?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------</td>
<td>----------</td>
<td>-------------</td>
<td>----------</td>
<td>---------</td>
<td>---------</td>
<td>-------------</td>
<td>---------------</td>
<td>------------------------</td>
<td>-----------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Breakfast Casserole</strong></td>
<td>385</td>
<td>24g</td>
<td>133mg</td>
<td>912mg</td>
<td>18g</td>
<td>13%</td>
<td></td>
<td></td>
<td></td>
<td>A. Nutrient Dense</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tex-Mex Chicken</strong></td>
<td>262</td>
<td>3g</td>
<td>55mg</td>
<td>237mg</td>
<td>24g</td>
<td>25mg</td>
<td></td>
<td></td>
<td></td>
<td>B. Nutrient Neutral</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Layered Mexican Salad</strong></td>
<td>117</td>
<td>3g</td>
<td>3mg</td>
<td>349mg</td>
<td>6g</td>
<td>77mg</td>
<td></td>
<td></td>
<td></td>
<td>C. Empty Calorie Food</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lemon Poppy Seed Cake</strong></td>
<td>217</td>
<td>7g</td>
<td>18mg</td>
<td>219mg</td>
<td>4g</td>
<td>69mg</td>
<td></td>
<td></td>
<td></td>
<td>B. Nutrient Neutral</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Seven Layer Bars</strong></td>
<td>453</td>
<td>8g</td>
<td></td>
<td>76mg</td>
<td>2g</td>
<td>15g</td>
<td></td>
<td></td>
<td></td>
<td>C. Empty Calorie Food</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Goals/Objectives:
Students will:
- Define the Pro Football Hall of Fame’s Gold Standards of Character: Commitment, Integrity, Courage, Respect & Excellence.
- Demonstrate understanding of the traits associated with the Pro Football Hall of Fame’s Gold Standards of Character.
- Demonstrate understanding that good character is essential for achieving success in life.
- Be inspired to embrace good character in order to live more meaningful and effective lives.
- Recognize the importance of good role models in the lives of teenagers.
- Recognize how decisions made in life during the teenage years affect future success.
- Identify self-destructive behavior in which teenagers may participate.
- Conduct research and present findings on a selected self-destructive behavior.

National Standards: 12.0 - Human Development, 13.0 - Interpersonal Relationships

Methods/Procedures:
- Introduce the attributes of good character by having students participate in one of “The Heart of a Hall of Famer” series. Have them complete the accompanying “Character in the NFL” activity. If you cannot participate in this series, the Hall of Fame has archived video of past programs: http://www.profootballhof.com/engage/heart-of-a-hall-of-famer/ or visit the Pro Football Hall of Fame Youth/Education YouTube page at https://www.youtube.com/user/profootballhofedu
- Tell students that, while not all NFL players display good character and make good choices at all times, most recognize their influence on young people and strive to be good role models both on and off the field. Discuss the importance of teenagers having good role models to emulate. Talk about the fact that just like football, the game of life has many choices and teenagers need tools to help them make good decisions. Choosing self-forming ways of behaving will contribute to teenagers’ growth and development. However, choosing self-destructive ways of behaving will have an adverse impact.
- Have a conversation about the characteristics of self-destructive behaviors (i.e. threaten physical, social, emotional, or cognitive well-being of self and others, tear down self-esteem, result in harmful consequences for self and others, involve uncaring actions, and hurt family, friends, or community). Then, brainstorm a list of self-destructive behaviors teenagers may engage in that would negatively impact their lives and their ability to reach their potential (i.e. eating disorders, physical abuse, substance abuse, isolation, bullying, promiscuity, gambling, gang involvement, self-loathing).
- Instruct students to complete “NFL Players Give Back” worksheet. They will select five NFL players and investigate their participation in humanitarian or charitable events. They will also identify five NFL players that specifically use their celebrity to help out at-risk youth. Have students share with class any motivational stories and effective strategies these NFL players have used along the way to reach their own potential.
• Review instructions and rubric for the Self-Destructive Behavior Presentation. Tell students that they will pretend to be a former or current NFL player and volunteer their time to inform a group of at-risk teenagers about a particular self-destructive behavior that is detrimental to their development. They will conduct research and present their findings using a PowerPoint Presentation or a Prezi Presentation.

Materials:
• Activity: Character in the NFL for the Heart of a Hall of Famer Series
• Worksheet: NFL Players Give Back
• Handout: Self-Destructive Behavior Presentation Instructions and Rubric
• Internet, books, magazines, newspapers, etc.
• Computer and Smartboard or projector and screen

Assessment:
• Rubric
Name: _________________________________

Name five NFL players that participate in humanitarian or charitable events. Give a brief description of something specific they have done.

1. __________________________________________________________________________________________
   __________________________________________________________________________________________
2. __________________________________________________________________________________________
   __________________________________________________________________________________________
3. __________________________________________________________________________________________
   __________________________________________________________________________________________
4. __________________________________________________________________________________________
   __________________________________________________________________________________________
5. __________________________________________________________________________________________
   __________________________________________________________________________________________

Name five NFL players that use their celebrity to help out at-risk youth. Give a brief description of something specific they have done.

1. __________________________________________________________________________________________
   __________________________________________________________________________________________
2. __________________________________________________________________________________________
   __________________________________________________________________________________________
3. __________________________________________________________________________________________
   __________________________________________________________________________________________
4. __________________________________________________________________________________________
   __________________________________________________________________________________________
5. __________________________________________________________________________________________
   __________________________________________________________________________________________
Instructions:

- You are a former or current NFL player and are volunteering your time to help some at-risk teenagers in your community. Specifically, you have been assigned the task of informing a group of teenagers about a self-destructive behavior that is detrimental to their development. Select one of the self-destructive behaviors, brainstormed in class, as a topic for an investigation.
- Research the topic using the Internet, books, magazines, newspapers, etc. You must use three different references. Be sure to site your sources.
- You will create a PowerPoint, or Prezi presentation as a means to inform your at-risk audience. It must include the elements listed below. However, any information you feel is important and relevant should be used. Make sure to label each element and provide detailed information.
  * Description/Definition of the self-destructive behavior
  * Prevalence of teen participation in the self-destructive behavior (statistics)
  * Reasons why some teens participate in the self-destructive behavior (risk factors)
  * Prevention and Treatment for teen offenders
- You will present the information to the class (at-risk students). Be sure to begin with a brief bio of yourself. Facts can reflect your life both on and off the football field.
- Print the slides of your presentation to turn in.
- See rubric on the following page
<table>
<thead>
<tr>
<th></th>
<th>Unsatisfactory</th>
<th>Needs Improvement</th>
<th>Satisfactory</th>
<th>Exemplary</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Slide Topics</strong></td>
<td>One topic is included</td>
<td>Two topics are included</td>
<td>Three topics are included</td>
<td>All four topics are included</td>
<td>4 points</td>
</tr>
<tr>
<td></td>
<td>1 point</td>
<td>2 points</td>
<td>3 points</td>
<td>4 points</td>
<td></td>
</tr>
<tr>
<td><strong>Slide Focus</strong></td>
<td>Information presented is not specific to teenagers, it applies to all age groups</td>
<td>Information presented is specific to teenagers however a lot of the information presented applies to other age groups</td>
<td>Information presented is specific to teenagers however some of the information presented applies to other age groups</td>
<td>All information presented is specific to teenagers</td>
<td>8 points</td>
</tr>
<tr>
<td></td>
<td>2 points</td>
<td>4 points</td>
<td>6 points</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Information Provided</strong></td>
<td>There are slides with incorrect information and they lack enough detail to provide a thorough understanding of the topics</td>
<td>There are slides with incorrect information but they have enough detail to provide a thorough understanding of the topics</td>
<td>All slides have correct information but some lack enough detail to provide a thorough understanding of the topic</td>
<td>All slides have correct information and enough detail to provide a thorough understanding of the topics</td>
<td>32 points</td>
</tr>
<tr>
<td></td>
<td>8 points</td>
<td>16 points</td>
<td>24 points</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Color/Graphics/Mechanics</strong></td>
<td>Slides are lacking in color and graphics, and contain several grammatical errors or errors that affect comprehension</td>
<td>Slides are lacking in color and graphics, or contain several grammatical errors or errors that affect comprehension</td>
<td>Slides contain ample color and graphics, but contain several grammatical errors or errors that affect comprehension</td>
<td>Slides contain ample color and graphics, and contain few to no grammatical errors or errors that affect comprehension</td>
<td>16 points</td>
</tr>
<tr>
<td></td>
<td>4 points</td>
<td>8 points</td>
<td>12 points</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Presentation</strong></td>
<td>Presenter read each slide, did not use eye contact except between slides, and was difficult to hear and understand</td>
<td>Presenter read each slide, did not use eye contact except between slides, but was easy to hear and understand</td>
<td>Presenter had to look at/read off of the slides the majority of time (not well-rehearsed) or was difficult to understand</td>
<td>Presenter was well-rehearsed, spoke with clarity and volume, and used eye contact</td>
<td>16 points</td>
</tr>
<tr>
<td></td>
<td>4 points</td>
<td>8 points</td>
<td>12 points</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>80 points</td>
</tr>
</tbody>
</table>
Goals/Objectives:
Students will:
- Research female participation in tackle football.
- Practice solving practical problems using the REASON Model (see next page).


Methods/Procedures:
- Ask students if playing tackle football is appropriate for middle school, junior high school, and high school girls?
- Working in small cooperative learning groups, have students use the REASON Model to solve the following practical problem: Mackenzie is in the ninth grade at a suburban comprehensive high school. She is an honor student and very popular among her peers. During her elementary and middle school years, she continually played on soccer teams in the community's soccer league as well as several club teams. She would very much like to play football on the high school's team, but is getting some resistance from her male peers, coaches, and school administration. However, her family supports her in everything she does. Add additional contextual information to the scenario as needed. Guide students to topics of research that would assist them in selecting a reasonable solution. Suggestions include:
  * A historical perspective of girls playing tackle football.
  * The impact of Title IX on female participation in high school and college athletics.
  * Profiles of current middle school, junior high school, and high school female football players and the positions they play.
  * States' rule governing girls in football and other contact sports.
  * The National Women's Football Association
  * The physiological differences among genders and the impact on playing contact sports.
- In a large group, have students debate whether or not girls should play tackle football in middle school, junior high school, and high school. Research from Activity 1 will help student support their points of view.

Materials:
- Access to: www.angelfire.com/sports/womenfootball
- Access to computers
- Girls in Football Bibliography (located on above website)
- The REASON Model information sheet (provided on the following pages)
- Practical Problem Think Sheet (provided on the following pages)
- Rubric for Practical Problem Think Sheet (provided on the following pages)

Assessment:
- Acceptable performance on Practical Problem Think Sheet
- Participation in class discussion
Name:__________________________________________

One way to make sure you are reasoning through a problem is to record your thoughts about the problem and possible solutions to the problem. Use this worksheet to implement the REASON model for solving practical problems.

Recognize the Problem
Practical problems can be very complex. Sometimes, just identifying the problem itself can be a real challenge. Each practical problem has a unique context, and the context of the problem can influence the solution. At this point, it is important to consider what a person really wants to happen when the problem is resolved.
Consider:
- What is the real problem?
- Why is it important to address the problem?
- What is the context of the problem?
- Who is involved?
- What are the desired ends you want to achieve?

Evaluate Information Needed to Solve the Problem
Solving practical problems requires both factual and value information. Factual information includes the concepts and knowledge that will help in developing and evaluating choices. Value information includes personal values, the values of others involved, and values that will help you in making an ethical choice.
Consider:
- What factual information is needed?
- Where can you obtain this factual information?
- What are your personal values regarding this problem situation and which of these are most important?
- What are the values of others involved in the situation?

Analyze Choices and Consequences
There is always more than once choice involved in a practical problem. Doing nothing about the situation is a choice as well as choosing another option. Sometimes there may be many choices. Each choice carries with it possible positive and negative consequences for self and others.
Consider:
- What choices are possible?
- What are the short-term and long-term consequences of each choice?
- What are the consequences for you and for others?
Select the Best Choice
Making a decision about which alternative is best means evaluating each alternative against the value information and desired ends. A win-win situation for all involved is desirable for the choice to be an effective one.

Consider:
- Which choice best reflects the values you have and the ends you desire regarding this problem?
- Which choice would result in the most positive consequences for you and others?
- Which choice works best for this particular situation?

Outline and Implement a Plan for Action
Problems are not solved until a reasoned decision is put into action. Action requires careful planning.

Consider:
- What skills do you need to carry out this choice?
- What resources do you need to carry out this choice?
- What barriers exist that might prevent you from taking action and how can you overcome these barriers?
- How can you organize the various tasks needed to achieve this solution?

Note the Results of Your Action(s)
Evaluating the outcome of a choice will help determine the success of the solution and what was learned from solving the problem.

Consider:
- Would you make the same choice again? Why or why not?
- What have you learned?
- How will this problem-solving experience affect your problem-solving in the future?
- Did your actions enhance the well-being of self and others?
- Were your actions ethical?
Name:__________________________________________

One way to make sure you are reasoning through a problem is to record your thoughts about the problem and possible solutions to the problem. Use this worksheet to implement the REASON model for solving practical problems.

Recognize the Problem
1. Identify the problem. Be Specific.

2. What is the context of the problem? What situational factors affect the problem?

3. Define your needs and wants. Explain what you would like to gain from the resolution of the problem.

Evaluate the Information Needed to Solve the Problem
1. List those values important enough to affect your decision.

2. What factual information do you need to solve the problem?
## Analyze Choices and Consequences

<table>
<thead>
<tr>
<th>Choices</th>
<th>Consequences for self: Positive and Negative</th>
<th>Consequences for OTHERS involved: Positive and Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Select the Best Choice
Make a decision that you feel is best for your situation and explain why.

______________________________________________________________
______________________________________________________________
______________________________________________________________
______________________________________________________________

Outline and Implement a Plan for Action
List the steps, in order, that you would take to carry out your decision.

______________________________________________________________
______________________________________________________________
______________________________________________________________
______________________________________________________________
______________________________________________________________

Note the Results of Your Actions
1. What were the consequences, both positive and negative, for yourself and others involved?

______________________________________________________________
______________________________________________________________
______________________________________________________________

2. How would you have changed your plan?

______________________________________________________________


<table>
<thead>
<tr>
<th>Criteria</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recognize the Problem</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State the Problem</td>
<td>Problem is stated accurately.</td>
<td>Problem is stated in unclear terms.</td>
<td>Problem is stated incorrectly.</td>
</tr>
<tr>
<td>Context</td>
<td>Completely identifies and explains the situational factors of the problem that will influence solving the problem.</td>
<td>Identifies the context of the problem, but omits some important situational factors.</td>
<td>Incorrectly assesses situational factors of the problem.</td>
</tr>
<tr>
<td>Desired Ends</td>
<td>Accurately describes the needs and wants desired when the problem is solved.</td>
<td>Describes either the needs or wants desired when the problem is solved.</td>
<td>Lacks understanding of desired needs and wants when the problem is solved or describes them in vague terms.</td>
</tr>
<tr>
<td><strong>Evaluate the Information Necessary to Solve the Problem</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value Information (values, interests, aptitudes, skills, personality and learning styles)</td>
<td>Accurately identifies all value information relevant to the problem.</td>
<td>Identifies some, but not all value information relevant to the problem.</td>
<td>Identifies value information that is not relevant to the problem.</td>
</tr>
<tr>
<td>Factual Information</td>
<td>Identifies reliable, factual information from a variety of sources.</td>
<td>Identifies appropriate factual information, but lacks depth and understanding. Limited sources cited.</td>
<td>Identifies unreliable factual information.</td>
</tr>
<tr>
<td><strong>Analyze the Choices and Consequences</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choices</td>
<td>Identifies at least 3 possible alternatives to solving the problem.</td>
<td>Identifies only 2 possible alternatives to solving the problem.</td>
<td>Identifies only 1 possible alternative to solving the problem.</td>
</tr>
<tr>
<td>Consequences</td>
<td>Able to describe in detail the consequences for self and others for each alternative.</td>
<td>Lists the consequences for either self or others, but not for both. More detail may be needed.</td>
<td>Consequences listed, however, little detail is given and may be irrelevant to the problem. Consequences are not given for each alternative.</td>
</tr>
<tr>
<td><strong>Select the Best Choice</strong></td>
<td>Selection has positive consequences for all involved (win,win situation) and meets the desired needs and wants.</td>
<td>Selection produces a win-lose situation or doesn’t meet the desired needs and wants.</td>
<td>Selection is not justified and lacks reason.</td>
</tr>
<tr>
<td><strong>Outline and Implement a Plan for Action</strong></td>
<td>A detailed plan is developed for putting the decision into action.</td>
<td>A plan is developed for putting the decision into action but lacks detail.</td>
<td>A plan is developed for putting the decision into action, but details are omitted.</td>
</tr>
<tr>
<td><strong>Note the Results of Your Actions</strong></td>
<td>Responses to questions demonstrate indepth thought and details.</td>
<td>Responses to questions are lacking in-depth thought and details.</td>
<td>Responses to questions are answered without thought or detail.</td>
</tr>
</tbody>
</table>
Goals/Objectives:
Students will:
- Recognize that childhood/teen obesity is a national epidemic.
- Describe causes for the rising number of young people who are overweight in this country.
- Calculate their Body Mass Index and determine their weight status.
- Give tips for safe, successful weight management.

National Standards: 14.0 - Nutrition and Wellness

Methods/Procedures:
- Give current statistics regarding childhood/teen obesity. For example, according to the U.S. Department of Health and Human Services, Center for Disease Control and Prevention, about 17.4% of adolescents, ages 12 to 19, are overweight. This number has tripled in the last 30 years.
- Discuss risks for being overweight (i.e. strain on bones, muscles, and internal organs, walking and even breathing take extra effort, hypertension, high blood cholesterol, coronary heart disease, type 2 diabetes, and certain kinds of cancers).
- Discuss why the number of people who are overweight is rising (i.e. modern living makes it easier to eat more food and the wrong types of food, people are less active, people eat for the wrong reasons, genetics).
- Explain to students that one method health professionals use to determine healthy weight is Body Mass Index (BMI), which uses a ratio of body weight to height. It is not a foolproof measure of health or fitness. Athletes and other people with large muscle mass have higher BMI and are not overweight.
- Formula for finding BMI: weight in pounds x 703 ÷ height in inches, squared (height times itself) = BMI
  * Example:
  * Suppose a fifteen-year-old female weighs 120 pounds and stands 5 feet 4 inches (64 inches). Her BMI calculations would look like this:
    * 120 x 703 = 84,360
    * 64 x 64 = 4,096
    * 84,360 ÷ 4,096 = 21
- Have students complete the Calculating Body Mass Index worksheet.
- Explain that weight management is a calorie budget. Calories are units used to measure the energy supplied by food. Whether a person gains, loses, or maintains weight depends on how many calories are taken in and how many are spent.
  - If a person gets more calories in a day than the body uses, the extra calories are stored as body fat. Over time, he/she will gain weight.
  - If a person uses more calories in a day than he/she gets from food, he/she will lose weight.
  - If a person uses an equal number of calories in a day as are eaten, his/her weight will stay the same.
  - Discuss weight management techniques (i.e. set reasonable goals, choose healthy foods, increase physical activity).

Materials:
- Calculating Body Mass Index worksheet

Assessment:
- Participation in class discussion
- Correct responses to Calculating Body Mass Index worksheet
Name:__________________________________________

**Directions:** Use the formula below to calculate your body mass index (BMI). Write responses in the spaces provided. After determining your BMI, find a chart to figure out your weight status.

1. Weight in lbs. x 703 ÷ Height in inches squared (height x height) = BMI

\[
\frac{\text{weight in lbs}}{703} \times \left(\frac{\text{height in inches}}{\text{height in inches}}\right)^2 = \text{BMI}
\]

\[
\frac{A}{703} = \text{BMI A}
\]

\[
\frac{B}{A} = \text{BMI B}
\]

2. My BMI score falls into the _______________ percentile. Therefore, my weight status category ____________________________.


<table>
<thead>
<tr>
<th>Weight Status Category</th>
<th>Percentile Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>Less than the 5th percentile</td>
</tr>
<tr>
<td>Healthy weight</td>
<td>5th percentile up to the 85th percentile</td>
</tr>
<tr>
<td>Overweight</td>
<td>85th percentile to less than the 95th percentile</td>
</tr>
<tr>
<td>Obese</td>
<td>Equal to or greater than the 95th percentile</td>
</tr>
</tbody>
</table>
Goals/Objectives:
Students will:
- Describe how physical activity affects Football Players’ nutritional needs.
- Analyze what’s best to eat and drink before, during, and after a football practice or game.
- Distinguish between fact and myths regarding sports nutrition

Common Core Standards: 14.0 - Nutrition and Wellness

Methods/Procedures:
- Have students investigate MyPlate by going to choosemyplate.gov. Inform students that the eating plan supplies Football Players with all the nutrients they need. With increased energy and fluid requirement, Football Players need to consume more than the minimum number of servings recommended. Additionally, they should be sure to get:
  * Plenty of carbohydrates. Football Players need extra calories for energy. They should get most of them from nutrient-dense foods high in complex carbohydrates.
  * Enough, but not too much protein. Physical activity along with sufficient amount of protein will help build muscles. Extra protein is stored as fat.
  * Enough vitamins and minerals. Football Players should eat calcium-rich foods for healthy bones, and iron-rich foods for oxygenated blood.
  * Enough water. Football Players should replenish the water lost through perspiration. Each pound of weight loss from sweating needs to be replaced by 2 cups of fluid.
- Review the functions of the essential nutrient, water. Discuss how the need is increased during a Football practice or game and what the health dangers are from dehydration. Have students address what types of fluids should be consumed and why, what physical activities pose the greatest challenges (running, weight training, etc.), and how these challenges can be overcome through rehydration.
- Have students create a sample menu for a high performance meal to be eaten several hours before a Football Game. They should trade with a classmate to evaluate each other’s meal plan. Using nutrient analysis software, have them analyze the nutritional value of their meal plan.
- Brainstorm food myths regarding sports nutrition such as making weight, bulking up, high-protein diets, and carbohydrate loading. Have students evaluate the nutritional consequences of each myth.

Materials:
- Computers
- Nutrient analysis computer software
- Internet access to: choosemyplate.gov

Assessment:
- Participation in all instructional activities
- Completion of Power for Performance Activity Sheet
Name: ____________________________________________

1. Complete the following schedules for fluid intake before, during and after a Football practice or game.

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Drink This Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 to 2 1/2 hours before activity</td>
<td></td>
</tr>
<tr>
<td>15 minutes or less before activity</td>
<td></td>
</tr>
<tr>
<td>Every 15 minutes during activity</td>
<td></td>
</tr>
<tr>
<td>After Activity</td>
<td></td>
</tr>
</tbody>
</table>

2. Select the best word(s) that complete(s) the following scenario.

A. Banana  B. Candy Bar  C. Complex Carbohydrates  D. Dehydration
E. Electrolytes  F. Fluids  G. Nauseated  H. Sports Drink

Before his first football game, Brandon ate a big bowl of cereal, a bagel and an orange to get plenty of _____. To make sure he would have enough ____, he took a bottle of water with him to the game. A teammate offered him a _____, but he was afraid it would make him jittery. He ate a _____ instead. The day was warm and many players suffered from _____. Brandon scored a touchdown, but his leg muscles cramped up. He drank a cola on the sideline, but it made him feel _____. His coach gave him several glasses of a _____. “You need to replace _____,” he said.

3. Circle the best choice for the missing word in each sentence.
A. The MyPlate eating plan provides Football Players with all the (nutrients or calories) they need.
B. Football Players require more than the minimum number of (foods or servings) because of their energy needs.
C. Football Players should get most of the extra calories they need from (fats or carbohydrates).
D. Complex carbohydrates produce (energy or muscle).
E. The body uses protein for (growth or energy).
F. MyPlate guidelines suggest Football Players eat foods rich in (calcium or iron) for healthy bones.
G. Football Players’ bodies sweat to reduce (body weight or body heat) during a workout or competition.
H. Football Players need to replace the (fluids or calories) lost during a workout or competition.
I. It takes 2 cups of water to replace each (ounce or pound) lost to sweat.

4. Joe weighs only 155 pounds, but he wants to make the football team in the fall. He has decided to eat a lot of steak and ice cream every day all summer to gain weight. How could his actions affect his ability to compete and his general health? Describe a better plan for reaching his goal.
Goals/Objectives:
Students will:
- Identify NFL careers.
- Conduct an exploratory interview to get an insider’s view of a particular career.
- Investigate career opportunities that reflect their interests, abilities, and personality.
- Utilize various sources of career information.

National Standards: 1.0 - Career, Community, and Family Connections:

Methods/Procedures:
- Have students complete the following career worksheets and activities provided on the following pages:
  * Careers in the NFL from A to Z
  * NFL Careers Scramble
  * Career Matching
  * Career Future
  * Career Activities

Materials:
- Career worksheets and activity descriptions
- Career reference books including:
  * Dictionary of Occupational Titles
  * Occupational Outlook Handbook (OOH)
  * Guide for Occupational Exploration
  * Occupational Outlook Quarterly
- Computer program “Ohio Career Information System (OCIS)”
- Internet access to career/job/vocation sites (i.e. http://stats.bls.gov)

Assessment:
- Students will be assessed on performance and accuracy of responses.
Name:__________________________________________

There are hundreds of jobs in the NFL in addition to being an athlete. See if you can think of one job for each letter in the alphabet.

A. ____________________________________________
B. ____________________________________________
C. ____________________________________________
D. ____________________________________________
E. ____________________________________________
F. ____________________________________________
G. ____________________________________________
H. ____________________________________________
I. ____________________________________________
J. ____________________________________________
K. ____________________________________________
L. ____________________________________________
M. ____________________________________________
N. ____________________________________________
O. ____________________________________________
P. ____________________________________________
Q. ____________________________________________
R. ____________________________________________
S. ____________________________________________
T. ____________________________________________
U. ____________________________________________
V. ____________________________________________
W. ____________________________________________
X. ____________________________________________
Y. ____________________________________________
Z. ____________________________________________
Name: __________________________________________

Directions: Unscramble the following NFL related careers

1. HACCO __________________________________________
2. ARPYEL GAMNETEEN ______________________________
3. NRLSJTUOIA ______________________________________
4. ROPAHOPGHTER __________________________________
5. KEPONUGREDSR __________________________________
6. NOWRE __________________________________________
7. TENARIR __________________________________________
8. CTSUO __________________________________________
9. CINTSAATISTI ____________________________________
10. KETICT SEALS ___________________________________
11. NEMPIQTUE GNAMARE ______________________________
12. EFREREE _________________________________________
13. POMRTORE _______________________________________
14. RECNUNNNA ______________________________________
15. ENTAG ___________________________________________
Name:__________________________________________

Directions: Match the careers on the left with the correct definition on the right:

_____ Players Agent A. Good with computers and networking. Oversee all technology applications for teams.

_____ Game Official B. Requires a keen eye, fast reflexes, stamina, self-control, and knowledge of rules and ability to make quick and correct decisions.

_____ Sports Photographer C. Has a strong science background with an emphasis on anatomy and physical therapy for athletes.

_____ Sports Psychologist D. Makes sure the stadiums and arenas are operable and safe for both players and fans.

_____ Facilities Manager E. Participates in contract negotiations, arranges personal appearances and sets up endorsements for commercial products.

_____ Director of IT F. Advises athletes on how to eat to perform their best.

_____ Official Statistician G. Expert in mathematics, bookkeeping, statistics and operating a computer.

_____ Scout H. Artist who uses a camera to capture the single action of an individual’s successes as well as defeats.

_____ Athletic Trainer I. Evaluates potential players as well as next week’s opponents.

_____ Sports Nutritionist J. Helps athletes cope with pressure.
Name:__________________________________________

The NFL can offer a ticket to fame and fortune. However, only a small percentage of people actually become professional athletes. Even those who do must some day retire and begin new careers. Education is the key to the future.

Think about the types of NFL career possibilities that exist for a person with your interests, abilities, and personality. Project yourself into the future and choose one occupation that interests you. Answer the following questions using any resources available (parents, relatives, career mentors, teachers, guidance counselors, Internet and printed material).

- What education and training would I need?
- What skills and aptitude should I have?
- Is there an age requirement? If so, what is it?
- What would my work environment be like?
- What hours would I spend on the job?
- What is the starting salary?
- What are the opportunities for advancement in this line of work?
- What are the benefits of the career?
- What is the dress code?
- What specific duties would I perform?
- What are the advantages and disadvantages of the job?

Now that you know more about the career, is it still something you would like to pursue? Yes or no and why?
Family and Consumer Sciences
NFL Career Activities

Teachers: The following are classroom career development activities for you and your students to enjoy. Feel free to adapt or copy these ideas to suit your classroom.

1. **CAREER PRACTICE:** Pretend you are a reporter for a large newspaper. You are asked to do an interview with a player after a big game. Prepare yourself by writing some questions to ask this professional player. Then ask your questions to a classmate who is pretending to be that player.

2. **MUSEUM CREATION:** Create a museum in your school. Help students decide on a theme for the museum. Allow every student to volunteer for a museum-related job (i.e. collectors, labelers, researchers, public relations staff, art designers, tour guides, and security). Next, decide on the objects to be collected and from where and whom you are going to collect them. Design a brochure with an invitation to be distributed to other classes and parents. In the brochure make sure to include where the museum is located, hours of operation, cost if any, and a brief description about what else is available at the museum. Have a grand opening with reporters and photographers. Have Fun!

3. **PROFESSIONALS’ PERSPECTIVE:** Invite people to class who are in or retired from sports related careers (i.e. sportswriter, radio or TV broadcaster, coach, advertising agency, artist, athlete, retailer, sports statistician, referee, etc). Ask these community resource people to share how they began their careers, what training, education, and qualifications they needed for that.

4. **RÉSUMÉ:** Develop a résumé that could be used to apply for sports related or museum careers.

5. **CAREER COLLAGE:** Have each student choose a career in which he/she is interested and create a collage to illustrate that career. Make a class scrapbook of dream careers.

6. **CAREER DAY:** Have students plan a career day for the whole school. Invite community resource people to address their careers and answers questions from students.

The Hall of Fame welcomes any suggestions for classroom activities. Please share your thoughts and ideas by contacting the Educational Programs Staff at Education@ProFootballHOF.com.
Goals/Objectives:
Students will:
- Learn the importance of setting goals
- Demonstrate the SMART goals method of setting goals
- Identify some personal short-term and long-term goals they want to work toward achieving
- Create a visualization of a goal they want to achieve before the end of the school year

National Standards: 12.0-Analyze factors that impact human growth and development

Methods/Procedures:
- **Activity #1:**
  - Write G O A L vertically on chart paper. Have students work in pairs to brainstorm words or phrases that begin with each of the letters to describe why a person would set goals. Examples include:
    - G: (gain skills)
    - O: (organize self)
    - A: (achievement)
    - L: (long range plan)

- **Activity #2: Why Set Goals?**
  - Divide group into teams of 3 - 4 students. Each team will need a pencil and piece of paper on which to keep their score. Give each team one tennis ball. Put a bucket about 10 feet in front of each team.
  - The person who is going to throw must either be blindfolded or have their back to the bucket. Have each person on the team try to throw the ball in the bucket without looking (maybe spin around a couple times before they throw).
  - Scoring: Give one point if the ball hits the bucket, three points if the ball goes in the bucket and then bounces out and five points if the ball goes in the bucket and stays in.
  - **Significance:** Tell students if you don’t have any goals, then you won’t know which direction you are heading or how to get there. Blindly throwing the tennis ball shows how hard it is to hit a goal you can’t see or haven’t set.
• **Activity #3: Degree of Difficulty in Setting Goals**

  • **First Round:**
    * Move each team’s bucket about 35 to 40 feet in front of each team. Give each team three tennis balls. Have one member of each team go out and stand by the bucket. Each team member gets to throw three tennis balls at the bucket. The person’s job by the bucket is to return the balls for the next person. Rotate positions so everyone gets a chance to throw. Have the teams keep a running score of how many balls go into the bucket. Give one point if the ball hits the bucket, three points if the ball goes in the bucket and then bounces out and five points if the ball goes in the bucket and stays in.

    * **Significance:** Tell students goals that are too difficult hardly ever get achieved

  • **Second Round:**
    * Move the buckets in closer to about 20 feet. Repeat the same procedure as before. Check scores.

  • **Third Round:**
    * Move the bucket closer to 3 feet and repeat the process once again.

    * **Significance:** Tell Students goals that are too easy are not much of a challenge.

  • **Fourth Round:**
    * Move the buckets back out to the 20 foot mark. Have one team member pick up the bucket and help get the tennis ball to land in the bucket by trying to catch it in the bucket. They may move only after the person throwing the ball has released it in the air. The procedure should be the same as previously used. Check scores.

    * **Significance:** Tell students that it is easier to accomplish a goal when someone helps you.

• **Discussion Questions for Activities #2 and #3:**

  1. How did it feel when you were trying to get it in the bucket without seeing it?
  2. How can the blindfolded throw be compared to not having any goals?
  3. Are goals important? Why or why not?
  4. How did you feel when you were trying to hit the bucket at 35-40 feet?
  5. How did you feel when you were trying to hit the bucket at 20 feet?
  6. How did you feel when you were trying to hit the bucket at 3 feet?
  7. How was it different when someone was moving the bucket to help you make it in?
  8. How did you feel when you were the person moving the bucket?
  9. Should you set goals that are really difficult to reach? Explain.
  10. What are some examples of goals that are difficult to reach?
11. Should you set goals that are easy to reach? Explain.
12. What are some examples of goals that are easy to reach?
13. What are some ways that people can help you reach your goals?
14. What happens when other people set goals for you to accomplish rather than you setting your own goals?
15. How can drugs, gangs, sexual activity or other self-destructive behaviors hurt your chances of reaching your goals?

• Activity #4: Setting SMART Goals
  • Tell students that goals can be set in seven areas of life which contribute to a person’s overall level of wellness: physical, social, emotional, mental, vocational, financial, and spiritual.
  • The first step in achieving goals is to write them down using the SMART goal format:
    * **Specific**: State exactly what is to be done.
    * **Measurable**: Include how the goal can be measured.
    * **Attainable**: Determine steps to reach the goal.
    * **Realistic**: Do not set goals for something unrealistic.
    * **Time Bound**: State when the goal will be met.
  • Example of a SMART financial goal:
    * **Specific** - I plan to save for a down payment on a new car
    * **Measurable** - I plan to save $5,000 for a down payment on a new car
    * **Attainable** - I plan to save $5,000 for a down payment on a new car by saving $200 per monthly paycheck
    * **Realistic** - It is realistic to save $200 from each monthly paycheck for a down payment on a car because I usually waste money on unnecessary items instead of saving it
    * **Time Bound** - I plan to save $5,000 for a down payment on a new car by saving $200 from each monthly paycheck for two years and one month (25 months)
  • Read the following goal statements and have students determine what part is missing (specific, measurable, attainable, realistic, or time bound):
    * **Wellness Goal #1**
      I plan to raise my grade in Math from an F to an A by the end of the week. I will do this by working hard in class, completing all of my homework, and studying for tests. (Realistic)
    * **Wellness Goal #2**
      By the end of the first grading period, I will get an A by working hard in class, completing all of my homework, and studying for all of my tests. (Specific)
* **Wellness Goal #3**
I plan to raise my grade in Math from a B to an A by the end of the first grading period. (Attainable)

* **Wellness Goal #4**
I plan to raise my grade in Math by the end of the first grading period. I will do this by working hard in class, completing all of my homework, and studying for tests. (Measurable)

* **Wellness Goal #5**
I plan to raise my grade in Math from a B to an A. I will do this by working hard in class, completing all of my homework, and studying for tests. (Time Bound)

- Working in small groups, have students rewrite on chart paper some incomplete goal statement like the ones below to make them SMART goals. Display chart paper and have students in the class critique.
  
  * I want to get in better shape.
  * I want to save money for college.
  * I want to feel better about myself.
  * I want to have more friends.
  * I want to figure out what I want to do for a job when “I grow up.”

**Materials:**
- Chart paper
- Markers
- Pencil and paper
- Tennis balls
- Bucket
- Measuring tape
- Assessment materials

**Assessment:**
Have students complete one of the following projects:

- **Letter Project**
  Write a letter to yourself that includes the following in the body of the letter:
  - Identify the benefits of setting goals
  - Define short term and long term goals
  - Describe the SMART goal setting process
  - Identify at least one personal SMART goal you intend to achieve before the end of the school year.
  - Provide your personal address on the stamped envelope provided. Your letter will be mailed to you at the end of the school year in the summer.
**Poster Project**

Create a poster to inform students at the retreat about the importance and method of setting goals, and construct at least one SMART goal to be achieved before the end of the school year.

- Poster board
- Title
  * Include your name(s)
  * Title of your poster
- Body
  * Identify the benefits of setting goals
  * Define short term and long term goals
  * Describe the SMART goal setting process
  * Identify at least one personal SMART goal you intend to achieve before the end of the school year.
- Use graphics, color and font sizes to make your poster interesting to read.
**Power For Performance**
1. At least 2 cups (500ml) of water, juice or milk; 2 cups (500ml) of water, or sports drink; 1/2 cup (125ml) of water or sports drink; 2 cups (500ml) of water or sports drink for every pound of weight lost during the activity
3. Nutrients, serving, carbohydrates, energy, energy, calcium, body heat, fluids, pounds
4. Answer varies

**Determining Nutritional Values**
Lamb Chops – 4, 4, 0, B
Broiled Fish – 2, 1, 1, A
Quiche Casserole – 4, 2, 2, A
Vegetable Risotto - 3, 0, 3, A
Almond-Pumpkin - 3, 0, 3, A
Breakfast Casserole - 5,2,3,A
Tex-Mex Chicken - 2,1,1,A
Layered Mexican Salad - 4,0,4,A
Lemon Poppy Seed Cake - 0,2,-2,C
Seven Layer Bars - 0,3,-3,C

**Careers in NFL from A to Z**
Possible Answers
A = Agent
B = Broadcaster
C = Coach
D = Doctor
E = Equipment Manager
F = Field Judge
G = Groundskeeper
H = Head Linesman
I = Intern
J = Journalist
K = Kinesiologist
L = Lawyer
M = Mascot
N = Nutritionist
O = Owner
P = Photographer
Q = Quarterback
R = Referee
S = Scout
T = Trainer
U = Umpire
V = Vendor
W = Writer
X = X-Ray Technician
Y = Yoga Instructor
Z = Zeppelin Driver

**Sports Career Scramble**
1. Coach
2. Designer
3. Journalist
4. Photographer
5. Groundskeeper
6. Owner
7. Trainer
8. Scout
9. Statistician
10. Ticket Sales
11. Equipment Manager
12. Referee
13. Promoter
14. Announcer
15. Agent

**Career Matching**
Players Agent - E
Game Official - B
Sports Photographer - H
Sports Psychologist - J
Facilities Manager - D
Director of IT - A
Official Statistician - G
Scout - I
Athletic Trainer - C
Sports Nutritionist - F
Pro Football Hall of Fame
Youth/Education

English
Language Arts

Activity Guide 2015-2016
<table>
<thead>
<tr>
<th>Lesson</th>
<th>Common Core Standards</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Proud Heritage: African Americans and Pro Football</td>
<td>RI, W, SL</td>
<td>ELA 1-2</td>
</tr>
<tr>
<td>African American Football Pioneers</td>
<td>RI, W, SL</td>
<td>ELA 3-4</td>
</tr>
<tr>
<td>All About Grammar</td>
<td>L</td>
<td>ELA 5-6</td>
</tr>
<tr>
<td>Analyzing Media Messages</td>
<td>RI, SL</td>
<td>ELA 7-8</td>
</tr>
<tr>
<td>Analyzing Poetry</td>
<td>RL, RI, W, SL</td>
<td>ELA 9-11</td>
</tr>
<tr>
<td>Breaking the Color Barrier: The Kansas Comet’s Roommate</td>
<td>RL, RI, W, SL</td>
<td>ELA 12-13</td>
</tr>
<tr>
<td>Descriptive Writing</td>
<td>RI, W, L</td>
<td>ELA 14</td>
</tr>
<tr>
<td>Essential Question: What is football’s role in American culture?</td>
<td>RI, W, SL, L</td>
<td>ELA 15</td>
</tr>
<tr>
<td>Emlen Tunnell, Pro Football’s First African American Hall of Famer</td>
<td>RI, W, SL</td>
<td>ELA 16-17</td>
</tr>
<tr>
<td>Fantasy Football Experience</td>
<td>RL, RI, W</td>
<td>ELA 18</td>
</tr>
<tr>
<td>Football Chain Story</td>
<td>W</td>
<td>ELA 19</td>
</tr>
<tr>
<td>Football Expressions in Everyday Language</td>
<td>L</td>
<td>ELA 20-21</td>
</tr>
<tr>
<td>History-Based Poetry</td>
<td>RI, W, SL</td>
<td>ELA 22-23</td>
</tr>
<tr>
<td>Newspaper Articles: What Are They Saying About Us?</td>
<td>RI, SL</td>
<td>ELA 24-25</td>
</tr>
<tr>
<td>Select Next Year’s Class</td>
<td>RI, W, SL</td>
<td>ELA 26</td>
</tr>
<tr>
<td>Writing, Football and You</td>
<td>RI, W, L</td>
<td>ELA 27</td>
</tr>
<tr>
<td>Travel Brochure</td>
<td>RI, W</td>
<td>ELA 28-29</td>
</tr>
<tr>
<td>Travel Review</td>
<td>RI, W, L</td>
<td>ELA 30-31</td>
</tr>
<tr>
<td>Literacy and America’s Game</td>
<td>RI, W</td>
<td>ELA 32-40</td>
</tr>
<tr>
<td>Miscellaneous Activities</td>
<td></td>
<td>ELA 41-46</td>
</tr>
<tr>
<td>Book List</td>
<td></td>
<td>ELA 47-49</td>
</tr>
<tr>
<td>Answer Key</td>
<td></td>
<td>ELA 50-51</td>
</tr>
</tbody>
</table>
Goals/Objectives:
Students will:
• Research African Americans in the National Football League through the process of gathering, synthesizing, and organizing that information into a presentable format using the Internet
• Develop an understanding of how to analyze and critique visual images, messages and meanings
• Effectively analyze media messages involving African Americans and pro football.
• Interpret ideas, evaluate purposes and effects of varying print media; evaluate how media forms influence and inform; analyze techniques used in mass media; compare and contrast various articles on the internet using reputable web sites
• Use written language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion and exchange of information)

Common Core Standards: RI- Key Ideas and Details, Integration of Knowledge and Ideas; W- Text Types and Purposes, Research to Build and Present Knowledge; SL- Presentation of Knowledge and Ideas

Methods/Procedures:
• Students will first complete a research project involving famous African Americans involved in the NFL. The research can involve players, coaches and other auxiliary members of the NFL, which will be listed on the board.
• As a beginning activity, students will be asked to brainstorm a list of African Americans in the NFL, which will be listed on the board.
• Next, the students will be instructed on the appropriate way to use the Internet for research and how to find and use reputable sources.
• Finally, the students will each choose a player from the list on which to complete a report or presentation. They can find valuable information at these reputable websites:
  * ProFootballHOF.com
  * NFL.com
• Students would be encouraged to access the Hall’s official site: ProFootballHOF.com. On this site students can examine photographs to analyze, discuss and import for use in their reports and/or presentations.
• Students will quickly be able to judge whether or not there is enough available information on the chosen player to adequately write a report or compile a visual presentation.
• If the individual chosen lacks adequate documentation available, the student may go to the class compiled list to choose another.
• Students will search for additional information on their subject to enhance their presentation
Materials:
- Search Engine List
- Website List
- Access to the Internet
- Class compiled list of African Americans in the NFL
- Access to HOF’s website at ProFootballHOF.com
- Access to the school and/or public library

Assessment:
- Students will submit their research in report form or in a PowerPoint presentation.
- Students will deliver formal presentations on their individuals.
- Reports and/or presentations will be assessed via a teacher-created rubric.
Goals/Objectives:
Students will:
- Help each other understand the contributions of African American football pioneers.
- Use Internet as a tool for finding and gathering information.
- Use information gathered to write a biographical report and/or give an oral presentation about chosen African American football pioneer.

Common Core Standards: RI- Key Ideas and Details, Integration of Knowledge and Ideas; W- Text Types and Purposes; SL- Comprehension and Collaboration

Methods/Procedures:
- Students will go to the Pro Football Hall of Fame website at ProFootballHOF.com. Click on the “Football History” tab and then the “History Index” on the left and locate the story called “African Americans in Pro Football.”
- Scanning the list of “Firsts” by African Americans in Pro Football, students should select one man upon which to complete further research.
- Students should then begin searching for information about their chosen African American football pioneer.
- Teacher should instruct students to examine the social and historical time period in which these men lived and worked. Teacher should also advise students to not only focus on the man’s contributions to football, but also his contributions in other areas of his life. For example, the first African American head coach, Fritz Pollard, also became a successful entrepreneur.
- Students should take detailed notes about the man they have chosen. (To prevent plagiarism, teacher can require students to provide a print out of all sources used. Depending on the grade level, students could even be required to complete a Works Cited Page and use MLA or APA documentation within the text of the essay.)
- Using the information gathered, students will write a biographical essay (or prepare an oral report) about their chosen football pioneer.
- Students will revise the essay with peer-editing help.
- Students will conference with the teacher for a final revision.
- Students will prepare a final copy for publication and presentation to the class.
- Students will share their biographies with each other. Students will be instructed to look for displays or on ProFootballHOF.com to find information about these pioneers or search for additional pioneers to add to their list (teacher could require all students to identify 5 additional pioneers).
- The class can then discuss the significance of football in terms of advancing racial equality in our country. The class can also discuss football’s role in helping athletes accomplish other goals in their lives (such as Fritz Pollard, who became a successful African American businessman after he left football).
African American Football Pioneers

Materials:
- Computer
- Access to the Internet
- Access to ProFootballHOF.com
- Paper
- Pen/Pencil

Assessment:
- Students will receive feedback from their peers regarding effectiveness of their biographies and/or presentations.
- Teacher can also assess student learning during the class discussion.
Goals/Objectives:
Students will:
- Identify words used as the eight parts of speech.
- Identify phrases and clauses in sentences.
- Observe capitalization and punctuation rules when used with direct quotations.

Common Core Standards: L- Conventions of Standard English; Vocabulary Acquisition and Use

Methods/Procedures:
- Each student (or group) selects a sports article, cuts or prints it out and then reads silently or aloud.
- Students identify nouns, pronouns, strong action verbs, adjectives, adverbs, prepositions, conjunctions, and interjections, using a highlighter to mark them. If a group is used, individuals may be assigned to search for different parts of speech.
- Students will identify and mark the required number of prepositional phrases, adjective clauses, adverb clauses, and/or noun clauses used in the article.
- Students could also be asked to look for use of puns, alliteration, similes, metaphors, and personification. These can be entered in the “other” section on the activity sheet.

Materials:
- Sports section of newspapers and/or magazines
- Scissors
- Highlighting pens
- Scrap paper
- Grammar Plays worksheet (See next page)

Assessment:
- Grades can be assigned for completed worksheets; points may vary for easy to difficult items. Bonus points could be used for the “other” section.
Find the following parts of speech, phrases, clauses, and other figures of speech (simile, metaphor, personification, pun, alliteration) used in your article. Try to use the football related words first.

Nouns:

Pronouns: (with their antecedents)

Adjectives:

Adverbs:

Verbs: (strong, action)

Prepositions: (in their phrases)

Conjunctions:

Interjections:

Clauses: (mark AC for adjective clause, AVC for adverb, and NC for noun)

Other:
Goals/Objectives:
Students will:
• Develop an understanding of how to analyze and critique visual images, messages and meanings.
• Effectively analyze media messages involving pro football.
• Interpret ideas, evaluate purposes and the effects of varying media; evaluate how media forms influence and inform, analyze techniques used in mass media; compare and contrast film with print version of a story.
• Use spoken, written and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion and exchange of information).

Common Core Standards: RI- Key Ideas and Details, Integration of Knowledge and Ideas; SL-CCR Comprehension and Collaboration

Methods/Procedures:
• Students should first examine the term “mass media” and discuss how its definition (“a form of communication that is widely available to many people”) relates and plays a major role not only in professional football, but also in all aspects of everyone’s life.
• As a beginning activity, students will respond to a writing prompt that asks them to describe their favorite football advertisement. Students will then share their descriptions and explain why they made their selections. Teachers will explain how verbal and visual messages are created to support a particular point of view. The teacher will then show examples of how facts and opinions are carefully blended to persuade readers and viewers to agree with a particular point of view.
• Teacher lists the key questions students ask with each sport’s advertisement and visual:
  • What message is this visual (photo, cartoon, television program, or advertisement) trying to send to viewers?
  • What do I know about this subject?
  • What techniques were used to present the information from a specific point of view?
  • How can I use what I already know to judge whether this message is fair or unfair, reality or fantasy, and based on facts or opinions?
  • What other sources might I use to find other viewpoints that I trust on this subject? (i.e. parent, teacher, reliable source)
• After discussing these questions in relation to the sample ads/images shown by the teacher, students will apply them to photos/ads of their own choice. To do this, students should visit any sports website or look through any sports magazine to select an image. Students should print the image and be prepared to share with class along with an analysis of the image’s message(s).
• Students would be encouraged to access the Hall’s official site: ProFootballHOF.com. On this site, students can examine photographs to analyze and discuss.
• Students will examine the photographs on display or on ProFootballHOF.com, apply the previously mentioned questions to bring back their gleaned information to discuss and compare.
• Students will then take/find their own photo and analyze the selected picture.
English Language Arts

Analyzing Media Messages

Materials:
- Key questions on overhead or chalkboard
- Key questions in print form to each student
- Access to the Internet
- Access to the Hall of Fame’s website at ProFootballHOF.com
- Photos from newspapers or periodicals

Assessment:
- Students will submit their assessment of their chosen photo from the Hall of Fame or on ProFootballHOF.com.
- Students will each choose one exhibit or visual that they photographed or found on ProFootballHOF.com. Each student will explain the message he/she hopes the photo imparts to the class. Prior to the student’s revelation of the message he/she wishes to impart, the class will individually write down what they think the photo imparts to the viewer.
- Students will deliver a formal presentation on their chosen photo(s) that will demonstrate a clear understanding of the key questions and how they can help analyze and evaluate the message(s) the pictures evoke.
- The teacher will also display each student’s photo.
Analyzing Poetry

Goals/Objectives:
Students will:
• Be introduced to and be able to identify the integral parts of a poem: content, structure, figurative language, sound devices, and symbolism.
• Be introduced to taking notes on a poem to be analyzed.
• Write a lyric poem.
• Write a free verse poem.

Common Core Standards: RL- Craft and Structure; RI- Key Ideas and Details; W- Text Types and Purposes; L- Vocabulary Acquisition and Use

Methods/Procedures:
• Students will first complete a series of exercises involving examination and interpretation of numerous poems chosen by the teacher and classmates.
• As a beginning activity, students will be asked to read the article written about Bob Kalsu, one of two pro football players to die in Vietnam. Teacher and students will discuss details of the article to come to an understanding of the man and his life.
• Secondly, the instructor will make copies of a poem written by Bob Kalsu, Jr, about the death of his father during the Vietnam War entitled “Why God.” Students will be given time to express their thoughts about what the author was trying to say in this poem.
• Next, the class will be provided with the definitions of lyric poems (poems that deal with feelings and emotions) and narrative poems (poems that tell a story). Students should come to the understanding that the “Why God” poem is a lyric.
• Finally, students should understand that some poems use end rhyme while others are free verse, or poems that do not use a regular end rhyme pattern. Students will come to the understanding that a free verse and lyric poem is made up of unrhymed words that are emotionally powerful.
• Students should think of an event or topic that evokes powerful feelings and emotions within them. Then, considering the information learned about Bob Kalsu and the poem written by his son as an example of an emotionally-charged topic, write a lyric poem of their own.

Materials:
• Newspaper article about Bob Kalsu
• Access to the Internet
• Access to HOF’s website at ProFootballHOF.com
• Paper and writing tool

Assessment:
• Poems displayed in classroom and/or compiled in booklet form
• Students will deliver a formal presentation or reading of their poem.
Kalsu’s Story Touching and Tragic

Buddy Thomas
Senior sports editor/columnist, South Coast Today

Bob Kalsu never reached All-Pro status in the National Football League. Probably because he didn’t play long enough. But the big lineman from the University of Oklahoma was voted the team’s top rookie in his first and only season with the Buffalo Bills. That was back in 1968 when the American Football League was on the threshold of a merger with the rival NFL, and the 1-12-1 Bills were hoping to re-discover the glory days of middecade.

I was two years removed from Vietnam at the time and still trying to re-adjust to civilian life. Part of that re-adjustment centered around watching professional football, trying to convince myself that the AFL was not just a cheap imitation of the real thing (NFL). A year later I finally became convinced when the Jets beat my beloved Colts in Super Bowl III. But I had never even heard of Bob Kalsu until sometime last week, when I saw his story on television. I can’t remember the exact night it was shown. It was mid- to late-week, I think. But I do know it was on the early version of ESPN’s Sportscenter. It probably was meant to be a filler piece. You know, one of those five-minute mini-features that help fill the hour-long time slot when off-nights, Mother Nature or a combination of both leave the scoreboard virtually empty. What it became was, quite simply, the most heart-rendering piece I’ve ever seen.

It was a story of life, love and devotion interrupted by an untimely death. Bob Kalsu played the lead role.

On July 21, 1970, the Bills’ lineman became the only professional football player to be killed in Vietnam. (Note: In 2001, after this article was written, it was discovered that another NFL player - Don Steinbrunner - who played for the Cleveland Browns in the 1950s was also killed in Vietnam). Details of his death came from the lips of a teary-eyed former soldier who saw Lieutenant Kalsu fall while helping defend something called Ripcord Base on an isolated jungle mountaintop near the Ashau Valley. All through his high school and college days, football was a big part of Kalsu’s life. So was the ROTC – Reserved Officers Training Corp. But the biggest part of Kalsu’s life was his sweetheart, Jan, who he married the day after his final college game in the Orange Bowl. The Bills selected him in the eighth round of the ’68 college draft – after such not-so-notables as Pete Richardson, a defensive back from Dayton, running back Max Anderson of Arizona State and Mike McBath, a defensive end from Penn State. With the exception of first-round selection Haven Moses of San Diego State, the Buffalo draft list read like a roll call from the Society of Unknown Nobodies.

But Kalsu quickly became somebody in his first AFL season by earning the team’s Rookie of the Year award with his stellar play at guard. Sadly it would be his final season of football. His wife had recently given birth to a daughter, Jill, and the future appeared bright. But following the ’68 season, Kalsu began fulfilling his ROTC obligation with the United States Army and in November 1969, he received his orders to go to Vietnam. He probably could have used politics to remain at home, but
Kalsu said no. After six months in Vietnam, 1st Lieutenant Bob Kalsu left his 11th Artillery unit of the 101st Airborne Division for a week of R&R in Hawaii. There he was reunited with Jan, who was now pregnant with their second child. Most of this information was recorded in newspaper articles – articles I never knew existed before watching last week’s riveting television piece. But while the written words put a lump in my throat, the spoken words induced tears that flowed freely from my eyes. I sobbed when Jan told of the day she received word of her husband’s death as she lay in her hospital bed after giving birth to her son, Bob Jr.

I sniffled when the young Bob revealed he had heard his father’s voice asking him to have the first dance with his sister on her wedding day. And I cried when Bob Jr. relayed how he saw his father sitting and smiling as he and Jill moved gracefully about the dance floor. But when all was said and done, I probably felt worse about myself for never having known Bob Kalsu had even existed.

Why God
A poem written by Bob Kalsu, Jr.

Why did you do it
Why did he die
You didn’t even give him time
To tell his own son “hi”

Why is there war
What does it show
Why us Lord
Why did he go

Why him Lord
He was such a good Christian
Why was it him
That you gave such a short mission

Why my father God
What did he ever do
You didn’t even give him time
To tell his own son “I love you.”

There are so many others
Why did it have to be him
Why did he leave
Why wasn’t it them

The love he showed for others
Could have been for me too

Why him God
Was he just for you

It hurts many others
Not just me
I guess I’ll never understand
I guess I’ll never see

Why my father God
What did he ever do
You didn’t even give him time
To tell his own son “I love you.”
Goals/Objectives:
Students will:
- Create, critique and discuss print and nonprint texts.
- Conduct research on issues and interests by generating ideas and questions and by posing problems. Use a variety of technological and informational resources (e.g., video, displays, databases) to gather and synthesize information and to create and communicate knowledge.
- Develop an understanding of and respect for diversity in language use, patterns and dialects across cultures, ethnic groups, geographic regions and social roles.
- Use spoken, written and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion and exchange of information).

Common Core Standards: RL- Key Ideas and Details, Integration of Knowledge and Ideas; RI- Key Ideas and Details, Integration of Knowledge and Ideas; W- Text Types and Purposes, Research to Build and Present Knowledge; SL- Presentation of Knowledge and Ideas

Methods/Procedures:
- Students will read *Brian’s Song* in either the play or novel version as a class and discuss the two protagonists (Gale Sayers, Brian Piccolo) and their relationship in detail. Individually, students will list ways in which Gale and Brian were similar and ways in which they were different.
- Students, as a class, will compile a list of similarities and differences for Gale and Brian. The list should be placed on a chart that can be posted in the classroom.
- Students will then view excerpts from the original Emmy-winning TV broadcast of *Brian’s Song* starring James Caan and Billy Dee Williams. Students will be shown the specific video scene where Gale is called into Coach Halas’s office and asked if he can handle rooming with Brian and all the public outrage that will result from the first black/white rooming arrangement. This scene is approximately 30 minutes into the video.
- Students will research this or any other color barrier any African American Hall of Famer broke and gather the facts or bits of information to share with the class. Students are encouraged to access the Hall's official site: ProFootballHOF.com.
- If the class can take a field trip to the Hall of Fame, students will gather more information on Gale Sayers for their stories. Students will assume the role of a reporter or newscaster for one of the major newspapers or networks and write a story about what Gale must have experienced when he agreed to room with Brian Piccolo.
- Students may also write from Brian’s perspective.
Materials:

- *Brian’s Song* (Novel version - Author, William Blinn, Bantam Books)
- Video of *Brian’s Song* (Columbia Pictures)
- Access to the Internet
- Access to HOF’s website at ProFootballHOF.com

Assessment:

- Students will individually compile and submit a list of the similarities of and differences between Gale and Brian.
- As a class, students will compile a similarities and differences list of Gale and Brian and post this in the classroom.
- Students will submit a news release on the first black and white roommates on the Chicago Bears team.
Goals/Objectives:
Students will:
- Produce descriptive essays and test the merit of the description by asking other students to match descriptions with photos.
- Understand the need for detail in descriptive essays.
- Write for one’s peers (a specific audience).

Common Core Standards: RI- Key Ideas and Details; W- Text Types and Purposes, Production and Distribution of Writing; L- Knowledge of Language

Methods/Procedures:
- On a field trip to the Pro Football Hall of Fame, students view exhibits. Then, each student must find one exhibit on which to write a short descriptive essay.
- Once students have selected an exhibit, they must use the class camera(s) to take photos of their exhibits or use a smartphone to take photos and then email them to the teacher.
- Students should take detailed notes about the exhibit they have chosen, using descriptive words and phrases.
- Using the information gathered, students will write a descriptive essay about their chosen exhibit. (This can be completed the next day in a computer lab - or with Chromebooks or iPads – to add a technology component to the lesson.)
- Students will revise the essay with peer-editing help.
- Students will conference with the teacher for a final revision.
- Students will prepare a final copy for publication and presentation to other class periods.
- For 6th - 12th grade groups: Each class period will number essays for their class and assign letters to each photo display.
- The next day, each class period must try to match the correct descriptive essay with the appropriate photo for each of the other classes.
- Students not able to tour can use ProFootballHOF.com to complete the activity for the Hall of Fame.

Materials:
- Notebooks, notepads/paper & writing implements
- Cameras, printing, and/or the use of a SmartBoard or projector

Assessment:
- Students will receive feedback from their peers regarding effectiveness of description (based on the ease with which readers could determine the display being described in the essay). The teacher will use a rubric to score each essay.

Alternate Activity:
- Photocopy essays from the first activity. Use the essays with a different group of students touring the Hall of Fame and turn it into a scavenger hunt.
- Group or team students. Hand each group 15-20 essays (make sure the number of essays given to each group is equal). The first group to correctly find and identify all displays being described in their stack of essays wins the scavenger hunt.
Essential Question:
What is football’s role in American culture?

Goals/Objectives:
Students will:

- Conduct research regarding football’s impact on American culture.
- Write an informative and persuasive essay or present a speech which attempts to answer the question “What is football’s role in American culture?” using data/research to back up the writer’s/speaker’s claims.

Common Core Standards: RI-Key Ideas and Details, Integration of Knowledge and Ideas; W-Text Types and Purposes, Production and Distribution of Writing, Research to Build and Present Knowledge; SL- Comprehension and Collaboration, Presentation of Knowledge and Ideas; L- Conventions of Standard English, Knowledge of Language

Methods/Procedures:
- The class examines the artifacts within the Pro Football Hall of Fame via a virtual tour or an actual field trip.
- After the tour, in groups of 3-4, students will discuss why the Pro Football Hall of Fame is a museum and how it is similar to and different from other museums.
- Brainstorm a list of key research questions. For example, guide students to think of all the ways football affects our society in terms of entertainment, sports and recreation, and the economy. Remind students that “football” includes not only professional teams, but pee wee, high school and college. Guide them to start by looking at pricing information for equipment and remind them that every time parents buy footballs or mouth guards, etc., several companies are making money (the company who manufactured the product as well as the company who sold it—and even the companies that provided the raw materials to the manufacturer, etc.). And, in the case of high school, college and professional football games, remind students of all the vendors who are there to provide services and make money as well as the many coaches, trainers, announcers, etc., that are employed to help guide a team.
- After students have come up with a list of key research questions which help them formulate an opinion on football’s impact on American culture, then divide the research tasks among group members and begin investigating (or students can work independently from here).
- Once facts and figures are gathered, students should again share their findings to see if there are any gaps (i.e. did one group overlook a key component that another group considered?).
- Then begin formulating arguments to support the answer to the essential question of football’s impact on American culture/society.
- Write an essay or speech and present to the agreed upon audience (i.e. classmates, teacher, etc).

Materials:
- Visit to the Pro Football Hall of Fame (either field trip or virtual tour)
- Computers with Internet capabilities, paper.

Assessment:
- Teacher created rubric for final project.
Goals/Objectives:
Students will:

- Conduct research on issues and interests by generating ideas and questions and by posing problems. Use a variety of technological and informational resources (e.g., video, displays, databases) to gather and synthesize information and to create and communicate knowledge.
- Develop an understanding of and respect for diversity in language use, patterns and dialects across cultures, ethnic groups, geographic regions and social roles.
- Use spoken, written and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion and exchange of information).

Common Core Standards: RI- Key Ideas and Details, Integration of Knowledge and Ideas; W-Text Types and Purposes, Research to Build and Present Knowledge; SL- Presentation of Knowledge and Ideas

Methods/Procedures:

- Students will read the biographical sketch on Emlen Tunnell (next page) as a class and discuss his role in black history and the history of pro football.
- Students will compile a list of questions that they would ask Emlen Tunnell if he were alive and available at the Hall of Fame the day of the visit. The questions can be on Emlen Tunnell and also on the role that African Americans played in professional football.
- If each student were allowed to ask three questions from his/her list, which three would he/she ask? Students should star those three questions.
- Students will select an African American Hall of Famer upon which to gather eight to ten facts or bits of information and share with the class. Students are encouraged to access the Hall’s official website: ProFootballHOF.com.
- Students will gather more information on their chosen individual that they previously did not know.
- Students will then write the information in paragraph form and present any new facts or bits of information that they discovered.

Materials:

- Emlen Tunnell biography (1 page)
- Access to the Internet
- Access to HOF’s website at ProFootballHOF.com

Assessment:

- Students will submit the informational essay/reports on their chosen African American Hall of Famers.
- Students will deliver formal presentations on their chosen African American Hall of Famer that will demonstrate a clear and distinctive perspective on the subject chosen and convey relevant information and descriptive details.
Even though football has moved into the premiere spot for many Americans, the name of the first black athlete to be inducted into the Pro Football Hall of Fame remains known only to a select few. Yet, those few who know of him, know that it is a remarkable story of faith, courage, determination and success.

Emlen Tunnell was born on March 25, 1925, in a small town in Pennsylvania named Bryn Mahr. When Emlen graduated from Radnor High School, he chose to attend the University of Toledo. His career veered off course when he suffered a broken neck in 1942. Although he had to wear a neck brace for one year, Emlen still tried to enlist in the Navy and Army. Even though his injuries made him ineligible for enlistment for the Army and Navy, he persisted and joined the U.S. Coast Guard.

Upon his discharge in 1946 following the end of WWII, Emlen enrolled at the University of Iowa. The Hawkeyes’ coach, Eddie Anderson, was impressed with his skill and Emlen soon rose to become Iowa’s most important defensive players. Emlen wanted to play more on offense, but an eye injury forced him to drop out of college his senior year.

Undaunted, Emlen hitch-hiked 150 miles to the offices of the New York Giants. It was 1948 and the Giants had never hired an African American. In fact, Coach Steve Owen had never heard of Emlen Tunnell. Because of his determination, the Giants allowed Emlen to try out and were so impressed, they hired him for $5,000 and a $1,000 sign-on bonus. At this time, there were other African Americans in the National Football League, but none playing for the Giants.

Emlen had a special quality about him that made everyone immediately like him. Even with his great personality, if Emlen had not strived and succeeded, the Giants would not have kept him on their roster. In his first game against the Green Bay Packers, Emlen intercepted four passes, an incredible feat for someone playing defense. Emlen never stopped striving to play offense. Coach Owen realized Emlen’s potential. Emlen had a knack at “reading” his opponents and getting where he needed to be to make that tackle or interception. Frank Gifford was one of Emlen’s teammates at the time and was quoted as saying, “At first I thought he was just lucky. I realized later that he was just great.”

Tunnell had excellent hands, great speed, toughness, and elusiveness and soon became the NFL’s top kick returner. To Emlen’s credit, he played in 158 consecutive games in the NFL. Quickly, Emlen became known as the Giants’ offense on defense. In 1951, Emlen scored three touchdowns on punt returns and a fourth on a kickoff return. In 1952, his runbacks of interceptions and kicks totaled 924 yards. This was thirty more yards than the league’s rushing leader that year. He was a star on the 1956 Giants’ NFL Championship team, the 1958 Giants’ Eastern Division team and when he went to Green Bay later in his career, he helped Coach Vince Lombardi win a division championship in 1960 and a championship in 1961.

Emlen did not rest after he retired. He served as an assistant coach from 1962-1973 for the Giants. Emlen was inducted into the Pro Football Hall of Fame in 1967. While serving as New York’s assistant director of pro personnel in 1974, Emlen suffered a fatal heart attack. Emlen Tunnell had a lot of firsts in his career and it is hard to imagine that his name isn’t one of the first names one thinks of when he/she thinks of Hall of Fame inductees. Maybe this too will change as we all learn more about who actually was inducted and why they were chosen above the others.
Goals/Objectives:
Students will:
- Read *Something for Joey* by Richard E. Peck.
- Read to gain background knowledge of the game of football.
- Read for understanding.
- Gather information about leukemia to be used later in the unit.

Common Core Standards: RL- Key Ideas and Details; RI- Integration of Knowledge and Ideas; W- Text Types and Purposes

Methods/Procedures:
- Students will read silently, orally, individually, with partners, and as a group with the teacher.
- Students will keep and/or develop their own vocabulary list throughout the book.
- Students will answer comprehension questions for each chapter.
- Students will write a summary of the book. The summary must include pertinent information such as main characters, settings, important details, and be in chronological order.
- At the end of the book, students will watch the video, *Something for Joey*, and compare the print and visual media.
- Students will write a paragraph identifying similarities between the book and movie. Then students will write a second paragraph noting the differences between the print and visual media. In a third paragraph, students will explore possible reasons for the differences, considering the media.

Materials:
- Copies of *Something for Joey*
- Copy of the video, *Something for Joey*
- Comprehension questions

Assessment:
- The summary must include pertinent information such as main characters, settings, and important details in chronological order.
- Reading check quizzes and/or a unit test.
- Essay will be assessed via a teacher-created rubric.
English Language Arts
Football Chain Story

Goals/Objectives:
Students will:
- Create a story using group cooperation.
- Edit and proofread in a group.

Common Core Standards: W-Text Types and Purposes, Production and Distribution of Writing

Methods/Procedures:
- Class studies Gridiron Terminology (page 7) and Football Facts (page 11).
- In groups of four, each group is given a photograph of an interesting football scene or situation.
- When music begins, the first student begins to write a narrative prompted by the photograph. During the writing process, the student should attempt to use gridiron terms.
- After a few minutes, the music is stopped and the story that student 1 began is read by student 2.
- The music is turned back on, and student 2 picks up the story where student 1 left off.
- This procedure continues around the group until all have had a turn. The last student in the group should attempt to end the tale.

Materials:
- Photographs (clipped from popular sports magazines)
- Blank paper attached to photographs
- Pens
- Music (College Fight Songs)
- Greatest College Fight songs, Touchdown USA!: Big Ten Marches (CDs)

Assessment:
- Each student in the group reads aloud to the class the part of the story he or she has written. The group will edit the story using specific terminology to replace general description used by less football-proficient students. Grades can be assigned to proofread and finish papers.
Goals/Objectives:
Students will:
- Study idiomatic expressions with examples.
- Find ordinary sports terms that have been incorporated into the everyday language expressions.
- Construct complete sentences to show these sports terms expressions.

Common Core Standards: L- Vocabulary Acquisition and Use, Knowledge of Language

Methods/Procedures:
- To begin this lesson, the teacher will write one of the suggested football terms on the board. Students will suggest a sentence to write that will use this term in an everyday expression.
- For example, “tackle” is written on the board. A sample sentence, might be “I guess I will have to tackle the laundry by myself since Mom’s not here to help me.”
- After five minutes of the students’ brainstorming, the instructor will distribute a handout of fifteen terms for which the students will construct sentences. They will be encouraged to think of other terms not on the list.

Materials:
- The handout entitled “Let’s Talk Sports” (Next Page)
- Pen/Pencil
- Access to computers
- Access to the Internet

Assessment:
- Designated points will be given for each completed sentence plus extra points for new terms or expressions used as common everyday vocabulary.
Directions: Create a sentence using each of the following phrases.

1. to play the field
2. to ask what’s the score
3. to give someone a play-by-play account
4. to kickoff a campaign
5. to tackle a job, chore
6. to go the whole nine yards
7. to take the ball and run with it
8. to intercept (a note)
9. to be a defensive driver
10. to be on the offensive
11. to toe the line
12. to have a game plan
13. to make the call
14. to be out of bounds
15. to have to punt
16. to go for the extra-points
17. to huddle together
Goals/Objectives:
Students will:
- Help each other get in touch with human spirit while studying history.
- Read print text to build understanding and acquire new information.
- Adjust their use of written language to communicate effectively for purpose.
- Create print text.
- Use technology to create a final written product

Common Core Standards: RI- Key Ideas and Details; W- Text Types and Purposes, Research to Build and Present Knowledge; Conventions of Standard English

Methods/Procedures:
- Students will take a virtual tour at the Pro Football Hall of Fame’s website, ProFootballHOF.com. Students choose a person on the website for whom there is biographical information. (This may be limited to a specific time period, if the teacher wishes.)
- Students list factual information about the person.
- Students attempt to imagine what life was like for that person at that time in history (previously sharing facts about historical events/periods would be helpful OR having students additionally research that period would add an extra step to this.)
- Students produce a biographical poem using a poem template. The poem may be word processed. Students can be instructed to add a picture to the poem for a classroom display.
- Students orally share poetry with the class.

Materials:
- Notebooks
- Templates
- Word processing software

Assessment:
- Teacher-created rubric emphasizing purpose, ideas, organization, style, and mechanics.
Poetry Template

This may be adjusted as needed.
Writer should assume the voice of the historic figure.

I am (two special characteristics you have)
I wonder (something you are curious about)
I see (an imaginary or real sight)
I want (an actual desire)
I am (repeat first line).
I pretend (something you pretend to do)
I feel (a feeling that is something imaginary or real)
I worry (something that bothers you)
I cry (something that makes you sad)
I am (repeat first line).
I understand (something you know to be true)
I say (something you believe in)
I dream (something you dream about)
I hope (something you actually hope for)
I am (repeat first line).

There are a number of other biographical poetry templates that could be used for this activity.
Goals/Objectives:
Students will:
- Identify the various sections of a newspaper with special note of the section termed sports.
- Identify key phrases and words in article titles and article.
- Identify theme of article.
- Identify main points of article.
- Effectively analyze media messages in newspaper articles involving African Americans and pro football.

Common Core Standards: RI- Key Ideas and Details, Craft and Structure, Integration of Knowledge and Ideas; SL- Comprehension and Collaboration

Methods/Procedures:
- Students will first complete a series of exercises involving examination and interpretation of numerous articles in newspapers involving African Americans.
- As a beginning activity, students will be asked to gather newspaper articles that mention and deal with African American pro football players. Students are asked to especially note if any players are identified as African Americans.
- Secondly, the instructor will make copies or transparencies of several articles that lend themselves to an easy identification of themes, main points and key words and phrases. The instructor will use at least one article as an example of what students are to do and how they are to accomplish the lesson’s goal of discovering themes, main points and key words and phrases.
- Next, the class will be provided with one article to individually identify the theme, main points and key words. After this is complete, the instructor will lead a class discussion of this article to arrive at a consensus.
- Finally, the students will be given their own articles to identify theme, main points and key words to present to the class.
- Students are encouraged to access the Hall’s official site: ProFootballHOF.com. On this site students can examine articles to analyze, discuss and import for use in their presentations and discussion.
- Students will search for newspaper articles used in displays and exhibits. Students may gather information to add to their presentations.

Materials:
- Teacher compiled articles
- Newspapers of various cities
- Access to the Internet
- Access to Hall’s website at ProFootballHOF.com
- Newspaper Review Sheet (Next Page)

Assessment:
- Teacher created rubric for student use and evaluation of articles.
- Students will deliver a formal presentation on their news articles.
- Teacher posts news articles and student analyzes.
Newspaper Review

Article Title:

Author (If Given):

Player(s) Mentioned:

Theme (Message):

Main Points:

Key Words:

Article or copy should be attached to the back of this sheet
Goals/Objectives:
Students will:
- Conduct research and compile statistics on current and former NFL greats.
- Select one player, based on their findings, to endorse for enshrinement into next year’s class.
- Write a persuasive speech or essay, highlighting the reasons why their chosen player should be inducted into the Hall of Fame.

Common Core Standards: RI- Key Ideas and Details; W- Text Types and Purposes; SL- Presentation of Knowledge and Ideas

Methods/Procedures:
- Students will visit the Pro Football Hall of Fame website at ProFootballHOF.com as well as NFL team websites, searching for statistics on players.
- Students will then select one player/person whose stats are good enough (in the student’s opinion) to warrant induction into the HOF.
- After examining models of persuasive essays/speeches, students will write a rough draft essay/speech, using the data collected as “evidence” to strengthen their argument.
- Peer and/or teacher editing to tighten arguments and smooth out the writing.
- Present arguments to the class and then have the class vote on the player/person whom they believe, after hearing all the evidence, should be included in next year’s HOF class.

Materials:
- Access to computers
- Access to the Internet
- Paper
- Pen/Pencil

Assessment:
- Students will receive feedback from their peers regarding the effectiveness of their persuasive essays/speeches.
- Teacher should create a rubric and ask students to use the rubric as a tool during the revision stage self-assessment. See rubistar.4teachers.org for help with designing a rubric.
Goals/Objectives:
Students will:
- Formulate writing ideas and identify a topic appropriate to the purpose and audience.
- Determine the usefulness of organizers and apply appropriate pre-writing tasks.
- Use revision strategies to improve the style, variety of sentence structure, clarity of the controlling idea, logic, effectiveness of word choice and transitions between paragraphs, passages, or ideas.
- Edit to improve sentence fluency, grammar and usage.
- Apply tools to judge the quality of writing.

Common Core Standards: RI- Key Ideas and Details; W- Text Types and Purposes, Production and Distribution of Writing; L- Knowledge of Language

Methods/Procedures:
- Using the sports sections from various newspapers, student will examine the type, style and subject matter dealt with in several publications, being aware of journalistic principles.
- As a beginning activity, all students will read the same article chosen by the teacher. The article will be representative of the ‘typical’ football themed piece of writing found on a weekly if not daily basis in the local newspaper.
- After reading the article as a class, the teacher will list on the board what students identify as the theme of the article. “What was the author’s purpose in writing this article?”
- Second, the teacher will list the main points students identify from the football news article.
- Vocabulary that is vital to an understanding of the article will be listed on the board and students, as a class, will come to a consensus as to definition.
- The teacher will next pass out a writing prompt, specifically chosen. Themes can range from, player conduct, salary, steroid use, drug abuse, fitness, anger management problems, player and coach relationships, role modeling, rivalries and media relations.
- After a brief discussion on the prompt and requirements, students will respond to the prompt and be prepared to read their responses to the class.
- Students will submit their newspaper articles based on prompts given by instructor.
- Students will choose one ‘headline’ to write an article.
- Students will deliver a formal presentation on their chosen articles and/or prompts.
- The teacher will also display each student’s articles

Materials:
- Newspaper articles
- Writing Prompts
- Headlines
- Access to the Internet
- Access to HOF’s website at ProFootballHOF.com

Assessment:
Goals/Objectives:
Students will:
- Read print text to build understanding and acquire new information.
- Adjust their use of written language to communicate effectively for purpose.
- Create print and non-print elements.
- Use a variety of technological resources.

Common Core Standards: RI- Key Ideas and Details; W- Text Types and Purposes, Production and Distribution of Writing, Research to Build and Present Knowledge

Methods/Procedures:
- On a field trip to the Pro Football Hall of Fame or using ProFootballHOF.com, students gather data about the Hall, including photos, if the resources are available.
- Students select data for inclusion in a travel brochure.
- Using suitable technology, students produce a tri-fold brochure to highlight items of interest at the Pro Football Hall of Fame. They are to include photos and graphics.
- Students share completed brochures orally with the class and then by classroom or school display.

Materials:
- Notebooks
- Digital cameras, Smartphone cameras
- Software such as Microsoft Word, PowerPoint, and Publisher

Assessment:
- Teacher-created rubric for design elements.
RUBRIC

Name:________________________________

The brochure should have the following elements of design:

<table>
<thead>
<tr>
<th></th>
<th>Possible</th>
<th>Your Score:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Highlights</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Pictures, minimum of two</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Graphics, minimum of two</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Travel directions</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td></td>
</tr>
</tbody>
</table>

In addition, the brochures should be:

<table>
<thead>
<tr>
<th></th>
<th>Possible</th>
<th>Your Score:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organized</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Creative</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Free of Errors</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Combined Score</td>
<td>55</td>
<td>/55</td>
</tr>
</tbody>
</table>

Comments:
Travel review

Goals/Objectives:
Students will:
- Read print text to build understanding of texts and to acquire new information.
- Adjust their use of written language to communicate effectively with a variety of audiences and for different purposes.
- Conduct research by gathering data.
- Demonstrate knowledge of language structure and conventions.
- Use technology to create a final written product.

Common Core Standards: RI- Key Ideas and Details; W- Text Types and Purposes, Production and Distribution of Writing, Research to Build and Present Knowledge; L- Knowledge of Conventions

Methods/Procedures:
- On a field trip to the Pro Football Hall of Fame or using ProFootballHOF.com, students will take notes.
- Students list details of interesting exhibits in their journals.
- Students list details of operation.
- Students study models of travel reviews from such sources as Ohio Magazine.
- Using the information gathered from the field trip, students write their own travel reviews on the Pro Football Hall of Fame, including hours of operation, etc.
- Because the review must fit within the constraints of a magazine, it is limited to 200 words. Students must revise and edit for length.
- Students should be aware of audience and purpose.
- Students use word processing software to complete the reviews.
- Students orally share their review with the class.

Materials:
- Journals and notebook paper
- Travel review models
- Word processing software

Assessment:
- Teacher-created rubric
- Oral assessment
RUBRIC

Name:________________________________

THE NUMBER THAT IS CIRCLED BEST DESCRIBES THE POSITION OF YOUR PAPER ON THE FOLLOWING SCALE:

GENERAL MERIT

1. Quality of ideas 5 4 3 2 1 0
   - Are your ideas original?
   - Are there enough ideas?

2. Development of ideas 5 4 3 2 1 0
   - Have you met the PURPOSE?
   - Have you considered the audience?

3. Organization 5 4 3 2 1 0
   - Is there an intro and conclusion?
   - Are there smooth transitions?

4. Style, Flavor, Individuality 5 4 3 2 1 0
   - Is there varied sentence structure?
   - Are you using figurative language?

5. Wording 5 4 3 2 1 0
   - Is the vocabulary mature?
   - Are you avoiding YOU?

Total: /25

MECHANICS

1. Grammar, Sentence Structure 5 4 3 2 1 0
2. Punctuation, Capitalization 5 4 3 2 1 0
3. Spelling 5 4 3 2 1 0

Total: /15

Grand Total: /40

SUGGESTED SCALE FOR GRAND TOTAL:

<table>
<thead>
<tr>
<th>5(A)</th>
<th>4(B)</th>
<th>3(C)</th>
<th>2(D)</th>
<th>1(F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>40=100%</td>
<td>35=92%</td>
<td>29=83%</td>
<td>22=73%</td>
<td>15=63%</td>
</tr>
<tr>
<td>39=98%</td>
<td>34=91%</td>
<td>28=82%</td>
<td>21=71%</td>
<td>14=62%</td>
</tr>
<tr>
<td>38=97%</td>
<td>33=89%</td>
<td>27=80%</td>
<td>20=70%</td>
<td>13=60%</td>
</tr>
<tr>
<td>37=95%</td>
<td>32=88%</td>
<td>26=79%</td>
<td>19=69%</td>
<td>12=59%</td>
</tr>
<tr>
<td>36=94%</td>
<td>31=86%</td>
<td>25=77%</td>
<td>18=68%</td>
<td>11=57%</td>
</tr>
<tr>
<td>30=85%</td>
<td>24=76%</td>
<td>17=66%</td>
<td>16=65%</td>
<td></td>
</tr>
</tbody>
</table>
Goals/Objectives:
Students will:
• Improve language arts skills (reading, writing, speaking, listening, research) by applying them to high interest material.

Common Core Standards: RI- Key Ideas and Details, Integration of Knowledge and Ideas; W- Text Types and Purposes

Methods/Procedures:
• Have students complete the language arts activities and worksheets provided on the following pages related to football. They may work independently or with others.
  * Fact vs. Opinion
  * Fan Support
  * Football Mix-Up
  * Sports Findings
  * “The Athlete”
  * Sports Journal Writing
  * Alphabet Football
  * Be a 100-Yard Reader
  * Miscellaneous Language Arts Activities
  * Book List
• Adaptations to suit your students’ needs may be made to any of the activities/ worksheets.
• Answers to worksheets can be found in the back of this booklet.

Materials:
• Paper
• Pen/Pencil
• Worksheets
• Access to Computers and the Internet
• Access to newspapers and magazines
• Art supplies (markers, crayons, construction paper, etc.)

Assessment:
• Teacher can observe during completion of the worksheets.
• Teacher can have students self-assess when the class goes over the activity together.
• Teacher can collect worksheets when students are finished and assess their progress.
• Teacher can use rubric for writing assignments, oral reports/presentation, displays, etc.
• Teacher can encourage peer assessment can be used for writing assignments, oral reports or displays.
FACT: Something that has actually happened or that is really true and can be proved. (Jerry Rice is the NFL’s all-time leading receiver.)

OPINION: A belief, conclusion or judgment not supported by proof. (Jerry Rice is the best receiver of all time.)

Choose an article from the sports section of a newspaper or magazine. Using the two definitions above as a guide, read the story and list the following information:

Headline of the story:

Name and date of the newspaper or magazine:

Who wrote the story:

Write some sentences that are FACTS:

Write some sentences that are OPINIONS:

Do you agree or disagree with the writer’s opinions? Explain why or why not.

Write a story using all FACTS and NO OPINIONS about your favorite team’s upcoming season. Tell why your team is going to make it to the Super Bowl.
Poll after poll proves that football is America’s #1 sport to watch. Take a survey in your school and see which sport your school calls #1. Start small by surveying the class, then by grades. Have a representative from each grade assist with compiling the data.

You can add other items to your survey, such as:
- Favorite Player
- Favorite Sport to Play
- Favorite Sports Team

**Sample student survey:**

What is your favorite sport to watch?

(Circle only one)

Baseball Basketball Football Hockey Softball
Golf Tennis Soccer Volleyball Other:___________

Who is your favorite professional athlete?

What is your favorite sport to play?

What sports team is your favorite?

When all the results have been tallied, you can create a graph and poster displaying the results of your survey. Everyone will know your school’s favorite sport to watch.
Using the team names to the right, match these with the clues about the 32 NFL teams. The names are only used once. Good Luck!

1. Fe Fi Fo Fum ____________________ Lions
2. Seven Squared ____________________ Colts
3. I Love Honey ____________________ Cowboys
4. A 747 ____________________ Bengals
5. Member of the Cat Family ____________________ Broncos
6. Various Ironworkers ____________________ Saints
7. Black Bird ____________________ Vikings
8. I.O.U.s ____________________ Ravens
9. Helpers to Relocate ____________________ Giants
10. Six Rulers ____________________ Dolphins
11. They Won Their Independence in 1836 ____________________ Texans
12. Stars and Stripes Forever ____________________ Patriots
13. A Man of Strength and Power ____________________ Bears
14. Our Friends in the Ocean ____________________ Cardinals
15. Opposite of Ewe ____________________ Steelers
16. Class of Boy Scouts ____________________ 49ers
17. Wild Wild West ____________________ Buccaneers
18. Fundamental Rules ____________________ Chiefs
19. The Pink Detective ____________________ Jaguars
20. Credit Card Users ____________________ Rams
21. Indian Leaders ____________________ Seahawks
22. Add "ie" Mmmm Yummy ____________________ Jets
23. King of the Beasts ____________________ Redskins
24. A Dollar A Corn ____________________ Raiders
25. Ocean Going Bird ____________________ Browns
26. Hot Epidermis ____________________ Chargers
27. Luxury Car ____________________ Falcons
28. Louis Armstrong’s Song “Saints” ____________________ Eagles
29. Baby Horse ____________________ Titans
30. Rodeo Horses ____________________ Bills
31. Rhymes with “Later!” ____________________ Packers
32. What Team Is Missing? ____________________ Panthers
Choose a sports article from a newspaper or magazine. After you have read the article, go back and underline all the subjects in GREEN, underline all the verbs in BLUE and circle all the descriptive words in RED.

Using the same article, complete the following:

1. List as many compound words that you can find.  
   EXAMPLE: Football = foot + ball

2. List all the contractions you can find.  
   EXAMPLE: Shouldn't = should + not

3. List all the words that have a prefix.  
   EXAMPLE: Unbeaten = un + beaten

4. List all the four syllable words.  
   EXAMPLE: Promotional = pro/mo/tion/al  
   Can you find any five syllable words?

5. How many homonyms can you find? Remember a homonym is a word that sounds like another word but is spelled differently.  
   EXAMPLE: piece and peace

6. Write down all the abbreviations in the article.  
   EXAMPLE: TD = touchdown

7. List ten action verbs. Use those verbs to write ten sentences.  
   Underline the action verb in each sentence.  
   EXAMPLE: Jim threw the ball to the receiver.

8. Answer these questions based on the information obtained in the article.  
   WHO, WHAT, WHEN, WHERE, WHY and HOW.
Pretend you are a professional athlete. Write a story about yourself and the sport you play. Be sure to include:

What is it like to be admired by thousands of fans?

What does it feel like when you are surrounded by fans who want your autograph?

How do you personally prepare for each game or event?

When would you be too old to participate in the sport?

What job or career would you like to pursue when you can no longer play?

What has been your greatest accomplishment professionally?

How do you handle defeat?

Add anything else you would like to include.
Keep a journal about your favorite sports and the sports you participate in. Below are some suggestions for writing topics.

- If you had the opportunity to change one thing in the game of football today, what would it be?
- Do girls get the same opportunities to play sports that boys get?
- If you could meet any professional athlete, who would it be and why?
- What sport do you believe is the safest to play?
- Should a referee be fined for making bad calls?
- Should there be a limit on how much money an athlete may make?
- Do you think kids look up to athletes too much?
- Should a boy be allowed to play on a girls’ team?
- I like or dislike football because...
- Should cheerleading be a professional sport?
- Should the NFL allow touchdown celebrations?
- Do sports heroes have an obligation to maintain high moral standards?
- If you could, what would you change about pro sports?
- What is your favorite sport and why?
- My favorite professional sports team is...
- The funniest thing that ever happened to me while playing a sport was...
- Do you have to finish first to be a winner?
Think of words that begin with each letter of the alphabet that relate to the topic of football. Use these words to complete as many spaces as you can.

<table>
<thead>
<tr>
<th>Letter</th>
<th>Word</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>____________</td>
</tr>
<tr>
<td>B</td>
<td>____________</td>
</tr>
<tr>
<td>C</td>
<td>____________</td>
</tr>
<tr>
<td>D</td>
<td>____________</td>
</tr>
<tr>
<td>E</td>
<td>____________</td>
</tr>
<tr>
<td>F</td>
<td>____________</td>
</tr>
<tr>
<td>G</td>
<td>____________</td>
</tr>
<tr>
<td>H</td>
<td>____________</td>
</tr>
<tr>
<td>I</td>
<td>____________</td>
</tr>
<tr>
<td>J</td>
<td>____________</td>
</tr>
<tr>
<td>K</td>
<td>____________</td>
</tr>
<tr>
<td>L</td>
<td>____________</td>
</tr>
<tr>
<td>M</td>
<td>____________</td>
</tr>
</tbody>
</table>
Be A Hall of Fame Reader!

Players in the NFL begin as Rookies and work their way to become Hall of Famers. As a student you will begin as a Rookie Reader and read your way to become a Hall of Fame Reader. Each book is worth five yards when you finish a book, check the correct box below and write a title on a five yard line. Fill in the entire field and you’ll be a Hall of Fame Reader!

- Arts and Crafts
- Autobiography
- Biography
- Fantasy
- Fiction
- History
- Hobbies
- Humor
- Mystery
- Myths, Legends, & Folktales
- Non Fiction
- Poetry
- Science
- Science Fiction
- Sports and Games
Teachers: The following are classroom activities for you and your students to enjoy. Feel free to adapt or copy these ideas to suit your classroom.

MAKE A BOOK: Duplicate a football pattern as a book cover. Trace and cut out football shaped paper for the pages. Students can use this for journal entries, creative writing, or writing their own football story.

FOOTBALLS EVERYWHERE: Cut out different sized footballs out of different color posterboards. Mix them up and have the students categorize them by size and colors.

TEAM MASCOTS: Make a list of the team mascots that are animals. Have students choose one animal and find out ten facts about that animal. Make a class book including the ten facts on each animal. Have the students illustrate their pages and sign their names. After the book is finished, donate it to the school library.

FOOTBALL TRIVIA: As students read interesting football facts in books, newspapers, or magazines, have them record each fact on a 3 x 5 card; question on one side, answer on the other. Decorate a shoe box for completed trivia cards and have students contribute to the box throughout the football season or unit. Teams consisting of one to three players can take turns drawing a card and quizzing an opposing team member. A point is scored for each correct response. The first team to reach the designated number of points wins!

PROFESSIONAL PLAYER: Research and do a report on a professional football player. He may be retired or currently playing. Give an oral presentation about your player (without using his name) to the class and see if anyone can guess who he is.

LETTER WRITING: Have students write to their favorite players in care of their current team (see addresses in Football Facts and Figures on pages FF4-FF5) - . Have the students proofread each other's letters, correct any mistakes, and type or rewrite the letters in their best handwriting. Mail them and see how many responses are returned.

FOOTBALL IN 2050: Design a short story about the sport of football in the year 2050. What will players wear? What will the rules be like? Fact or fiction!

TRADING CARDS: Share football, baseball, basketball, hockey, and other sports cards with students or have students bring in some of their own cards. Trading cards tell information about players, not just statistics. After discussing the cards and information found on them, have students design their own trading cards on tagboard. Write an autobiography on one side. On the other side have students draw pictures of themselves engaged in an activity they enjoy. It does not have to be sports. Display them around the room or make copies so the students can trade their cards and find out about their classmates. They could be collector's items one day!
F = FOOTBALL: Introduce the letter “F” to the students by showing them the written word “FOOTBALL” and helping them identify that it begins with an “F.” Identify students in your class who have names beginning with “F.” Have students name other things, objects that begin with “F.” Cut a large football shape out of paper, see page 236, and write the letter “F” on it. Have the students tear or cut out magazine pictures of things that begin with the letter “F” and attach them to the football shape.

PLAYER OF THE WEEK: The students will create a bulletin board that focuses on one professional athlete each week. Discuss qualities beyond athletic ability that make that person someone you want on your team. Sports biographies, newspapers, magazines and interviews will supply students with needed information. Discuss current events in sports related to players and topics from articles.

PENNANTS: Using the reproducible pennant design on page 235 have students become designers. Have students create a pennant for their favorite sports team or invent a new team. Use felt and other fabric scraps - be creative. Make it bright and colorful, something that stands out so people will take a closer look at your product. Display creations throughout the classroom.

BULLETIN BOARDS: Design a bulletin board titled “Let’s Read about Sports.” Have students display sports articles from newspapers and magazines. A brief oral or written report can be presented before the articles are displayed.

The Hall of Fame welcomes any suggestions for classroom activities. Please share your thoughts and ideas by contacting the Educational Programs Staff at Education@ProFootballHOF.com.
Quarterbacks often have to scramble away from defenders. Your job in this puzzle is to unscramble. The words on the left of the page are scrambled names of 10 NFL teams. The words on the right side are scrambled names of 10 NFL quarterbacks. Unscramble the names and write them in the space above each one. Then, draw a line between each quarterback and his team.

1. ENW GLNEADN TORITSAP

2. ALNTAA SLACONF

3. ENW RKYO ATNSGI

4. TELTAES HASEKSWA

5. ARCONALI TNAPSREH

6. HACIOGC RESAB

7. EWN SELRAON INATSS

8. OMEBLAITR ESNVAR

9. EGREN AYB CAPSKER

10. ERENDV ONOBRCs

A. AYJ TUCLER

B. REDW ERSBE

C. TMAT YARN

D. OJE CLCAFO

E. MTO YBADR

F. ACM ENNWOT

G. RANOA DORRGES

H. TONYPE GNINNAM

I. SLERULS SWLINO

J. LIE GAMNINN
Change one letter in each word to create a football term. Write the football term on the spaces by the original word (the first one has been done for you). Write the circled letters on the first row of spaces below.

On the second line, unscramble the letters to spell the name of the nation’s most popular sport.

1. Cuddle  **HUDDLE**

2. Sick  

3. Tumble  

4. Couch  

5. Term  

6. Mall  

7. Shore  

---

---
See if you can locate the 16 teams in the American Football Conference. The names appear forward, backward, up, down, or diagonal. How many can you find? The names are listed below.

<table>
<thead>
<tr>
<th>M</th>
<th>E</th>
<th>R</th>
<th>W</th>
<th>S</th>
<th>N</th>
<th>A</th>
<th>T</th>
<th>I</th>
<th>T</th>
<th>I</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>N</td>
<td>A</td>
<td>X</td>
<td>E</td>
<td>T</td>
<td>J</td>
<td>S</td>
<td>I</td>
<td>R</td>
<td>A</td>
<td>S</td>
</tr>
<tr>
<td>O</td>
<td>T</td>
<td>V</td>
<td>G</td>
<td>C</td>
<td>O</td>
<td>L</td>
<td>T</td>
<td>S</td>
<td>I</td>
<td>R</td>
<td>Q</td>
</tr>
<tr>
<td>P</td>
<td>D</td>
<td>E</td>
<td>M</td>
<td>H</td>
<td>L</td>
<td>V</td>
<td>J</td>
<td>D</td>
<td>A</td>
<td>U</td>
<td>S</td>
</tr>
<tr>
<td>A</td>
<td>O</td>
<td>N</td>
<td>J</td>
<td>I</td>
<td>N</td>
<td>C</td>
<td>E</td>
<td>U</td>
<td>R</td>
<td>K</td>
<td>R</td>
</tr>
<tr>
<td>T</td>
<td>L</td>
<td>S</td>
<td>B</td>
<td>E</td>
<td>T</td>
<td>R</td>
<td>G</td>
<td>J</td>
<td>W</td>
<td>Y</td>
<td>E</td>
</tr>
<tr>
<td>R</td>
<td>P</td>
<td>N</td>
<td>X</td>
<td>F</td>
<td>S</td>
<td>A</td>
<td>I</td>
<td>A</td>
<td>B</td>
<td>T</td>
<td>L</td>
</tr>
<tr>
<td>I</td>
<td>H</td>
<td>W</td>
<td>I</td>
<td>S</td>
<td>J</td>
<td>W</td>
<td>H</td>
<td>V</td>
<td>K</td>
<td>G</td>
<td>E</td>
</tr>
<tr>
<td>O</td>
<td>I</td>
<td>O</td>
<td>K</td>
<td>L</td>
<td>Y</td>
<td>A</td>
<td>F</td>
<td>H</td>
<td>R</td>
<td>Z</td>
<td>E</td>
</tr>
<tr>
<td>T</td>
<td>N</td>
<td>R</td>
<td>E</td>
<td>B</td>
<td>E</td>
<td>N</td>
<td>G</td>
<td>A</td>
<td>L</td>
<td>S</td>
<td>T</td>
</tr>
<tr>
<td>S</td>
<td>S</td>
<td>B</td>
<td>C</td>
<td>S</td>
<td>B</td>
<td>R</td>
<td>O</td>
<td>N</td>
<td>C</td>
<td>O</td>
<td>S</td>
</tr>
<tr>
<td>C</td>
<td>H</td>
<td>A</td>
<td>R</td>
<td>G</td>
<td>E</td>
<td>R</td>
<td>S</td>
<td>C</td>
<td>O</td>
<td>K</td>
<td>P</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AFC North</th>
<th>AFC South</th>
<th>AFC East</th>
<th>AFC West</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENGALS</td>
<td>COLTS</td>
<td>BILLS</td>
<td>BRONCOS</td>
</tr>
<tr>
<td>BROWNS</td>
<td>JAGUARS</td>
<td>DOLPHINS</td>
<td>CHARGERS</td>
</tr>
<tr>
<td>RAVENS</td>
<td>TEXANS</td>
<td>JETS</td>
<td>CHIEFS</td>
</tr>
<tr>
<td>STEELERS</td>
<td>TITANS</td>
<td>PATRIOTS</td>
<td>RAIDERS</td>
</tr>
</tbody>
</table>
There are over 100 words that can be made from the letters that spell **QUARTERBACK**.
See how many different words you can find and list them below.


Please NOTE: This in no way reflects all of the books about football currently in print. Most of these have been selected for their appeal to a young adult audience.

Updated June 2010.
Football Mix
1. Giants
2. 49ers
3. Bears
4. Jets
5. Bengals
6. Steelers
7. Ravens
8. Bills
9. Packers
10. Vikings
11. Texans
12. Patriots
13. Titans
14. Dolphins
15. Rams
16. Eagles
17. Cowboys
18. Cardinals
19. Panthers
20. Chargers
21. Chiefs
22. Browns
23. Lions
24. Buccaneers
25. Seahawks
26. Redskins
27. Jaguars
28. Saints
29. Colts
30. Broncos
31. Raiders
32. Falcons

Alphabet Football
(Possible Answers)
A = Audible
B = Blitz
C = Center
D = Defense
E = End zone
F = Fumble
G = Goal post
H = Half-time
I = Interception
J = Jumping
K = Kicker
L = Linebacker
M = Motion
N = National Football League
O = Offense
P = Penalties
Q = Quarterback
R = Referee
S = Safety
T = Touchdown
U = Uprights
V = Victory
W = Wide Receiver
X = X-ray
Y = Yards
Z = Zone

Player Scramble
1. New England Patriots
   E - Tom Brady
2. Atlanta Falcons
   C - Matt Ryan
3. New York Giants
   J - Eli Manning
4. Seattle Seahawks
   I - Russell Wilson
5. Carolina Panthers
   F - Cam Newton
6. Chicago Bears
   A - Jay Cutler
7. New Orleans Saints
   B - Drew Brees
8. Baltimore Ravens
   D - Joe Flacco
9. Green Bay Packers
   G - Aaron Rodgers
10. Denver Broncos
    H - Peyton Manning
English Language Arts

Answer Key

Word Blitz
1. Huddle
2. Sack
3. Fumble
4. Coach
5. Team
6. Ball
7. Score

FOOTBALL

Quarterback Wordsack
Possible Answers:
Art, Are, Act, Ace, Arc, Ate, Back,
Buck, Bar, Bear, Bat, Bake, Bark, Be,
But, Break, Bucket, Beak, Cake, Cute,
Cut, Cat, Car, Cart, Care, Crab, Crack,
Crate, Cub, Cue, Cure, Ear, Eat, Quarter,
Quack, Rut, Rack, Rate, Rake, Rear,
Racket, Rare, React, Take, Tea, Tack,
Tab, Tear, Tar, Tub, Tube, Truck, Tuck

All in the AFC Word Search
<table>
<thead>
<tr>
<th>Lesson</th>
<th>Common Core Standards</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance is Booming</td>
<td>MD</td>
<td>MA 1</td>
</tr>
<tr>
<td>Be an NFL Statistician</td>
<td>MD</td>
<td>MA 4</td>
</tr>
<tr>
<td>Buying and Selling at the Concession Stand</td>
<td>NOBT</td>
<td>MA 5</td>
</tr>
<tr>
<td>Driving the Field With Data</td>
<td>MD</td>
<td>MA 6</td>
</tr>
<tr>
<td>Finding Your Team’s Bearings</td>
<td>GEO</td>
<td>MA 7</td>
</tr>
<tr>
<td>Hall of Fame Shapes</td>
<td>GEO</td>
<td>MA 8</td>
</tr>
<tr>
<td>Jersey Number Math</td>
<td>NOBT</td>
<td>MA 9-10</td>
</tr>
<tr>
<td>Math Football</td>
<td>NOBT</td>
<td>MA 11</td>
</tr>
<tr>
<td>How Far is 300 Yards?</td>
<td>MD</td>
<td>MA 12-13</td>
</tr>
<tr>
<td>Number Patterns</td>
<td>NOBT, MD</td>
<td>MA 14-15</td>
</tr>
<tr>
<td>Punt, Pass and Snap</td>
<td>NOBT, MD</td>
<td>MA 16</td>
</tr>
<tr>
<td>Running to the Hall of Fame</td>
<td>NOBT, MD</td>
<td>MA 17</td>
</tr>
<tr>
<td>Same Data Different Graph</td>
<td>MD</td>
<td>MA 18-19</td>
</tr>
<tr>
<td>Stadium Design</td>
<td>GEO</td>
<td>MA 20</td>
</tr>
<tr>
<td>Surveying The Field</td>
<td>MD</td>
<td>MA 21</td>
</tr>
<tr>
<td>Using Variables with NFL Scorers</td>
<td>OAT</td>
<td>MA 22-24</td>
</tr>
<tr>
<td>What’s In a Number?</td>
<td>OAT</td>
<td>MA 25-26</td>
</tr>
<tr>
<td>Tackling Football Math</td>
<td>OAT, NOBT, MC</td>
<td>MA 27-36</td>
</tr>
<tr>
<td>Stats with Andre Reed</td>
<td>RID</td>
<td>MA 37-38</td>
</tr>
<tr>
<td>NFL Wide Receiver Math</td>
<td>RID</td>
<td>MA 39-40</td>
</tr>
<tr>
<td>NFL Scoring System</td>
<td>OAT</td>
<td>MA 41-42</td>
</tr>
<tr>
<td>Miscellaneous Math Activities</td>
<td></td>
<td>MA 43</td>
</tr>
<tr>
<td>Answer Keys</td>
<td></td>
<td>MA 44-46</td>
</tr>
</tbody>
</table>
Goals/Objectives:
Students will:
- Learn to use front end estimation and rounding.
- Learn how to make a line graph.

Common Core Standards: Measurement and Data

Methods/Procedures:
- The teacher can begin a discussion asking the students if they have ever been to an NFL game or if they know anyone who has gone to one.
- As a class the teacher will use the board or overhead projector to show samples of how to round. Depending on the students’ abilities, the students can round to the nearest thousand, hundred, tenth, hundredth, etc.
- Once the teacher feels secure that the students can round numbers, the teacher will introduce front-end estimation. Remind the students that when doing front-end estimation they should take the first number and turn everything else into a 0. Examples: 17,000 = 10,000; 22,000 = 20,000; 45.16 = 40
- Depending upon ability, students will do the worksheet independently, with a partner, or as a whole class. It can also be revised for older students to estimate the number of tickets sold, for example, in 1990 and 1989. It can also be adjusted to do subtraction problems, such as to compute how many more tickets were sold in one year than in another. Once they have their answers they need to decide whether or not it makes sense.
- Students can also find the landmarks of the data: median, mode, maximum, range, and median.
- Once done the students will take this information and turn it into a line graph. If students are unfamiliar with line graphs, it can be done as a class on the overhead. If you choose, you can assign different groups a type of graph to complete and the students can judge which one best shows the data. Some examples could be a bar graph or scatter plot.

Materials:
- Estimation worksheet
- Line graph worksheet
- Overhead or chalkboard
- Pencils

Assessment:
- Student participation
- Worksheets
How Many People Attended NFL Games?

Directions: Use the following numbers that tell the average number of people who purchased tickets to NFL games during the regular season. Round the number and then use front-end estimation.

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Attendance</th>
<th>Rounding</th>
<th>Front End Estimation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>65,074</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>64,698</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>64,978</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>65,043</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>66,625</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>66,836</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>66,666</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>66,455</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>66,409</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>66,328</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>66,755</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>65,187</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>66,078</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>65,349</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>64,020</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
How Many People Attended NFL Games?

Directions: Use the rounded numbers to make a line graph.

Graph Title: _______________________________
Goals/Objectives:
Students will:
- Create a graph of information obtained from a data set.
- Analyze data recorded on a graph.
- Calculate the mean, median, and mode of Super Bowl MVP’s by starting position.

Common Core Standards: Measurement and Data

Methods/Procedures:
- Using Superbowl.com, have students record the starting position of each MVP from all Super Bowl games. Students should record this information in a graph (bar, pie, line).
  Have students analyze the data as follows:
  * Find the position that is the mode of the data set.
  * Find the median of the data set.
  * Find the mean of the data set.
  * Find the mean of each position relative to the number of Superbowls.

Materials:
- Super Bowl MVP’s information
- Paper
- Pen or pencil
- Calculator (optional)
- Colored pencil (optional)

Assessment:
- Students will be assessed on accuracy of responses.
Goals/Objectives:
Students will:
- Develop their money skills
- Practice addition, subtraction, and multiplication
- Make change for purchases at a football concession stand
- Write monetary units using the dollar sign and the decimal point

Common Core Standards: Number Operations in Base Ten

Methods/Procedures:
- As a whole class or small group activity, have students create a menu board for a concession stand. The menu should include foods typically served at a football game such as hot dogs, popcorn, soda, Cracker Jacks, etc., and should include competitive pricing.
- Students should work in pairs so each student has a turn as the buyer and the seller. Make sure each pair of students has a copy of the menu board for the concession stand with the items for sale and prices on it. Pass out envelopes with varying amounts of play money in them. Give each student one envelope.
- Have each student complete a tally ticket, which asks questions about the possibilities afforded them with their available money. Questions posed on the tally ticket could include the following:
  1. How much money do you have to spend at the game?
  2. If your family of four wants to buy hot dogs and drinks, how much will it cost for all of you? How much change will you receive?
  3. Do you have enough money to buy one of each item on the menu board? How much will it cost? How much change will you receive? *Partners should check one another’s tally ticket responses for accuracy.
- Have students role play the purchasing of food at the concession stand. The buyer should order items from the menu board. The seller should create a receipt for the buyer. Then, the buyer should pay the bill and the seller makes change if necessary. Each partner should check the monetary transactions performed for accuracy.

Materials:
- Envelopes
- Play money (assortment of bills and coins)
- Materials for constructing a menu board
- Tally Ticket

Assessment:
- Student participation
- Accuracy of answers on Tally Ticket
- Accuracy of monetary transactions
- Teacher observations of money skills, addition, subtraction and multiplication
**Goals/Objectives:**
Students will:
- Practice with units of measurements: yards, feet, inches.
- Keep statistics for an individual player of their choice.

**Common Core Standards:** Measurement and Data

**Methods/Procedures:**
- Students will use a replica of a football field (drawn to scale, unless a trip to the high school stadium can be arranged) and practice measuring.
- Students will practice measuring ‘downs.’
- Students will use the statistics of a player to see how the yardage is compiled.

**Materials:**
- Rulers
- Measuring tape
- Pencils

**Assessment:**
- Students will be able to explain what a football field looks like and draw a replica of a field (yard markers, etc.)
Finding Your Team’s Bearings

Goals/Objectives:
Students will:

- Understand the concept of bearings.
- Comprehend the two types of information given on a compass:
  1. Direction – North, East, South, West
  2. Bearings – degree measurements (North = 0 or 360 degrees, East = 90 degrees, South = 180 degrees, and West = 270 degrees)

Common Core Standards: Geometry

Methods/Procedures:
- Students need a protractor and a United States map showing major cities (All NFLCities should be shown)
- The teacher would give a lecture on the concept of bearings:
  - The directions on a compass – North, South, East and West also can be described by degree measurements
  - North = 0 degrees and 360 degrees; East = 90 degrees; South = 180 degrees; West = 270 degrees
- The teacher shows the students how to use the protractor to find bearings.
- Each student is assigned an NFL Team in which the students need to find the bearings their team will take to each game.
  For example: Cleveland Browns
    A. Play at home against the Pittsburgh Steelers their second game – skip
    B. In their third game the Browns must travel to Baltimore – what is the bearing they must travel?
    C. In their fourth game the Browns must travel to Cincinnati – so for purposes of this exercise what is the bearing the team must travel from Baltimore to Cincinnati?
    D. In their fifth game, the Browns must travel back home to play the New York Giants – so for purposes of this exercise what is the bearing the team must travel from Cincinnati to Cleveland?
    E. Etc.

Materials:
- Access to the Internet
- Access to NFL team websites at www.nfl.com (links to team sites are at the top of the page)
- Map of the U.S.
- Protractor, paper and writing tool

Assessment:
- Students will keep track of the bearings for their team and be graded on this assignment.

Adaptation for primary grades:
- Have students locate two cities on a large map. For example, Baltimore to Cleveland and then instead of using bearings have the students estimate the approximate direction between the cardinal compass points.
Goals/Objectives:
Students will:
- Locate and name planes and solid shapes: circle, square, triangle, diamond, oval, sphere, pyramid, cone, cylinder, cube
- Find planes and solid shapes in the environment
- Sort objects by shape
- Graph everyday objects
- Write or dictate a sentence related to each shape that was located

Common Core Standards: Geometry

Methods/Procedures:
- Students will review plane and solid shape names and the characteristics of each.
- Students will locate real objects to match these shapes in their classroom, school building or home and match them to class models of these shapes. Pictures of familiar objects will be sorted, classified and graphed by shape name.
- Teacher prepares name tags for groups, each depicting one plane and one solid shape.
- Students will tour the Pro Football Hall of Fame to get an overview. During a shape scavenger hunt through the building, groups of students (those wearing the same shape name tags) will find real objects that are the same as the plane and solid shape depicted on their tag.
- The chaperone accompanying each group of students will allow a group member to take a photo of each shape that was found on the shape scavenger hunt and will record the name of the object.
- Photos will be developed or printed. Chaperone will give teacher a list of what their group photographed. Each group of students will write or dictate a sentence about the shape, such as, “The ring is a circle.”
- If a field trip to the Hall of Fame cannot be made, students should use the Hall of Fame’s website at Profootballhof.com to view its exhibits

Materials:
- Models of shapes
- Name tags depicting one plane and one solid shape
- Disposable or digital camera for each group of 3-4 students
- Paper/pencil for chaperone to record shape names

Assessment:
- Teacher observation during the trip
- The photo product from the shape scavenger hunt
- The sentences written or dictated by the students
Mathematics
Jersey Number Math

Goals/Objectives:
Students will:
- Research Hall of Famers' jersey numbers.
- Using http://www.profootballhof.com/players/ find the jersey number worn by each player
  - In the “Find Your Hero” Bar, type in the last name of the player you are looking for
  - After you search for this player, click on “View Profile”
  - When you get to the player, do not scroll down the page, click on “Career Capsule”
    - If “Career Capsule” is not listed, look at some of the pictures of the player and use the jersey number in those pictures
  - This will take you to the players basic information
  - At the bottom of that page you will see “Uniform Number”
  - Solve basic addition and subtraction facts

Common Core Standards: Number Operations in Base Ten

Methods/Procedures:
- Students will research Pro Football Hall of Famers’ jersey numbers.
- Students will complete the Hall of Famer Jersey Math Worksheet
- Students can find a Hall of Famer’s jersey number for the answer.
- This can be adapted to multiplication and division as well.

Materials:
- Computer
- Access to the Internet
- Access to http://www.profootballhof.com/players/
- Hall of Famer Jersey Math Worksheet
- Pen or Pencil

Assessment:
- Accuracy of answers on Hall of Famer Jersey Math Worksheet.
Directions: Look up the Hall of Famers number. Use the Hall of Famers number to complete each equation.

- Len Dawson + Troy Aikman
- Dave Casper + Bart Starr
- Lou Groza + Andre Tippett

- Dan Hampton + Warren Moon
- Dan Dierdorf + Mike Haynes
- Larry Csonka + John Elway

- George Blanda - Guy Chamberlin
- Terry Bradshaw - Wilber Henry
- Mike Ditka - Charlie Sanders

- Ozzie Newsome - Joe Montana
- Jerry Rice - Jack Ham
- Marshall Faulk - Joe Namath

- John Randle - Lou Creekmur
- Bronko Nagurski + Joe Perry
- Jack Youngblood + Dan Marino
Goals/Objectives:
Students will:
- Practice math facts for review.
- Create a fun way to practice math facts.

Common Core Standards: Number Operations in Base Ten

Methods/Procedures:
- The class will be divided into two equal groups (teams).
- Students will need pencil and paper.
- Students from each team will be given a number that matches one other student from the opposing team.
- The teacher will choose a captain and quarterback from each team. There will be a coin toss at the beginning to see which team will kickoff or receive.
- The team that kicks will choose a card from the kickoff cards, which represents different lengths of kicks. The ball will be marked on the overhead.
- The teams will compete by working on the problems given by the teacher.
- Once the problem is given, the teacher will wait 5-10 seconds and pull a number chip. The players from each team that represents the number drawn will get to answer the problem. The person who answers first gets a first down or a block for their respective team.
- If the offensive team gets blocked 3 times, they must go to the 4th down cards or try for a field goal (if they are inside the opposing team’s 40 yard line). Passing cards are allowed after every third play, as long as the offensive team has at least one first down.
- Play continues until time runs out.
- The team with the most points wins. If tied, the team with the most first downs wins. If first downs are tied, then the winner is determined by most blocks.
- Chalkboard is used to record points, first downs and blocks.

Materials:
- Paper, pencil, chalk & chalkboard, White Board or SMART Board
- Overhead projector & football field overhead
- Math sheets & number chips
- Cards for kickoff, 4th down pile and passing

Assessment:
- Teacher observation
- Teacher visually checks problems worked on paper.
Mathematics
How Far is 300 Yards?

Goals/Objectives:
Students will:
• Convert measurements between yards, feet, and inches.
• Measure objects to the nearest inch, foot, and yard.

Common Core Standards: Measurement and Data

Methods/Procedures:
• Students will use a ruler to determine how many inches there are in a foot.
• Students will measure three items to the nearest inch i.e., their pencil, book, crayon, desk, etc. Share with the class and explain how they obtained their results.
• Students will then measure some objects to the nearest foot i.e., the White Board/SMART Board, door, height, etc. Then students will compute how many inches that would be. Students will share their conversions and procedures with the class so the teacher can assess understanding.
• Students will then use a yardstick to measure several objects i.e., a counter, a carpet, or a table. Then students will convert the number of yards to the amount of feet and inches. Students will share answers with the class so the teacher can assess understanding. These results can be made into a table on the chalkboard.
• Students will then complete the worksheet provided on the following page with the table to convert the number of yards gained during the football game to inches and feet.
• After the students complete the worksheet, they may go outside to the playground or football field and see how far the measurements they converted are.
• Older students can then compare their answers and discuss why there are different results. Was everyone precise with their measuring? Which measurements are accurate? Discuss how most measurements contain some error in them.

Materials:
• Ruler with inches
• Yard stick
• Materials in the classroom to measure
• Worksheet (easy or harder version)
• Pencils

Assessment:
• Class participation
• Worksheet
Directions: Below is a list of some of the players who earned 300 combined net yards in a single game. Complete the chart by converting the amount of net yards in a game to feet and inches.

<table>
<thead>
<tr>
<th>Player</th>
<th>Team</th>
<th>Yards</th>
<th>Feet</th>
<th>Inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jason Tucker</td>
<td>Dallas Cowboys</td>
<td>331</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jermaine Lewis</td>
<td>Baltimore Ravens</td>
<td>308</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jacoby Ford</td>
<td>Oakland Raiders</td>
<td>329</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glyn Milburn</td>
<td>Denver Broncos</td>
<td>404</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tyrone Hughes</td>
<td>New Orleans Saints</td>
<td>347</td>
<td></td>
<td></td>
</tr>
<tr>
<td>John Taylor</td>
<td>San Francisco 49ers</td>
<td>321</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Willie Anderson</td>
<td>Los Angeles Rams</td>
<td>336</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joshua Cribbs</td>
<td>Cleveland Browns</td>
<td>316</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stephone Paige</td>
<td>Kansas City Chiefs</td>
<td>309</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lionel James</td>
<td>San Diego Chargers</td>
<td>345</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adrian Peterson</td>
<td>Minnesota Vikings</td>
<td>361</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walter Payton</td>
<td>Chicago Bears</td>
<td>300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Darren Sproles</td>
<td>San Diego Chargers</td>
<td>317</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steve Smith</td>
<td>Carolina Panthers</td>
<td>313</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gale Sayers</td>
<td>Chicago Bears</td>
<td>339</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Compiled from 2013 NFL Record and Fact Book
Goals/Objectives:
Students will:
- Students will determine number patterns from a given set of numbers

Common Core Standards: Number Operations in Base Ten; Measurement and Data

Methods/Procedures:
- Students will be given a chart with the yardage gained from running backs in each quarter of a game.
- Students will look at the number in each quarter to determine the number pattern.
- Students will then determine either how to continue the pattern or what number in the pattern is missing.
- Students will share the number operations they used to determine the pattern.

Materials:
- Number Pattern Worksheet
- Pencils

Assessment:
- Completion of worksheet
- Observation of process
Directions: Fill-in the charts below by analyzing the numbers given to determine the numbers needed to complete each pattern.

<table>
<thead>
<tr>
<th>Running Back</th>
<th>1st Quarter</th>
<th>2nd Quarter</th>
<th>3rd Quarter</th>
<th>4th Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3 yards</td>
<td>6 yards</td>
<td>9 yards</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>15 yards</td>
<td></td>
<td>25 yards</td>
<td>30 yards</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>16 yards</td>
<td>20 yards</td>
<td>24 yards</td>
</tr>
<tr>
<td>D</td>
<td>28 yards</td>
<td>40 yards</td>
<td></td>
<td>64 yards</td>
</tr>
</tbody>
</table>

What is running back A’s number pattern? ____________________________

What is running back B’s number pattern? ____________________________

What is running back C’s number pattern? ____________________________

What is running back D’s number pattern? ____________________________

You may use the space below to show your work.

<table>
<thead>
<tr>
<th>Running Back</th>
<th>1st Quarter</th>
<th>2nd Quarter</th>
<th>3rd Quarter</th>
<th>4th Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.5 yards</td>
<td>8 yards</td>
<td>10.5 yards</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>12.2 yards</td>
<td></td>
<td>26.8 yards</td>
<td>34.1 yards</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>15.4 yards</td>
<td>17.1 yards</td>
<td>18.8 yards</td>
</tr>
<tr>
<td>D</td>
<td>28.6 yards</td>
<td>39 yards</td>
<td></td>
<td>59.8 yards</td>
</tr>
</tbody>
</table>

What is running back A’s number pattern? ____________________________

What is running back B’s number pattern? ____________________________

What is running back C’s number pattern? ____________________________

What is running back D’s number pattern? ____________________________

You may use the space below to show your work.
**Mathematics**

**Punt, Pass and Snap**

**Goals/Objectives:**
Students will:
- Learn the proper techniques of punting, passing and snapping a football.
- Calculate the mean, median and mode of the class’s data for these three football skills.
- Compare/contrast the three different sets of data.

**Common Core Standards:** Number Operations in Base Ten; Measurement and Data

**Methods/Procedures:**
- Introduce and define the three measures of central tendency: mean=average, median=exact middle, mode=number occurring most often
- Set up a chart for the class listing all students’ names, leaving blank sections to record the distance each student throws, kicks and long-snaps the ball.
- Teach students to execute all three skills, allow time for practice.
- Have students take turns throwing the football as far as they can, recording the distance each student throws in yards. Repeat this procedure with the kick and long snap.
- Have students arrange the data on a visual chart, graph or number line in ascending order, displaying individual statistics.
- Instruct students to calculate the mean, median and mode for each of the 3 sets of data.
- Guide students through a comparison of each set of data and discuss why they differ.

**Materials:**
- Footballs
- Paper
- Pen/pencil
- Clipboards
- Chart paper
- Whistle
- Field marked off in yards

**Assessment:**
- Participation in activity (observation)
- Completion of mean, median and mode calculations
- Quiz on defining each measure of central tendency and calculating each using a set of data.
Running to the Hall of Fame

Goals/Objectives:
Students will:
• Create a scatter plot with information on attempts and yards gained.
• Create a best fit line which would show the slope of the line as the average yards per carry.

Common Core Standards: Number Operations in Base Ten; Measurement and Data

Methods/Procedures:
• Find information on attempts and yards gained for Hall of Fame running backs like Jim Brown, Jim Taylor and Walter Payton.
• Create a scatter plot using the x-axis for number of attempts and the y-axis for yards gained.
• Plot the (x,y) points of at least seven Hall of Fame running backs.
• Create a best fit line (straight line that represents these x,y data points).
• Find a good slope $\frac{Y_2-Y_1}{X_2-X_1}$ of this best fit line.
• This should be the approximate yards per carry of these great running backs.

Materials:
• Computers (Hall of Famer information on ProFootballHOF.com)
• Graph paper
• Rulers
• Colored pencils
• Calculators.
• Sports books for reference like 2014 NFL Record and Fact Book.

Assessment:
• Students will be able to show a best fit line on a scatter plot graph. The average yards per carry should be reasonable (slope of line calculated).
Mathematics

Same Data Different Graph

Goals/Objectives:
Students will:
- Take data provided by the teacher and as a class, group or individual, compare differing representations of it to determine which representation best imparts the intended message or meaning.

Common Core Standards: Measurement and Data

Methods/Procedures:
- This lesson can be undertaken prior to or after visiting the Pro Football Hall of Fame or the Hall of Fame website at ProFootballHOF.com. Students will have held at least one discussion on professional football and various aspects of the sport to make certain all students are somewhat familiar with the game.
- The teacher will then provide the students with data from this activity guide or from the website (Profootballhof.com.) A good source in this activity guide is the page listing the current Super Bowl Champs, the Seattle Seahawks (page MA 35). This page has a column that lists which college each player attended. Students can use this data in their data representations (bar, pie etc.).
- At this point the instructor should decide whether to do this data representation as a class, group or individual. Doing one graphic representation (i.e. bar graph) of colleges attended by the winning Super Bowl team as a class is a great starting point for discussion and reference point.
- Students can be assigned to do another graph (i.e. pie) by filling in the proper ‘slice’ with college name as a transition to doing a representation without any assistance.
- If the teacher chooses individual or group work instead of class as a whole work, time should be set aside to present graphs and findings to class.
- The class should come to a consensus or at the least discuss which graphic representation best imparts the information. The strong and weak points of each representation should be addressed.

Materials:
- Access to the Internet
- Access to HOF website at ProFootballHOF.com
- Statistics to graph….i.e. Current Super Bowl Team Members’ Roster in Activity Book

Assessment:
- Students will present to the class graphical representations and analysis of the data.
- See examples on the following page.
Same Data Different Graph

Example 1:

<table>
<thead>
<tr>
<th>College</th>
<th>Members Attended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ohio State</td>
<td>2</td>
</tr>
<tr>
<td>Illinois</td>
<td>1</td>
</tr>
<tr>
<td>Alabama</td>
<td>3</td>
</tr>
<tr>
<td>Pitt</td>
<td>1</td>
</tr>
</tbody>
</table>

Example 2:

Super Bowl I
College Team
Members Attended

- Wake Forest       1
- Florida           4
- Oklahoma State    3
Goals/Objectives:
Students will:
- Follow Directions and Create a New Football Stadium using knowledge of shapes and numbers.

Common Core Standards: Geometry

Methods/Procedures:
- Students will work in pairs or small groups. (Building Teams)
- Each team will review a list of requirements that the stadiums must have to be considered complete.
- Each team will plan and draw their stadium.
- Each team will check to make sure they meet each requirement.

Materials:
- Drawing paper for each pair or group
- Pencils
- Rulers
- Checklists

Assessment:
- Observation of team discussions
- Completed stadium drawings
Surveying The Field

**Goals/Objectives:**
Students will:

- Design a survey, collect data and interpret data collected related to an ‘issue’ in professional football.

**Common Core Standards:** Measurement and Data

**Methods/Procedures:**

- Prior to visiting to the Pro Football Hall of Fame or the Hall of Fame website (Profootballhof.com), students will have held one (or more if necessary) discussion on professional football and the role it plays in the lives of individuals today.
- The teacher will guide the discussion to include ‘issues’ or concerns that students have thought of themselves or have read or seen in the media. An example might be the age that an individual should be before he can be drafted by an NFL team. Another could be the role that women play in the NFL. The possibilities are endless and students will have no problem compiling a significant list of ‘issues.’
- At this point the instructor should decide whether this is an individual OR a group project.
- Once the make-up of the study’s members is decided, students need to write the survey question or issue in a coherent and statistically measurable format.
- After the instructor approves the format of the issue to be surveyed, students must collect data from an adequate audience population and a representative audience. Because this is part of the standard’s requirements and will be part of the instructor’s evaluation criteria, the audience and population of the audience is something the student(s) must determine.
- Once the survey has been completed, the student(s) must interpret the data with graphical displays. At this point, the instructor can determine in what form(s) and in what quantity of diverse graphic representations are necessary.
- The student(s) must include in their presentation variability as a factor, correlation and standard deviation.
- The presentation can be in the form of a class lecture by each student or group or in the form of a turn-in project. The use of the tri-fold science fair board is a great method of display for data and explanation of ‘issue.’

**Materials:**

- Access to the Internet
- Access to HOF website at ProFootballHOF.com
- Optional science fair tri-folds

**Assessment:**

- Students will present to the class or in report form to the instructor the results and analysis of the data collected.
**Goals/Objectives:**
Students will:
- Create number sentences with variables and then solve the variables using story problems

**Common Core Standards:** Operations and Algebraic Thinking

**Methods/Procedures:**
- The class will begin discussing how many points are usually scored in a football game.
- The class will use the worksheets provided on the following pages to make number sentences with variables and then solve the variables.

**Materials:**
- Pencil
- Worksheet

**Assessment:**
- Classroom participation
- Completion of worksheet
Directions: For each problem write a number sentence to solve the problem and see how many points the top 10 NFL scorers made. Then find out the variable by using another sheet of paper. Use the table to help you. The first one has been done for you.

<table>
<thead>
<tr>
<th>TYPE OF PLAY</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Touchdown</td>
<td>6</td>
</tr>
<tr>
<td>Field Goal</td>
<td>3</td>
</tr>
<tr>
<td>Extra Point</td>
<td>1</td>
</tr>
</tbody>
</table>

1. Gary Anderson has 2,434 points. He earned 820 extra points and no touchdowns. How many field goals did he get? 538

Number sentence: \((3 \times F) + 820 = 2,434\)

2. Morten Andersen scored 2,544 points. He made 565 field goals and no touchdowns. How many extra points did he score? _________

Number sentence: __________________________

3. George Blanda scored 2,002 points. He scored 9 touchdowns and 335 field goals. How many extra points did he score? _______________

Number sentence: _____________________

4. Norm Johnson didn’t score any touchdowns in his 18 year career. He did score a total of 1,736 points. If he made 638 extra points, how many field goals did he score? _______________

Number sentence: _______________________

5. Adam Vinatieri scored 1,867 points. He didn’t make any touchdowns, but he did score 413 field goals. How many extra points did he score? ________

Number sentence: ______________________

6. Jason Hanson has played football for 21 years. He didn’t have any touchdowns but he did score 2,150 points. If he had 665 extra points, how many field goals did he score? ____________

Number sentence: _______________________

7. John Kasay played football for 20 years. He did not score any touchdowns but he did score 461 field goals and a total of 1,970 points. How many extra points did he get? ________________

Number sentence: _______________________
8. Jason Elam is the 7th top scorer in NFL history. He scored 1,983 points and didn’t score any touchdowns. If he made 675 extra points, how many field goals did he score? _______________

Number sentence: _________________________

9. John Carney has played football for 23 years. During that time he scored 628 extra points and 478 field goals. How many total points did he score? _______________

Number sentence: _________________________

10. Matt Stover has played in the NFL for 19 years. During that time he has scored 471 field goals, 0 touchdowns, and a total of 2,004 points. Determine how many extra points he scored. ___________

Number sentence: _________________________

Compiled from 2013 NFL Record and Fact Book
Goals/Objectives:
Students will:
• Find factors and multiples of players’ numbers
• Identify numbers as prime and composite

Common Core Standards: Operations and Algebraic Thinking

Methods/Procedures:
• The students should have familiarity with finding factors. The class should begin with a review of how to find factors of a number. For example, the factors of 50 would be: 1, 2, 5, 10, 25, 50. You may prefer for the students to list the factors like this: 1 * 50, 2 * 25, 5 * 10.
• Students will learn how to classify numbers whether they are prime or composite. A prime number has only two factors: 1 and itself. An example would be 5 because the only two numbers that multiply together to equal 5 would be 1 and 5. Composite numbers have 3 or more factors. For example 50 would be composite because it has 6 factors.
• Students will do some practice determining if a number is prime or composite. The teacher can hand each student a different number on an index card and the students can find the factors and then place the card on the chalkboard either in the prime or composite category. Students can also count the letters in their first or last name and determine if that number is prime or composite.
• The class should also talk about finding multiples of a number. So given the number 4, the multiples would be 4, 8, 12, 16, 20, etc.
• Once the class has practiced, they can work on the worksheet.

Materials:
• Pencil
• Worksheet
• Index cards
• Tape to place the index cards on the board

Assessment:
• Class participation
• Worksheet
What’s In a Number?

Directions: Use the number of each Hall of Famer to complete the worksheet.

Troy Aikman
#8

The factors of 8 are:
_______________________________
Is the number 8 prime or composite?
_______________________________
Five multiples of 8 are:
_______________________________

Bill George
#61

The factors of 61 are:
_______________________________
Is the number 61 prime or composite?
_______________________________
Five multiples of 61 are:
_______________________________

Harry Carson
#53

The factors of 53 are:
_______________________________
Is the number 53 prime or composite?
_______________________________
Five multiples of 53 are:
_______________________________

David (Deacon) Jones
#75

The factors of 75 are:
_______________________________
Is the number 75 prime or composite?
_______________________________
Five multiples of 75 are:
_______________________________

Dick Lane
#81

The factors of 81 are:
_______________________________
Is the number 81 prime or composite?
_______________________________
Five multiples of 81 are:
_______________________________

Doak Walker
#37

The factors of 37 are:
_______________________________
Is the number 37 prime or composite?
_______________________________
Five multiples of 37 are:
_______________________________

Lee Roy Selmon
#63

The factors of 63 are:
_______________________________
Is the number 63 prime or composite?
_______________________________
Five multiples of 63 are:
_______________________________

Otto Graham
#60

The factors of 60 are:
_______________________________
Is the number 60 prime or composite?
_______________________________
Five multiples of 60 are:
_______________________________
Mathematics
Tackling Football Math

Goals/Objectives:
Students will:
- Improve math skills by applying basic functions to the game of football.
- Learn basic football facts and game terms.
- Utilize statistics of NFL football players and teams for computing math problems.
- Research statistics of selected NFL football players and teams for use as alternative information in certain math problems.

Common Core Standards: Operations and Algebraic Thinking; Number Operations in Base Ten; Measurement and Data

Methods/Procedures:
- Students will complete the math worksheets provided on the following pages related to the game of football. They may work independently or with others. Feel free to make adaptations in players and teams to suit your students. Answers to the following worksheets are found in the back of this publication.
  * A Day at the Game (CCS: Number Operations in Base Ten)
  * How Old are They? (CCS: Number Operations in Base Ten)
  * Conversions in Football (CCS: Measurement and Data)
  * Super Bowl Numbers (CCS: Number Operations in Base Ten)
  * Top Active Rushers (CCS: Number Operations in Base Ten; Measurement and Data)
  * Super Bowl XLVII Thunder (CCS: Number Operations in Base Ten; Measurement and Data)
  * Miscellaneous Math Activities

Materials:
- Pencil
- Scrap paper for working problems
- Calculators if permitted
- Worksheets

Assessment:
- Students will be assessed on accuracy of responses.
Directions: Complete the following problems, be sure to show all of your work on a separate sheet of paper.

1. Tickets for the game are $62.00 each. A family of six attended the game on Sunday. What was the total cost of the tickets?

2. There are four quarters in a game, each lasting 15 minutes. What is the total number of minutes in a game? Convert the total minutes to seconds.

3. There are 53 members on one NFL team, but only 11 players are on the field at one time. How many are still on the sideline?

4. The seating capacity for Cleveland Browns Stadium is 73,300. There were 66,528 in attendance for the game. How many empty seats were there?

5. Twenty-four game balls are used in every indoor NFL game. If one ball weighs 14 ounces, how many ounces do 24 balls weigh? Convert to pounds. Clue: 16 ounces = 1 lb.

6. Vendors were selling programs for $5.00 each throughout the stadium. If 20 vendors each sold 32 programs in one hour for five hours, how many total programs did the vendors sell?

7. A family of three decided to buy some souvenirs while at the game. They purchased two pennants at $4.99 each, two hats at $24.99 each, one football at $19.99 and two programs at $5.00 a piece. How much did they spend?

8. Throughout the game they purchased snacks to eat. They bought 5 hot dogs at $3.00 each, 2 bags of peanuts and 2 bags of popcorn at $3.25 a piece, 4 soft drinks at 2.75 each and 2 ice cream cones at $3.25 each. What was the total?

9. The game kicked off at 1:05 p.m. and ended at 4:44 p.m.. How many hours and minutes did the game last?

10. If 90% of the seats in Ford Field, which holds 64,500, are filled for an NFL game, how many fans are there?

11. Your football team scored 18 points more than the previous high score of 56 points. What is their new high score?

12. On a series of downs, the football was spotted on your own 48-yard line. The quarterback passed for 15 yards, lost 9 yards when the quarterback was sacked, and then gained 17 yards on a halfback run. Where was the ball placed for the next down?
13. Your football team had a field goal in the first quarter, a touchdown plus an extra point in the second quarter, a touchdown but missed the extra point in the third quarter, and a safety in the fourth quarter. In the fourth quarter, the opposing team had 2 touchdowns followed by 2-point conversions for each touchdown. What was the final score of the game?

14. Your football team had penalties of 15 yards, 5 yards, 15 yards, and 15 yards. The opposing team had 5 yards fewer than half that in penalties. What were the total yards lost for the game?

15. At the concession stand, the Booster Club makes a nickel profit on each candy bar, a quarter on each box of popcorn, and $.40 for each beverage. If they sold 70 boxes of popcorn, 45 candy bars, and 107 beverages, what was their total profit?

16. What is the area of a high school football field from goal line to goal line (a football field is 53 1/3 yards wide)?

17. Ticket sales were up this season by 17%. If last year’s totaled $12,000, what were this year’s sales?

18. The price of a student ticket was raised from $3.00 to $3.50 and the price of an adult ticket was raised from $5.00 to $5.50. If ticket sales for the first game of the season were 210 student tickets and 748 adult tickets, what was the total additional revenue?

19. Football ticket sales bring in a profit of $10,000 annually. New stadium lights and bleachers will cost $24,000, annual maintenance is $2,000 and $1,000 is needed for the replacement of equipment each year. Given the figures, how many years will it take to break even and begin making a profit?

20. It is second down and 9-yards to go for the first down. The quarterback is sacked for an 8-yard loss. On third down, how many yards are necessary to achieve a first down?

21. The football game is scheduled to begin at 7:30 p.m. The pre-game show lasts 8 minutes. The band must report 10 minutes prior to the start of the pre-game show. What time must the band be present?

22. In the fourth quarter the clock says 1:59.04. The next 4 plays take 39.2 seconds, 15.85, 20.08, and 9.79 seconds off the clock. How much time is left?

23. The stadium lights are turned on at 6:40 p.m. and turned off 30 minutes after the game is over. If the game is over at 9:28 p.m., how many minutes of electricity will be charged by the utility company?
24. Given the following attendance statistics for your school’s 7 home games, find the median for the attendance at the home games

<table>
<thead>
<tr>
<th>Home Games</th>
<th>Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>958</td>
</tr>
<tr>
<td>#2</td>
<td>15,002</td>
</tr>
<tr>
<td>#3</td>
<td>500</td>
</tr>
<tr>
<td>#4</td>
<td>12,980</td>
</tr>
<tr>
<td>#5</td>
<td>11,040</td>
</tr>
<tr>
<td>#6</td>
<td>935</td>
</tr>
<tr>
<td>#7</td>
<td>10,091</td>
</tr>
</tbody>
</table>

25. The kickoff return player fielded 5 punts during the game. The first, he caught at his own 8-yard line and returned it to his own 26-yard line. The second, he caught at the opponent’s 48-yard line and returned it to their 34-yard line. The third, he made a “fair catch” at his own 26-yard line. The fourth he fielded at his own 12-yard line and scored a touchdown. The fifth, he caught on his 28-yard line and was immediately tackled for no gain. What was his average punt return for this game?

26. What percentage of the field has your team covered if they move the ball from their 20-yard line to their 40-yard line?

27. The defensive back intercepts the football at his own 5-yard line and runs to the opposing team’s 5-yard line before being tackled. How many yards did he gain on the interception?

28. The kicker made successful field goals of 37 yards, 29 yards, 42 yards, 18 yards, 19 yards, 40 yards, 31 yards, and 20 yards. He missed field goals of 50 yards and 46 yards. What was his percent of success?

29. In the first game of the season, the fullback ran for 17 yards, 5 yards, 12 yards, 21 yards, -6 yards, 34 yards, 3 yards, -2 yards, 10 yards, 7 yards, 4 yards, 18 yards, 66 yards, and 2 yards. What was his average yards per carry for the game?

30. What is the difference between the tallest player on the team at 7’ 5/8” and the shortest player on the team at 5’6 3/4”?
Directions: Read the following paragraphs about two NFL stars. Then complete the charts to figure out each one’s age.

During his 17-year, 242-game career with the Miami Dolphins, Hall of Fame quarterback Dan Marino has earned the right to be called the most prolific passer in NFL history. At the time of his retirement Marino held four of the NFL’s major career passing records with 61,361 passing yards, 4,967 completions, 8,358 passing attempts, and 420 passing touchdowns. Marino was selected to nine Pro Bowls during his illustrious career with the Dolphins. Thirteen times Marino passed for 3,000 yards or more in a single season, including six seasons in which he threw for 4,000 yards or more, and one season where he became the first player in NFL history to throw for 5,000 yards in one season. Marino passed for 300 yards in a single game 63 times, and threw for 400 yards or more in a single game 13 times – both were NFL records when he retired. Use the steps below to figure out his age.

<table>
<thead>
<tr>
<th>Step 1</th>
<th>_____ # of career completions x _____ # of Pro Bowls = _____ total for step 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2</td>
<td>_____ # of career passing yards - _____ total Step 1 = _____ total for step 2</td>
</tr>
<tr>
<td>Step 3</td>
<td>16,854 - _____ total step 2 = _____ total step 3</td>
</tr>
<tr>
<td>Step 4</td>
<td>_____ # of career games + _____ total for step 3 = _____ total step 4</td>
</tr>
<tr>
<td>Step 5</td>
<td>_____ total step 4 - _____ # of career touchdown passes = _____ total step 5</td>
</tr>
<tr>
<td>Step 6</td>
<td>_____ total step 5 + _____ # of 3,000-yd seasons = _____ total step 6</td>
</tr>
<tr>
<td>Step 7</td>
<td>_____ total step 6 + _____ # of 400-yard games = _____ total step 7</td>
</tr>
<tr>
<td>Step 8</td>
<td>_____ total of step 7 + <em><strong>8</strong></em> = _____ Dan’s Age</td>
</tr>
</tbody>
</table>

Hall of Fame quarterback John Elway became known as “Mr. Comeback” due to his 47 career fourth quarter comeback victories or ties. Elway was selected to nine Pro Bowls during his 16-year career with the Denver Broncos. Considered as one of the most versatile quarterbacks in NFL history Elway scrambled to a career rushing mark of 3,407 yards. His 51,475 career passing yards, along with 4,123 completions, place him fourth on the NFL’s all-time passing list. His 7,250 passing attempts are fourth all time in that category. Elway’s versatility is displayed by his 334 total career touchdowns (300 passing, 33 rushing, and 1 receiving). Elway led his team into five Super Bowl appearances that included two NFL championships. Elway took home the Super Bowl MVP Award in the final game of his career. Use the steps below to figure out his age.

<table>
<thead>
<tr>
<th>Step 1</th>
<th>_____ # career passing yards / _____ # Super Bowl starts = _____ total for step 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2</td>
<td>_____ # of career attempts + _____ # of career rushing yards = _____ total for step 2</td>
</tr>
<tr>
<td>Step 3</td>
<td>_____ total for step 2 - _____ total for step 1 = _____ total for step 3</td>
</tr>
<tr>
<td>Step 4</td>
<td>_____ total career touchdowns (passing, rushing, receiving) - _____ fourth quarter comebacks + _____ Pro Bowls = _____ total for step 4</td>
</tr>
<tr>
<td>Step 5</td>
<td>_____ total for step 4 + _____ # of Super Bowl MVP = _____ total of step 5</td>
</tr>
<tr>
<td>Step 6</td>
<td>_____ total for step 3 - _____ total for step 5 - <em><strong>12</strong></em> = _____ John’s age</td>
</tr>
</tbody>
</table>
Directions: Complete the following problems, be sure to show all of your work on a separate sheet of paper.

1. During his career, Barry Sanders rushed for 15,269 yards. How many feet is that? 

2. Cordarrelle Patterson of the Minnesota Vikings returned a kickoff for an NFL record 109 yards in 2013. How many inches is that?

3. Dan Marino passed for 61,361 yards in his career. How many miles is that? *Hint: 1 mile = 1,760 yards Round to the nearest tenth.

4. Antonio Brown of the Pittsburgh Steelers had 1,698 receiving yards in 2014. How many feet is that?

5. The Packers have the ball on their own 25-yard line and they complete a 45-yard pass. They then lose 4 yards on the next play. What yard line are they on now?

6. Joe Flacco throws a 54-yard pass. How many inches did he throw? How many centimeters? *Hint: 1 inch = 2.54 centimeters

7. A football field measures 100 yards from goal line to goal line. A field is 53 1/3 yards wide. Convert these measurements to feet.


9. A game normally lasts 60 minutes. During a 16-game season, how many total minutes does one team play?

10. There are seven officials on the field for every NFL game. If 16 games are played each week, what is the total number of officials officiating throughout the NFL each week?
Super Bowl games are written with Roman numerals. The use of Roman numerals actually began with Super Bowl V. Use the chart to calculate past and future games.

### Roman Numeral Chart

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
<th>VII</th>
<th>VIII</th>
<th>IX</th>
<th>X</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Example:**

\[ X = 10 \]
\[ + IX = 9 \]

**Super Bowl 19**

<p>| | | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Super Bowl</td>
<td>Super Bowl</td>
<td>Super Bowl</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+III</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Super Bowl</td>
<td>Super Bowl</td>
<td>Super Bowl</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Super Bowl</td>
<td>Super Bowl</td>
<td>Super Bowl</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Super Bowl</td>
<td>Super Bowl</td>
<td>Super Bowl</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**• Write the Roman numeral for Super Bowl 48 which will be played in East Rutherford, NJ. ____________**
Directions: Answer the following questions using the Baltimore Ravens’ roster on the following page.

1. Who was the oldest player on the team?
2. What number was Torrey Smith?
3. How many wide receivers (WR) were there?
4. How many players had 10 or more years of NFL experience?
5. How many quarterbacks (QB) were listed?
6. Who was the only player to attend Lane College?
7. Who was the heaviest player on the team?
8. Who was the lightest player on the team?
9. What position did number 90 play?
10. Add up the total weight of all the running backs (RB/FB).
## Baltimore Ravens 2012 Roster Super Bowl XLVII Champions

### Ravens Alphabetical Roster

<table>
<thead>
<tr>
<th>No</th>
<th>Player</th>
<th>Pos</th>
<th>Ht</th>
<th>Wt</th>
<th>Birth Date</th>
<th>NFL Exp</th>
<th>College</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>Allen, Anthony</td>
<td>RB</td>
<td>6-1</td>
<td>223</td>
<td>8/5/88</td>
<td>2</td>
<td>Georgia Tech</td>
</tr>
<tr>
<td>51</td>
<td>Agabovich, Brendan</td>
<td>LB</td>
<td>6-1</td>
<td>225</td>
<td>9/7/76</td>
<td>10</td>
<td>UCLA</td>
</tr>
<tr>
<td>66</td>
<td>Bajema, Billy</td>
<td>TE</td>
<td>6-4</td>
<td>259</td>
<td>10/31/02</td>
<td>8</td>
<td>Oklahoma State</td>
</tr>
<tr>
<td>77</td>
<td>Birk, Matt</td>
<td>C</td>
<td>6-4</td>
<td>310</td>
<td>7/25/76</td>
<td>15</td>
<td>Harvard</td>
</tr>
<tr>
<td>81</td>
<td>Boldin, Anquan</td>
<td>WR</td>
<td>6-1</td>
<td>220</td>
<td>10/5/90</td>
<td>10</td>
<td>Florida State</td>
</tr>
<tr>
<td>23</td>
<td>Brown, Chykie</td>
<td>CB</td>
<td>5-11</td>
<td>190</td>
<td>12/26/95</td>
<td>2</td>
<td>Texas</td>
</tr>
<tr>
<td>38</td>
<td>Brown, Omar</td>
<td>S</td>
<td>5-11</td>
<td>195</td>
<td>6/6/98</td>
<td>2</td>
<td>Marshall</td>
</tr>
<tr>
<td>56</td>
<td>Bynes, Josh</td>
<td>LB</td>
<td>6-1</td>
<td>240</td>
<td>8/24/89</td>
<td>1</td>
<td>Auburn</td>
</tr>
<tr>
<td>62</td>
<td>Cody, Terrance</td>
<td>NT</td>
<td>6-6</td>
<td>341</td>
<td>6/28/88</td>
<td>3</td>
<td>Alabama</td>
</tr>
<tr>
<td>37</td>
<td>Cones, Sean</td>
<td>S</td>
<td>6-0</td>
<td>212</td>
<td>12/17/82</td>
<td>2</td>
<td>Iowa</td>
</tr>
<tr>
<td>46</td>
<td>Cox, Morgan</td>
<td>LB</td>
<td>6-4</td>
<td>241</td>
<td>4/28/86</td>
<td>3</td>
<td>Tennessee</td>
</tr>
<tr>
<td>84</td>
<td>DeBose, Ed</td>
<td>TE</td>
<td>6-4</td>
<td>275</td>
<td>7/26/87</td>
<td>3</td>
<td>Oregon</td>
</tr>
<tr>
<td>17</td>
<td>Doss, Tarik</td>
<td>WR</td>
<td>6-3</td>
<td>207</td>
<td>9/22/89</td>
<td>2</td>
<td>Indiana</td>
</tr>
<tr>
<td>59</td>
<td>Elam, Dannell</td>
<td>ILB</td>
<td>6-1</td>
<td>243</td>
<td>11/29/85</td>
<td>4</td>
<td>Georgia</td>
</tr>
<tr>
<td>3</td>
<td>Flacco, Joe</td>
<td>QB</td>
<td>6-6</td>
<td>245</td>
<td>1/16/85</td>
<td>5</td>
<td>Delaware</td>
</tr>
<tr>
<td>66</td>
<td>Gogolakowski, Gino</td>
<td>G/C</td>
<td>5-10</td>
<td>300</td>
<td>11/10/60</td>
<td>R</td>
<td>Delaware</td>
</tr>
<tr>
<td>24</td>
<td>Graham, Carey</td>
<td>CB</td>
<td>6-0</td>
<td>196</td>
<td>7/25/85</td>
<td>6</td>
<td>New Hampshire</td>
</tr>
<tr>
<td>95</td>
<td>Hall, Bryan</td>
<td>DT</td>
<td>6-2</td>
<td>291</td>
<td>9/12/88</td>
<td>1</td>
<td>Arkansas State</td>
</tr>
<tr>
<td>54</td>
<td>Hamilton, Adrian</td>
<td>LB</td>
<td>6-3</td>
<td>251</td>
<td>11/29/67</td>
<td>R</td>
<td>Prairie View A&amp;M</td>
</tr>
<tr>
<td>70</td>
<td>Harwood, Ramon</td>
<td>G.T</td>
<td>6-6</td>
<td>334</td>
<td>3/3/87</td>
<td>3</td>
<td>Morehouse</td>
</tr>
<tr>
<td>32</td>
<td>Hurd, James</td>
<td>S</td>
<td>6-1</td>
<td>214</td>
<td>12/5/63</td>
<td>6</td>
<td>Massachusetts</td>
</tr>
<tr>
<td>25</td>
<td>Jackson, Anu</td>
<td>CB/RS</td>
<td>5-10</td>
<td>190</td>
<td>12/2/99</td>
<td>R</td>
<td>Cal-Poly</td>
</tr>
<tr>
<td>39</td>
<td>Johnson, Chris</td>
<td>CB</td>
<td>6-1</td>
<td>200</td>
<td>9/25/79</td>
<td>9</td>
<td>Louisiana</td>
</tr>
<tr>
<td>97</td>
<td>Jones, Arthur</td>
<td>DE</td>
<td>6-3</td>
<td>315</td>
<td>6/3/96</td>
<td>3</td>
<td>Syracuse</td>
</tr>
<tr>
<td>12</td>
<td>Jones, Jacoby</td>
<td>WR/RS</td>
<td>5-2</td>
<td>220</td>
<td>7/11/84</td>
<td>6</td>
<td>Lane</td>
</tr>
<tr>
<td>98</td>
<td>Kaneko, Masaaki</td>
<td>N.T</td>
<td>6-0</td>
<td>340</td>
<td>1/10/78</td>
<td>10</td>
<td>Utah</td>
</tr>
<tr>
<td>4</td>
<td>Koch, Sam</td>
<td>P</td>
<td>5-11</td>
<td>218</td>
<td>8/13/92</td>
<td>7</td>
<td>Nebraska</td>
</tr>
<tr>
<td>99</td>
<td>Kruger, Paul</td>
<td>DLB</td>
<td>6-4</td>
<td>270</td>
<td>2/15/96</td>
<td>4</td>
<td>Utah</td>
</tr>
<tr>
<td>44</td>
<td>Liach, Vonta</td>
<td>RB</td>
<td>5-6</td>
<td>290</td>
<td>11/16/81</td>
<td>9</td>
<td>East Carolina</td>
</tr>
<tr>
<td>52</td>
<td>Lewis, Ray</td>
<td>ILB</td>
<td>6-1</td>
<td>245</td>
<td>5/15/75</td>
<td>17</td>
<td>Miami (Fla.)</td>
</tr>
<tr>
<td>50</td>
<td>McClendon, Albert</td>
<td>LB</td>
<td>6-2</td>
<td>243</td>
<td>6/4/86</td>
<td>2</td>
<td>Miami (Fla.)</td>
</tr>
<tr>
<td>78</td>
<td>McKinnie, Bryant</td>
<td>T</td>
<td>6-8</td>
<td>354</td>
<td>9/23/79</td>
<td>11</td>
<td>Miami (Fla.)</td>
</tr>
<tr>
<td>90</td>
<td>McPherson, Vernell</td>
<td>DE</td>
<td>6-3</td>
<td>290</td>
<td>12/17/88</td>
<td>2</td>
<td>Mississippi State</td>
</tr>
<tr>
<td>82</td>
<td>Ngata, Haloti</td>
<td>DT</td>
<td>6-4</td>
<td>340</td>
<td>1/21/84</td>
<td>7</td>
<td>Oregon</td>
</tr>
<tr>
<td>74</td>
<td>Ochit, Michael</td>
<td>T</td>
<td>6-4</td>
<td>315</td>
<td>5/26/80</td>
<td>4</td>
<td>Mississippi</td>
</tr>
<tr>
<td>72</td>
<td>Ochontola, Kelechi</td>
<td>G/T</td>
<td>6-5</td>
<td>335</td>
<td>6/24/89</td>
<td>R</td>
<td>Iowa State</td>
</tr>
<tr>
<td>30</td>
<td>Pierc, Bernard</td>
<td>RB</td>
<td>6-0</td>
<td>218</td>
<td>5/10/90</td>
<td>R</td>
<td>Temple</td>
</tr>
<tr>
<td>68</td>
<td>Pitta, Dennis</td>
<td>TE</td>
<td>6-4</td>
<td>245</td>
<td>6/24/85</td>
<td>3</td>
<td>BYU</td>
</tr>
<tr>
<td>31</td>
<td>Pittsburgh, Bernard</td>
<td>S</td>
<td>6-1</td>
<td>225</td>
<td>12/23/84</td>
<td>7</td>
<td>Purdue</td>
</tr>
<tr>
<td>16</td>
<td>Reed, David</td>
<td>WR/RS</td>
<td>6-0</td>
<td>190</td>
<td>3/22/87</td>
<td>3</td>
<td>Utah</td>
</tr>
<tr>
<td>20</td>
<td>Reed, Ed</td>
<td>S</td>
<td>5-11</td>
<td>206</td>
<td>9/11/78</td>
<td>11</td>
<td>Miami (Fla.)</td>
</tr>
<tr>
<td>27</td>
<td>Rice, Ray</td>
<td>RB</td>
<td>5-6</td>
<td>212</td>
<td>7/28/87</td>
<td>5</td>
<td>Rutgers</td>
</tr>
<tr>
<td>22</td>
<td>Smith, Jeremy</td>
<td>CB</td>
<td>6-2</td>
<td>205</td>
<td>7/22/88</td>
<td>2</td>
<td>Colorado</td>
</tr>
<tr>
<td>82</td>
<td>Smith, Torrey</td>
<td>WR</td>
<td>6-0</td>
<td>205</td>
<td>1/26/89</td>
<td>2</td>
<td>Maryland</td>
</tr>
<tr>
<td>52</td>
<td>Suggs, Terrill</td>
<td>OLB</td>
<td>6-3</td>
<td>280</td>
<td>10/11/82</td>
<td>10</td>
<td>Arizona State</td>
</tr>
<tr>
<td>2</td>
<td>Taylor, Tyrone</td>
<td>QB</td>
<td>6-1</td>
<td>215</td>
<td>3/3/89</td>
<td>2</td>
<td>Virginia Tech</td>
</tr>
<tr>
<td>83</td>
<td>Thompson, Deonte</td>
<td>WR/RS</td>
<td>6-0</td>
<td>303</td>
<td>2/14/89</td>
<td>R</td>
<td>Florida</td>
</tr>
<tr>
<td>9</td>
<td>Tockar, Justin</td>
<td>K</td>
<td>6-0</td>
<td>180</td>
<td>11/21/89</td>
<td>R</td>
<td>Texas</td>
</tr>
<tr>
<td>95</td>
<td>Tyson, DeAngelo</td>
<td>DE</td>
<td>6-2</td>
<td>310</td>
<td>4/12/89</td>
<td>R</td>
<td>Georgia</td>
</tr>
<tr>
<td>91</td>
<td>Upshaw, Courtney</td>
<td>OLB</td>
<td>6-2</td>
<td>272</td>
<td>12/15/80</td>
<td>R</td>
<td>Alabama</td>
</tr>
<tr>
<td>63</td>
<td>Williams, Robbie</td>
<td>G</td>
<td>6-4</td>
<td>345</td>
<td>9/25/76</td>
<td>13</td>
<td>Arkansas</td>
</tr>
<tr>
<td>29</td>
<td>Williams, Cary</td>
<td>CB</td>
<td>6-1</td>
<td>190</td>
<td>12/23/84</td>
<td>5</td>
<td>Washington</td>
</tr>
<tr>
<td>73</td>
<td>Young, Marshall</td>
<td>G/T</td>
<td>6-3</td>
<td>315</td>
<td>9/15/84</td>
<td>6</td>
<td>Iowa</td>
</tr>
</tbody>
</table>

Source: Super Bowl XLVII Game Program
## Top Active Rushers

**Heading into the 2014 Season**
(1,000 or more attempts)

<table>
<thead>
<tr>
<th>Player</th>
<th>Attempts</th>
<th>Yards</th>
<th>Average Yards/Attempt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Steven Jackson</td>
<td>2,743</td>
<td>11,388</td>
<td></td>
</tr>
<tr>
<td>2. Frank Gore</td>
<td>2,442</td>
<td>11,073</td>
<td></td>
</tr>
<tr>
<td>3. Adrian Peterson</td>
<td>2,054</td>
<td>10,190</td>
<td></td>
</tr>
<tr>
<td>4. Marshawn Lynch</td>
<td>2,033</td>
<td>8,695</td>
<td></td>
</tr>
<tr>
<td>5. Chris Johnson</td>
<td>1,897</td>
<td>8,628</td>
<td></td>
</tr>
<tr>
<td>6. Matt Forte</td>
<td>1,817</td>
<td>7,704</td>
<td></td>
</tr>
<tr>
<td>7. Jamaal Charles</td>
<td>1,249</td>
<td>6,856</td>
<td></td>
</tr>
<tr>
<td>8. DeAngelo Williams</td>
<td>1,432</td>
<td>6,846</td>
<td></td>
</tr>
<tr>
<td>9. LeSean McCoy</td>
<td>1,461</td>
<td>6,792</td>
<td></td>
</tr>
<tr>
<td>10. Arian Foster</td>
<td>1,391</td>
<td>6,309</td>
<td></td>
</tr>
</tbody>
</table>

*Source: National Football League*

1. Who had the best average yards/carry?

2. Who had the lowest average yards/carry?

3. What is the total yards rushed by all ten running backs?

4. What is the total of attempts of all ten running backs?

5. What is the average yards/attempt of all ten running backs combined?
Mathematics
Stats with Andre Reed

Goals/Objectives:
Students will:
- Order numbers from smallest to largest
- Review the terms range, median, mode and mean.
- Determine the range, median, mode of a list of numbers.
- Read and interpret a chart

Common Core Standards: Represent and Interpret Data

Methods/Procedures:
- Students will answer a set of questions based on a chart given to them representing Hall of Famer Wide Receiver Andre Reed’s career receiving yards
- If able to, create a graph using the data from the chart
- If able to, using NFL.com and/or ProFootballHOF.com, find another Hall of Famer’s statistics, create a chart, and find the range, mode, median and mean of the statistics

Materials:
- Hall of Famer’s Statistics Chart
- Calculator
- Worksheet
- Access to NFL.com and/or ProFootballHOF.com by computer

Assessment:
- Students will be assessed on accuracy of responses
Directions: Using the chart below, answer the questions.

Andre Reed played professional football as a wide receiver from 1985 to 2000. He is a member of the Pro Football Hall of Fame Class of 2014. During his career he caught passes for an amazing 13,198 yards.

<table>
<thead>
<tr>
<th>Year</th>
<th>Yards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>637</td>
</tr>
<tr>
<td>1986</td>
<td>739</td>
</tr>
<tr>
<td>1987</td>
<td>752</td>
</tr>
<tr>
<td>1988</td>
<td>968</td>
</tr>
<tr>
<td>1989</td>
<td>1,312</td>
</tr>
<tr>
<td>1990</td>
<td>945</td>
</tr>
<tr>
<td>1991</td>
<td>1,113</td>
</tr>
<tr>
<td>1992</td>
<td>913</td>
</tr>
<tr>
<td>1993</td>
<td>854</td>
</tr>
<tr>
<td>1994</td>
<td>1,303</td>
</tr>
<tr>
<td>1995</td>
<td>312</td>
</tr>
<tr>
<td>1996</td>
<td>1,036</td>
</tr>
<tr>
<td>1997</td>
<td>880</td>
</tr>
<tr>
<td>1998</td>
<td>795</td>
</tr>
<tr>
<td>1999</td>
<td>536</td>
</tr>
<tr>
<td>2000</td>
<td>103</td>
</tr>
<tr>
<td>Total</td>
<td>13,198</td>
</tr>
</tbody>
</table>

1. The range is the difference between the largest number and the smallest number. What is the range of Andre Reed's receiving yards?

2. The mode is the number that occurs the most. Is there a mode in the chart? Why or why not?

3. The median is the middle number in a series of numbers in ascending order. If there is an even amount of numbers the median is the average of the two middle numbers. What is the median of the chart?

4. The mean is the average of a group of numbers. What is the mean of the chart (Round to the nearest tenth)?
**Goals/Objectives:**

Students will:
- Order numbers from smallest to largest
- Review the terms range, median, mode and mean.
- Determine the range, median, mode of a list of numbers.
- Read and interpret a chart

**Common Core Standards:** Represent and Interpret Data

**Methods/Procedures:**
- Students will answer a set of questions based on a chart depicting the leaders in the NFL for receptions in the 2013-2014 NFL Season
- If able, they can create a bar graph showing in graph form the number of receptions of each NFL Wide Receiver
- If able, use NFL.com and / or ProFootballHOF.com to find other NFL Statistical Category leaders and do the same process

**Materials:**
- NFL Reception Leaders Chart
- Calculator
- Worksheet
- Graph Paper (If doing bar graphs)
- Access to NFL.com and / or ProFootballHOF.com by computer

**Assessment:**
- Student will be assessed on accuracy of responses
Directions: Using the chart below, answer the questions.

Below is a chart that shows the top ten number of passes caught by wide receivers in the 2013 season.

<table>
<thead>
<tr>
<th>PLAYER</th>
<th>TEAM</th>
<th>RECEPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antonio Brown</td>
<td>PIT</td>
<td>129</td>
</tr>
<tr>
<td>Demaryius Thomas</td>
<td>DEN</td>
<td>111</td>
</tr>
<tr>
<td>Julio Jones</td>
<td>ATL</td>
<td>104</td>
</tr>
<tr>
<td>Matt Forte</td>
<td>CHI</td>
<td>102</td>
</tr>
<tr>
<td>Emmanuel Sanders</td>
<td>DEN</td>
<td>101</td>
</tr>
<tr>
<td>Golden Tate</td>
<td>DET</td>
<td>99</td>
</tr>
<tr>
<td>Jordy Nelson</td>
<td>GB</td>
<td>98</td>
</tr>
<tr>
<td>Julian Edelman</td>
<td>NE</td>
<td>92</td>
</tr>
<tr>
<td>Odell Beckham Jr.</td>
<td>NYG</td>
<td>91</td>
</tr>
<tr>
<td>Randall Cobb</td>
<td>GB</td>
<td>91</td>
</tr>
</tbody>
</table>

1. The range is the difference between the largest number and the smallest number. What is the range of the chart?

2. The mode is the number that occurs the most. Is there a mean in the chart? Why or why not?

3. The median is the middle number in a series of numbers in ascending order. If there is an even amount of numbers the median is the average of the two middle numbers. What is the median of the chart?

4. The mean is the average of a group of numbers. What is the mean of the chart?
Goals/Objectives:
Students will:
- Review addition facts
- Practice problem solving skills
- Read and interpret a chart

Common Core Standards: Operations and Algebraic Thinking

Methods/Procedures:
- Students will answer a set of questions based on a chart given to them about how points were given for touchdowns, field goals, and point-after conversions throughout history
- If visiting the Hall of Fame, there is an interactive chart where students can view this

Materials:
- Scoring System Chart (If no visit)
- Calculator
- Worksheet

Assessment:
- Student will be assessed on accuracy of responses
Directions: Using the chart below, answer the questions.

During your visit to the Pro Football Hall of Fame you saw an interactive chart that explained the development of the NFL scoring system. In 1892 scoring in football looked quite different than today. For example, a field goal was worth more than a touchdown.

<table>
<thead>
<tr>
<th>Type of Score</th>
<th>Points Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>1892 Field Goal</td>
<td>5 points</td>
</tr>
<tr>
<td>1892 Touchdown</td>
<td>4 points</td>
</tr>
<tr>
<td>1892 Point After Touchdown</td>
<td>2 points</td>
</tr>
<tr>
<td>1897 Point After Touchdown</td>
<td>1 point</td>
</tr>
<tr>
<td>1904 Field Goal</td>
<td>4 points</td>
</tr>
<tr>
<td>1909 Field Goal</td>
<td>3 points</td>
</tr>
<tr>
<td>1912 Touchdown</td>
<td>6 points</td>
</tr>
<tr>
<td>1994 2-Point Conversion</td>
<td>2 points</td>
</tr>
</tbody>
</table>

In 2015, the Green Bay Packers played the Seattle Seahawks in the NFC Championship Game (which went to overtime). The final score of this game was:

**Packers - 22**  
**Seahawks - 28**

Packers Field Goals = 5 for 15 points  
Packers Touchdowns = 1 for 6 points  
Extra Point =1 for 1 point  
2-Point Conversions = 0 for 0 points  
Packers total: 22

Seahawks Field Goals = 0 for 0 points  
Seahawks Touchdowns = 4 for 24 points  
**One TD in Overtime**  
Extra Point = 2 for 2 points  
2-Point Conversions = 1 for 2 points  
Seahawks total: 28

1. Are they other ways the teams could have achieved the same scores? If so, please explain. If no, please explain-

2. What would the score be if the game had been played in 1892 (not including overtime scores)?

1904 (not including OT)?  
1909 (not including OT)?  
1912 (not including OT)?
Teachers: The following are classroom mathematics activities for you and your students to enjoy. Feel free to adapt and make copies of these ideas to suit your classroom.

NERF FOOTBALL: Use a Nerf football to provide math practice. With a permanent marker draw puzzle pieces all over the ball and number each piece. When the student catches the football, they either add or multiply the numbers found under their fingers. You can be “all thumbs” and still enjoy!

WEEKLY ANALYZING: Assign each student a team or a player and have them keep track of their weekly statistics. Give weekly math problems to the students in order to practice various mathematics skills. Students can keep a journal of their findings to compare with their classmates’ findings.

FIELD FACTS: Take a trip to a football field. Have the students practice using rulers, measuring tapes, and compasses by giving assignments related to the field. How far is the end zone from the goal post? How many inches is the entire field? How many yards across is a field? You could even have the students play a game of catch - how far can they throw? Who can catch the farthest throw?

FOOTBALL FOLDER GAME: Using the inside of a file folder, draw the outlines of 10 footballs and then write a different number inside each one. Laminate the folder. Draw matching football shapes on poster board, add corresponding number of dots, laminate and cut out. To play, the student counts the number of dots on the football and places it on top of the matching numbered footballs on the file folder. You could also use this for multiplication and subtraction by adapting the numbers.

ROMAN NUMERAL FUN: Super Bowls are numbered by Roman numerals. Make a list of Roman numerals from one to fifty. Multiply each number on your list by ten and write the products in Roman numerals.

The Hall of Fame welcomes any suggestions for classroom activities. Please share your thoughts and ideas by contacting the Educational Programs Staff at (330) 456-8207 or e-mail at Education@ProFootballHOF.com.
How Far is 300 Yards?
Jason Tucker - 993 feet, 11,916 inches
Jermaine Lewis - 924 feet, 11,088 inches
Jacoby Ford - 987 feet, 11,844 inches
Glyn Milburn - 1,212 feet, 14,544 inches
Tyrone Hughes - 1,041 feet, 12,492 inches
John Taylor - 963 feet, 11,556 inches
Willie Anderson - 1,008 feet, 12,096 inches
Joshua Cribbs - 948 feet, 11,376 inches
Stephone Paige - 927 feet, 11,124 inches
Lionel James - 1,035 feet, 12,420 inches
Adrian Peterson - 1,083 feet, 12,996 inches
Walter Payton - 900 feet, 10,800 inches
Darren Sproles - 951 feet, 11,412 inches
Steve Smith - 939 feet, 11,268 inches
Gale Sayers - 1,017 feet, 12,204 inches

Using Variables With NFL Scorers
1. Completed on worksheet.

2. (565*3)+x=2,544
   x=849

3. (9*6)+(335*3)+x=2,002
   x=943

4. (3*x)+638=1,736
   x=366

5. (413*3)+x=1,867
   x=626

6. (3*x)+655=2,150
   x=495

7. (461*3)+x=1,970
   x=587

8. (3*x)+675=1,983
   x=436

9. (478*3)+628=x
   x=2,062

10. (471*3)+x=2,004
    x=591

How Many People Attended NFL Games
2011 - 65,000 - 60,000
2010 - 65,000 - 60,000
2009 - 65,000 - 60,000
2008 - 67,000 - 60,000
2007 - 67,000 - 60,000
2006 - 67,000 - 60,000
2005 - 66,000 - 60,000
2004 - 66,000 - 60,000
2003 - 66,000 - 60,000
2002 - 66,000 - 60,000
2001 - 65,000 - 60,000
2000 - 66,000 - 60,000
1999 - 65,000 - 60,000
1998 - 64,000 - 60,000
1997 - 62,000 - 60,000

What’s in a Number?
#8: Factors: 1, 2, 4, 8
   Composite
   Multiples: 8,16, 24,32, 40, etc.

#61: Factors: 1 & 61
   Prime
   Multiples: 61, 122, 183, 244, 305, etc.

#53: Factors: 1 & 53
   Prime
   Multiples: 53, 106, 159, 212, 265, etc.

#75: Factors: 1, 3, 5, 15, 25, 75,
   Composite
   Multiples: 75, 150, 225, 300, 375, etc.

#81: Factors: 1, 3, 9, 27, 81
   Composite
   Multiples: 81, 162, 243, 324, 405, etc.

#37: Factors: 1 & 37
   Prime
   Multiples: 37, 74, 111, 148, 185, etc.

#63: Factors: 1, 3, 7, 9, 21, 63
   Composite
   Multiples: 63, 126, 189, 252, 315, etc.

#60: Factors: 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60
   Composite
   Multiples: 60, 120, 180, 240, 300, etc.

A Day At The Game
1. $372.00
2. 60 minutes, 3,600 seconds
3. 42 players
4. 6,772 empty seats
5. 336 ounces, 21 pounds
6. 3,200 programs
7. $ 89.95
8. $ 45.50
9. 3 hours, 39 minutes
10. 58,050 fans
11. 74 points
12. Opposing team’s 29-yard line
13. 18 to 16
14. 70 yards
15. $62.55
16. 5,333 1/3 square yards or 48,000 square feet
17. $14,040
18. $479
19. Four years
20. 17
21. 7:12 PM
22. 0:34.12 or 34.12 seconds
23. 198 minutes
24. 10,091
25. 30 yards (the fair catch does not count against him, thus, total yards is divided by 4 instead of 5)
26. 20%
27. 90 yards
28. 80%
29. 13.64 yards per carry
30. 1’5 7/8”

How Old are They?
Dan Marino:
Step 1 – 44,703
Step 2 – 16,658
Step 3 – 196
Step 4 – 438
Step 5 – 18
Step 6 – 31
Step 7 – 44
Step 8 – 52

John Elway:
Step 1 – 10,295
Step 2 – 10,657
Step 3 – 362
Step 4 – 296
Step 5 – 297
Step 6 – 53

Conversions in Football
1. 45,807 feet
2. 3,924 inches
3. 34.9 miles
4. 5,094 feet
5. 34 yard line of opposing team
6. 1,944 inches, 4,937.76 centimeters
7. 300 feet long, 160 feet wide
8. 5,440 ounces
9. 960 minutes
10. 112 officials

Super Bowl Numbers
15, 14, 9
23, 26, 18
35, 32, 37
XLVIII

Super Bowl Thunder
1. Ray Lewis, 5-15-75
2. 82
3. 6
4. 9
5. 2
6. Jacoby Jones
8. Justin Tucker - 180 lbs.
9. Defensive End
10. 913 lbs.

Top Rushers
1. Jamaal Charles - 5.49
2. Steven Jackson - 4.15
3. 84, 481 yards
4. 18,519 attempts
5. 4.56

Andre Reed
1. 1,209
2. No. There are no repeated numbers
3. 867
4. 824.9

NFL WR
1. 38
2. Yes. There is a number repeated (91)
3. 100
4. 101.8

Scoring System
1. Answers will vary
2. See Below:
   1892: Packers 31 - Seahawks 18
   1904: Packers 25 - Seahawks 15
   1909: Packers 20 - Seahawks 15
   1912: Packers 22 - Seahawks 21
## Number Patterns

<table>
<thead>
<tr>
<th>Running Back</th>
<th>1st Quarter</th>
<th>2nd Quarter</th>
<th>3rd Quarter</th>
<th>4th Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3 yards</td>
<td>6 yards</td>
<td>9 yards</td>
<td>12 yards</td>
</tr>
<tr>
<td>B</td>
<td>15 yards</td>
<td>20 yards</td>
<td>25 yards</td>
<td>30 yards</td>
</tr>
<tr>
<td>C</td>
<td>12 yards</td>
<td>16 yards</td>
<td>20 yards</td>
<td>24 yards</td>
</tr>
<tr>
<td>D</td>
<td>28 yards</td>
<td>40 yards</td>
<td>52 yards</td>
<td>64 yards</td>
</tr>
</tbody>
</table>

What is running back A’s number pattern? \(+3\)

What is running back B’s number pattern? \(+5\)

What is running back C’s number pattern? \(+4\)

What is running back D’s number pattern? \(+12\)

<table>
<thead>
<tr>
<th>Running Back</th>
<th>1st Quarter</th>
<th>2nd Quarter</th>
<th>3rd Quarter</th>
<th>4th Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.5 yards</td>
<td>8 yards</td>
<td>10.5 yards</td>
<td>15 yards</td>
</tr>
<tr>
<td>B</td>
<td>12.2 yards</td>
<td>19.5 yards</td>
<td>26.8 yards</td>
<td>34.1 yards</td>
</tr>
<tr>
<td>C</td>
<td>13.7 yards</td>
<td>15.4 yards</td>
<td>17.1 yards</td>
<td>18.8 yards</td>
</tr>
<tr>
<td>D</td>
<td>28.6 yards</td>
<td>39 yards</td>
<td>49.4 yards</td>
<td>59.8 yards</td>
</tr>
</tbody>
</table>

What is running back A’s number pattern? \(+3.5\)

What is running back B’s number pattern? \(+7.3\)

What is running back C’s number pattern? \(+1.7\)

What is running back D’s number pattern? \(+10.4\)
Pro Football Hall of Fame
Youth/Education

Physical Education

Activity Guide 2015-2016
<table>
<thead>
<tr>
<th>Lesson</th>
<th>National Standards</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do You Have What it Takes?</td>
<td>2-Movement; 3-Activity; 4-Fitness; 6-Values</td>
<td>PE 1</td>
</tr>
<tr>
<td>Even Jim Brown Had to Start Somewhere</td>
<td>2-Movement; 3-Activity; 4-Fitness; 6-Values</td>
<td>PE 2</td>
</tr>
<tr>
<td>Get Ready, Get Set, Get Moving</td>
<td>2-Movement; 3-Activity; 4-Fitness; 6-Values</td>
<td>PE 3</td>
</tr>
<tr>
<td>Personal Fitness Chart</td>
<td>2-Movement; 3-Activity; 4-Fitness; 6-Values</td>
<td>PE 4</td>
</tr>
<tr>
<td>Physical Fitness and Exercise 101</td>
<td>2-Movement; 3-Activity; 4-Fitness; 6-Values</td>
<td>PE 5-6</td>
</tr>
<tr>
<td>Punt, Pass and Kick Team Challenge</td>
<td>2-Movement; 3-Activity; 4-Fitness; 6-Values</td>
<td>PE 7-8</td>
</tr>
<tr>
<td>Speed and Quickness: A Hall of Famers Key to Success</td>
<td>2-Movement; 3-Activity; 4-Fitness; 6-Values</td>
<td>PE 9-10</td>
</tr>
<tr>
<td>The Highs and Lows of Being a Football Player</td>
<td>2-Movement; 3-Activity; 4-Fitness; 6-Values</td>
<td>PE 11</td>
</tr>
</tbody>
</table>
**Goals/Objectives:**
Students will:
- Discuss different football positions and the physical attributes required to play each position.

**National Standards:** 2-Movement Concepts, Principles, Strategies and Tactics; 3-Physical Activity; 4-Physical Fitness; 6-Values Physical Activity

**Methods/Procedures:**
- Instructor will lead a brainstorming activity discussing different Pro Football positions and which ones require strength, agility, flexibility or endurance and why?
- Physical Attributes needed by position.
  * Quarterback: Agility, Flexibility, Endurance
  * Lineman: Strength, Endurance
  * Running back/Defensive back: Agility, Strength, Flexibility, Endurance
  * Linebackers: Strength, Agility, Flexibility, Endurance
  * Receivers: Strength, Flexibility, Endurance
- Note: As elite athletes, pro football players will have a higher level of ALL fitness components.

**Materials:**
- Notepad/paper and pencil/pen
- Blackboard or dry mark board
- Access to computer

**Assessment:**
- Students will be assessed on their participation in activities.
Goals/Objectives:
Students will:
- Correlate the fitness concepts of strength, agility, flexibility, and endurance to basic yet specific forms of exercise.

National Standards: 2-Movement Concepts, Principles, Strategies and Tactics; 3-Physical Activity; 4-Physical Fitness; 6-Values Physical Activity

Methods/Procedures:
- Students will be asked to discuss and list basic exercises that can be done to improve one’s muscular strength, agility, flexibility, and muscular endurance.
- Basic Exercise Examples
  * Muscular Strength: Push-ups, Sit-ups, (Few Repetitions), Chin-ups, Pull-ups, Squat thrust, Bench dips
  * Agility: Line jumps (forward, backward, side to side, scissors), One Foot hop
  * Flexibility: Standing toe touch, Standing V stretch, Butterfly, Seated toe touch, Seated V stretch, Inverted hurdles stretch
  * Endurance: Push-ups, sit-ups, Chin-ups, Squat thrust, Bench dips, Walking, Jogging (slow, medium or fast) Jump rope (Many Repetitions)

Materials:
- Notepad/paper and pencil/pen
- Blackboard or Dry mark board
- Access to computer

Assessment:
- Students will be assessed on their participation in activities.
Goals/Objectives:
Students will:
• Be encouraged to regularly participate in physical exercise activities.

National Standards: 2-Movement Concepts, Principles, Strategies and Tactics; 3-Physical Activity; 4-Physical Fitness; 6-Values Physical Activity

Methods/Procedures:
• Students will be encouraged to start a “Fitness File” via The President’s Challenge web site, www.presidentschallenge.org

Materials:
• Notepad/paper and pencil/pen
• Blackboard or dry mark board
• Access to computer

Assessment:
• Students will be assessed on their participation in activities.
Goals/Objectives:
Students will:
• Perform a different fitness activity each day in class to the best of their ability. They will compete against themselves, not others, and encourage each other to do their best.

National Standards: 2-Movement Concepts, Principles, Strategies, and Tactics; 3-Physical Activity; 4-Physical Fitness; 6-Values Physical Activity

Methods/Procedures:
• After a warm-up and stretch routine, students will be accessing their own personal fitness chart from their class’s folder. They will turn in their fitness chart at the end of class.
• Each day, students will perform one of the activities on the chart, then record their score on their chart.
• Several activities can/will be listed on the chart such as
  * Jump rope (as many as possible in 1 minute)
  * Sit ups (as many as possible in 1 minute)
  * Push-ups (as many as possible in 1 minute)
  * Pull ups (as many as possible-no time limit)
  * Flexed arm hang (as long as possible-this will be timed using a stop watch)
  * Long jump (this will be measured using a measuring tape)
  * Jogging/sprinting (up to one mile and/or 40 yard dash-timed with a stop watch)
  * Eraser run (timed with a stop watch)

Materials:
• Fitness chart paper
• Folder with each homeroom teacher’s name
• Pens, pencils, clipboards
• Whistles
• Stop watches, tape measures
• Jump ropes
• Pull up bars
• Mats

Assessment:
• Students will be in small groups (3-4) and keep score for each other (pair students with friends so they feel more comfortable)
• Students will be assessed on their participation and improvement throughout the school year.
Goals/Objectives:
Students will:
- Develop their money skills
- Practice addition, subtraction, and multiplication
- Make change for purchases at a football concession stand
- Write monetary units using the dollar sign and the decimal point

National Standards: 2-Movement Concepts, Principles, Strategies and Tactics; 3-Physical activity; 4-Physical Fitness; 6-Values Physical Activity

Methods/Procedures:
- Initially the students will be given and review the physical fitness vocabulary list provided on the next page.
- Students will be asked to discuss and list basic exercises that can be done to improve one’s muscular strength, agility, flexibility, and muscular endurance.
- Students will be introduced to websites they can access to gather additional information on fitness and sports:
  - President’s Council on Physical Fitness and Sports - www.fitness.gov
  - Amateur Athletic Union - www.aausports.org
  - Fitness for Youth - http://Fitnessforyouth.umich.edu
  - Kids Health - www.kidshealth.org
  - Sports Illustrated for Kids - www.sikids.com

Materials:
- Notepad/paper and pencil/pen
- Blackboard or Dry mark board
- Access to computer
- Basic Fitness and Exercise Terms Worksheet

Assessment:
- Students will be assessed on their participation in activities.
Physical Education
Basic Fitness and Exercise Terms

**Fitness and Exercise terms and definitions.**

1. **Muscular Strength:** the amount of force exerted with a muscle.

2. **Agility:** quickness of motion, the ability to change directions quickly.

3. **Flexibility:** the ability to move your muscles and joints through a full range of motion.

4. **Muscular Endurance:** the ability of your body to move for a long period of time.

5. **Regularity:** setting up a regular exercise schedule.

6. **Overload:** for muscles to get stronger or your body to get fit, you must work harder when exercising then when you are at rest.

7. **Specificity:** you need to exercise your body the way you are going to use it.

8. **Progression:** gradually increase the number of exercises you do, the time you do them and how hard you exercise.

9. **Warm-Up:** warming up makes muscles more limber and decreases chances of being impaired during exercise.

10. **Cool-Down:** the time used to allow your body to return to normal after exercise.

11. **Frequency:** how often you exercise.

12. **Intensity:** how hard you exercise.

13. **Time:** how long you exercise.

14. **Type:** the kind of exercise- aerobic or anaerobic.
Physical Education

Punt, Pass and Kick Team Challenge

Goals/Objectives:
Students will:

• Become familiar with some activities and skills that help develop a Hall of Fame football player’s talents.

National Standards: 2-Movement Concepts, Principles, Strategies and Tactics; 3-Physical Activity; 4-Physical Fitness; 6-Values Physical Activity

Methods/Procedures:

• Students will be challenged in a variety of football related physical movements and skills. Students can be placed on teams of 4 to 5 per team. They can select a name of their favorite NFL Team. Scores will be recorded and averaged to determine winning teams.
• Teacher/Coach should provide rudimentary instruction in throwing, kicking and punting or have experienced students demonstrate.
• Students can use the Punt, Pass, and Kick skills worksheet provided on the following page to record their results.

Materials:

• 4 to 5 footballs
• 4 to 5 kicking tees
• Notepad/paper and pencil/pen
• Blackboard or Dry mark board
• Calculator
• Tape Measure

Assessment:

• Students/Teams will be assessed on their personal and team scores
**Directions:** Each team member will get three attempts each at throwing, kicking and punting a football as far as possible. Distance can be measured in feet, yards and/or meters. Have each student record his or her longest throw, kick, and punt to determine his or her team average.

**Punt**

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Distance</th>
<th>Longest</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. __________</td>
<td>#1</td>
<td>#3</td>
</tr>
<tr>
<td>2. __________</td>
<td>#1</td>
<td>#3</td>
</tr>
<tr>
<td>3. __________</td>
<td>#1</td>
<td>#3</td>
</tr>
<tr>
<td>4. __________</td>
<td>#1</td>
<td>#3</td>
</tr>
<tr>
<td>5. __________</td>
<td>#1</td>
<td>#3</td>
</tr>
</tbody>
</table>

Team Average:

**Pass**

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Distance</th>
<th>Longest</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. __________</td>
<td>#1</td>
<td>#3</td>
</tr>
<tr>
<td>2. __________</td>
<td>#1</td>
<td>#3</td>
</tr>
<tr>
<td>3. __________</td>
<td>#1</td>
<td>#3</td>
</tr>
<tr>
<td>4. __________</td>
<td>#1</td>
<td>#3</td>
</tr>
<tr>
<td>5. __________</td>
<td>#1</td>
<td>#3</td>
</tr>
</tbody>
</table>

Team Average:

**Kick**

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Distance</th>
<th>Longest</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. __________</td>
<td>#1</td>
<td>#3</td>
</tr>
<tr>
<td>2. __________</td>
<td>#1</td>
<td>#3</td>
</tr>
<tr>
<td>3. __________</td>
<td>#1</td>
<td>#3</td>
</tr>
<tr>
<td>4. __________</td>
<td>#1</td>
<td>#3</td>
</tr>
<tr>
<td>5. __________</td>
<td>#1</td>
<td>#3</td>
</tr>
</tbody>
</table>

Team Average:
Goals/Objectives:
Students will:
- Experience a variety of football related locomotor movements
- Bear crawl, grapevine, back pedal and forward run.

National Standards: 2-Movement Concepts, Principles, Strategies and Tactics; 3-Physical Activity; 4-Physical Fitness; 6-Values Physical Activity

Methods/Procedures:
- One student at a time will attempt the skills movement course. Also known as the four corners drill. After a practice turn the teacher/coach will time the students’ official attempt. The drill should be done as fast as possible with proper technique for the bear crawl, grapevine, back pedal and forward run. Efforts are timed with a stopwatch. Times should be recorded to the nearest 1/10th of a second (i.e. 16.8).
- Layout:

\[\text{Grapevine} \quad \text{Back Pedal} \quad \text{Forward Run} \quad \text{Bear Crawl}\]

* Cones are spaced 5yds apart

- Times can be recorded on the event score worksheet provided on the following page.

Materials:
- 4 cones
- 1 yard stick
- Stop Watch
- Paper and pencil

Assessment:
- Students will be assessed on their effort and personal best times for the event.
<table>
<thead>
<tr>
<th>Student Name</th>
<th>Practice Time</th>
<th>Official Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Goals/Objectives:
Students will:
• Students will become familiar with a football player's initial stance and how they correlate to the movement levels, high, medium, and low.

National Standards: 2-Movement Concepts, Principles, Strategies and Tactics; 3-Physical Activity; 4-Physical Fitness; 6-Values Physical Activity

Methods/Procedures:
• Students will be asked to discuss and list the strengths and characteristics of a football player's initial or beginning stance and how they correlate to the three basic levels of movement, high, medium, and low.
• The Three Basic Stances by Position
  * Two-Point Stance (High to Medium Level): 2 feet touching the ground
    » quarterbacks, running backs, receivers, linebackers, defensive backs and some defensive lineman
    » This offers the immediate benefit of greater vision of the entire field and also allows for greater quickness and speed to move in any direction.
  * Three-Point Stance (Medium to Low Level): 1 hand and 2 feet touching the ground
    » linemen, running backs, and tight ends
    » The main benefit of a three point stance is that it brings a player's center of gravity lower, which allows for greater balance and quicker movement.
  * Four-Point Stance (Low Level): 2 hands and 2 feet touching the ground
    » defensive lineman
    » This stance allows players to spread both hands and feet at a lower and wider level. Their weight is evenly distributed and this allows a player to launch forward quicker.

Materials:
• Notepad/paper and pencil/pen
• Blackboard or dry mark board
• Pictures or video demonstrations of stances
• Access to computer

Assessment:
• Students will be assessed on their participation in activities.
<table>
<thead>
<tr>
<th>Lesson</th>
<th>Indicator</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Sort</td>
<td>3 - Life</td>
<td>SC 1</td>
</tr>
<tr>
<td>Collisions on the Gridiron</td>
<td>1 - Inquiry 2 - Physical</td>
<td>SC 2-3</td>
</tr>
<tr>
<td>Football Games In Dangerous Weather</td>
<td>5 - Earth/Space</td>
<td>SC 4</td>
</tr>
<tr>
<td>Getting Into Shape...The Shape of a Football</td>
<td>1 - Inquiry</td>
<td>SC 5-7</td>
</tr>
<tr>
<td>The Purpose of Eye Black</td>
<td>1 - Inquiry</td>
<td>SC 8-10</td>
</tr>
<tr>
<td>Momentum and Football</td>
<td>1 - Inquiry, 2 - Physical</td>
<td>SC 11-13</td>
</tr>
<tr>
<td>Home Sweet Home: Get Me to My Biome</td>
<td>3 - Life Science</td>
<td>SC 14-15</td>
</tr>
<tr>
<td>Muscles and Football</td>
<td>1 - Inquiry, 3 - Life, 7 - Perspective</td>
<td>SC 16</td>
</tr>
<tr>
<td>Newton’s First Law of Motion in Football: Motion Stories</td>
<td>2 - Physical</td>
<td>SC 17-18</td>
</tr>
<tr>
<td>Physics and Football</td>
<td>1 - Inquiry, 2 - Physical</td>
<td>SC 19</td>
</tr>
<tr>
<td>Potential or Kinetic Energy?</td>
<td>2 - Physical</td>
<td>SC 20</td>
</tr>
<tr>
<td>The Flight of the Ball</td>
<td>1 - Inquiry, 2 - Physical</td>
<td>SC 21-23</td>
</tr>
<tr>
<td>Weather Observations: Should the Game Be Played?</td>
<td>1 - Inquiry, 4 - Earth/Space</td>
<td>SC 24-25</td>
</tr>
<tr>
<td>What Happens to NFL Players’ Heart Rate As Exercise Increases?</td>
<td>7 - Perspective</td>
<td>SC 26-27</td>
</tr>
<tr>
<td>What If Footballs Weren’t Made of Leather</td>
<td>1 - Perspective</td>
<td>SC 28-29</td>
</tr>
<tr>
<td>What’s the Matter With the Game of Football?</td>
<td>2 - Physical</td>
<td>SC 30-31</td>
</tr>
<tr>
<td>What’s Your Reaction Time?</td>
<td>1 - Inquiry, 7 - Perspective</td>
<td>SC 32-33</td>
</tr>
<tr>
<td>Which NFL Cities Have The Most Rainfall?</td>
<td>5 - Technology</td>
<td>SC 34-36</td>
</tr>
<tr>
<td>Motion and Forces in the NFL</td>
<td>1 - Inquiry, 2 - Physical</td>
<td>SC 39</td>
</tr>
<tr>
<td>Movement and Motion in the NFL: I and II</td>
<td>1 - Inquiry, 2 - Physical</td>
<td>SC40-SC41</td>
</tr>
<tr>
<td>My Movement and Motion Booklet</td>
<td></td>
<td>SC42-SC48</td>
</tr>
<tr>
<td>Answer Key</td>
<td></td>
<td>SC49</td>
</tr>
</tbody>
</table>
Goals/Objectives:
Students will:
- Identify characteristics of organisms
- Sort organisms according to different characteristics

National Standards: Science: 3-Life Science

Methods/Procedures:
- Discuss how each football team has a mascot, such as the Detroit Lions or the Philadelphia Eagles (refer to page 10 for complete list of team names). Have the students brainstorm different mascots for teams.
- Distribute animal pictures. Teacher and students will search for pictures of these animals for a visual aid. The teacher will name a characteristic an animal could have and the students will sort all of their animal pictures into categories according to that characteristic, for example: animals with wings, animals that fly, animals that have sharp teeth for eating prey, animals that live in water, animals that live in forests, etc.
- Animals can also be sorted by carnivore/herbivore or nocturnal/diurnal.

Materials:
- Scissors
- Handout of animal pictures

Assessment:
- Ability to sort animals according to characteristics determined by the teacher
- Baltimore Ravens
- Cincinnati Bengals
- Denver Broncos
- Indianapolis Colts
- Jacksonville Jaguars
- Miami Dolphins
- Arizona Cardinals
- Atlanta Falcons
- St. Louis Rams
- Seattle Seahawks
- Carolina Panthers
- Chicago Bears
- Detroit Lions
- Philadelphia Eagles

Extension Activity:
- The children can discuss what animal characteristics best fit an NFL team.
- The children can create a new NFL team and create a mascot based upon those characteristics.
Science
Collisions on the Gridiron

Goals/Objectives:
Students will:
- Explore the Professional Football Hall of Fame and through the website and/or tours.
- Find real life examples of the motions and forces as they apply to the NFL.
  * Identify balanced and unbalanced forces.
  * Identify examples of Newton’s third law of motion.
  * Find examples showing how force and mass are related to momentum.

National Standards: 1-Science as Inquiry, 2-Physical Science

Methods/Procedures:
- Students are to find player information on weight and 40 yard time to use for calculations.
- Students will start with the Professional Football Hall of Fame website to find resources.
- Students will use the NFL site to find additional information, pictures, graphics or any other materials and information needed to complete the goals and objectives of the lesson.
- Visits to the Professional Football Hall of Fame may be used to gather information.
- Using the attached formulas, students will calculate speed, energy and force created from football collisions.

Materials:
- Students may use a variety of materials to complete the lesson.
- Worksheet and formulas on the following pages.

Assessment:
- Completion and scoring of worksheet material.
- Student/Teacher created scoring rubric.
- Written summation.
Collisions on the Gridiron

So how much force is generated in a tackle? Using a mathematical formula, we can discover how much energy is expended in an open field tackle. Late in the third quarter of a game there is a 4th and goal situation. Your favorite running back is up against your favorite linebacker. In the open field both players collide. Whose force will prevail?

Your task is to come up with the player information on weight and to calculate the players’ speed using 40 yard times. Then as fan, you may want to prepare for a small earthquake in the Stadium. Just how much energy results from this collision?

Running Back
Weight lbs. ________   Speed in mph ________

Linebacker
Weight lbs. ________   Speed in mph ________

In our calculations, we’ll assume that the players become entangled and “stick” to each other during the collision. This is called an inelastic collision. Even though the players may not come to a complete stop (depending on their weights and speeds), we can still calculate the amount of energy that will be dissipated in the collision. We do this by calculating the energy of each player before the collision, and subtract the energy of the combined players after the collision. The kinetic energy of each player before the collision can be calculated with the equation:

Energy = (1/2)mass x velocity2

The energy after is:

Energy = (1/2)total-mass x final-velocity2

To find the final velocity, you use the fact that the initial momentum (mass x velocity) of both players must equal the final momentum of the players:

(mass player 1 x velocity player 1) + (mass player 2 x velocity player 2) = combined mass x final velocity

Notice that in the above equation we know all the variables except for the final velocity. We solve for this and get:

final velocity = [(mass player 1 x velocity player 1) + (mass player 2 x velocity player 2)] ______ combined mass

The energy comes out in a metric unit called a “joule”. A joule is not a lot of energy. It’s about the amount of energy you’d use to lift an apple to the height of your waist (1 meter).

To find the stopping force, we assumed the collision between the players took about 1/4 of a second. Knowing this, we can look at the change in momentum of either player and use the formula:

force = change-in-momentum ________________________
        time of impact

According to Newton’s third law -- for every action there is an equal and opposite reaction -- each player must experience the same force.
Goals/Objectives:
Students will:
- Identify dangerous weather that may occur during football games
- Learn more about lightning

National Standards: 4-Earth and Space Science

Methods/Procedures:
- Students should be familiar with reasons why some sports activities may be cancelled. Discuss with the students different types of weather and how it may have adverse effects on a football game.
  * Rain: Difficult to see, muddy ground, players may slip easily
  * Snow: May be difficult to see, slippery ground
  * Ice: Players may fall and suffer injuries
  * Fog: Players can’t see in front of them
  * Severe heat: Players can get dehydrated
  * Severe cold: Players may get frostbite
  * Lightning: Players could get struck by lightning.
- Share with the students different stories of football players who were hit by lightning.
  1. In the fall of 1970, 30 American football players, coaches, and spectators were struck by lightning on or near a football field.
  2. During a light rain shower one college senior was flattened by a bolt of lightning. His heart stopped and then restarted. Three nearby teammates were knocked unconscious.
- Discuss with students some possible side effects of being struck by lightning. It could result in death, concussions, neurological complications, burns, cataracts in eyes, or unconscious state.
- Discuss with students possible reasons for so many players being struck by lightning. Players have a lot of equipment with metal: metal facemasks, belt buckles, and athletic supporters. Some football players have long hair, which could cause static electricity.
- Have students make lightning. Do this on a cool, dry day. Here are the directions:
  1. Choose a partner
  2. Make the room as dark as possible.
  3. Rub your feet back and forth on the carpet to create heat.
  4. Touch your partner with one finger.
- Have students share what they saw and felt. Discuss why it happened. How was energy transferred? Students can do the experiment with on one student rubbing his/her feet on the carpet and then with both students rubbing their feet on the carpet.
- Here is an optional extension: Students can even make lightning in their mouth. It needs to be done on a cold, dry day. Here are the directions: 1) Put two wintergreen Life Savers in their mouth, with the room as dark as possible. 2) Chew the Life Savers with their mouths wide open. 3) Watch in a mirror to see what happens.

Materials:
- Carpeted flooring
- 2 Wintergreen Life Savers (optional)
- Mirror (optional)

Assessment:
- Discussion about how weather affects football games.
Goals/Objectives:
Students will:
- Learn to do a scientific inquiry by understanding the process
- Examine the question posed and formulate a hypothesis, test it by collecting data, and compile the results
- Record the data in a chart and find the average
- Learn how to create a bar graph using the above data
- Develop a theory based on the process of the scientific inquiry

National Standards: 1-Science as inquiry

Methods/Procedures:
- The teacher creates this scenario: You are babysitting for a small child and the electricity has gone out...no television, no video games to play, and no computer can be used. So you decide to take out his football and toss it around. The small child always asks the same question..."Why?" Why did the electricity go out? Why is the television not working? Why is the football the shape it is? Now you need to find the answer to that question.
- The child has posed the question for you to try and help him understand. Why is the shape of a football the shape it is? First, identify the shape as an elliptical shape in 2-D. Draw it. Then explain that the 3-D shape is called a prolate spheroid.
- Use the one variable of shape and test it for distance. Consider the shape of a round rubber ball and a square plastic Tupperware or food storage container. Be sure they are all about the same size.
- Each student in the class will be asked to pretend they are the small child and to make a prediction or form a hypothesis. Example: The round ball will go further when thrown. Divide the class into groups so that they can test their hypothesis.
- Explain the procedures for this (ie., the group will need to do 3 tries for each test to be sure the data is accurate; the kick or throw should be done by the same student so that strength is not a variable).
  * The idea of kicking to compare distance may be withheld depending on your class and their limitations.
- Have students create a chart comparing the prolate spheroid's distance when thrown to the round ball and the square's distance when thrown. Collect the data for three tries each. Then record the data into your chart. Find the average for the three tries by adding up the number and dividing by three.
- Compare accuracy of a throw by using a target with rings around the bull's eye. Set it up so the throws are equal distance away. Give the bull's eye 5 points, first ring around it 4 points, next ring 3 points, and keep going with the rings getting bigger and worth less points, until you reach 0 points.
- Record the data in a chart comparing the three tries for each, and then find the average for each shape by dividing the numbers by three.
- Create a bar graph based on the findings. There will be two separate bar graphs, one for distance and one for accuracy.
Getting Into Shape...The Shape of a Football

- This experiment should be conducted outside or in a space in the gym where there is plenty of room for these activities.
- Each group will then present its findings to the class by explaining the graphs.
- After results are shared, it might interest the students to view the following website: http://www.profootballhof.com/photos/gallery/the-evolution-of-the-football/

Materials:
- Teacher created scenario
- Traditional footballs
- Round rubber balls
- Square plastic storage containers
- A target with bull’s eye and rings around it
- Chart in “research notes”
- Access to the internet

Assessment:
- Completed chart
- Completed bar graph using results of experiment.
- Students will present their findings to the class as to the best shape for distance and accuracy based on their data.

An excellent video to use based on the shape of a football can be accessed at: www.nieonline.com/memphis/2011footballscience.cfm
Click on: Science of NFL Football: Geometric Shapes: Spheres, Ellipses, and Prolate Spheroids
## Getting Into Shape...The Shape of a Football

<table>
<thead>
<tr>
<th>Name:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Class:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Prolate Spheroid (Traditional Football)</th>
<th>Round Rubber Ball</th>
<th>Square Container</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Distance Ball Can Be Thrown</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Accuracy of Throw Based on Target</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Distance Ball Can be Kicked (optional)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Purpose of Eye Black

Goals/Objectives:
Students will:
- Introduce or review the terms reflect, absorb, glare and albedo
- Use knowledge of reflection and absorption of light on the ability to see
- Determine the importance of a football player’s eye black.

National Standards: 1-Science as Inquiry

Methods/Procedures:
- Ask students to create a list of things that glare (shining brightly and blindingly) and cause one to squint and / wear a visor/sunglasses. (i.e. sunlight, snow, water, stadium lights) What do those things have in common?
- Ask students to create another list of things that they can use in the above situations to help them to see. (i.e. sunglasses, visors, caps, eye black) What do those items have in common? (i.e. dark color, cover the sun…)
- Review the terms reflection as the returning of light and absorption as soaking up light
- Ask the children to look at their lists and determine what color would be best to absorb light to improve vision.
- NASA defines albedo as the ratio of the light reflected by a body to the light received by it. The value of albedo can range from 0 pitch black-absorption to 1 which is a perfect reflection of light. http://neo.jpl.nasa.gov/glossary/albedo.html
- Black has the lowest albedo score. How will that make the best Eye Black?
- Ask the children to complete the sentence. “Eye Black is important to football players because______________.”

Materials:
- Samples of eye blacks, visors, sunglasses
- Glare charts
- Pencils
- Extended Response page

Assessment:
- Extended response question. A correct response will include vocabulary and include the lesson’s discovery that black having an albedo range of 0 reflects light and allows the football player to see without glare.
The Purpose of Eye Black

Name: __________________________

List 1 - Things with a Glare and Cause One to Squint

1. ______________________________________________________
2. ______________________________________________________
3. ______________________________________________________
4. ______________________________________________________
5. ______________________________________________________

List 2 - Things to Wear to Prevent Glare and Squinting

1. ______________________________________________________
2. ______________________________________________________
3. ______________________________________________________
4. ______________________________________________________
5. ______________________________________________________
The Purpose of Eye Black

Respond to the following question using today’s vocabulary and including your discovery.

“How does eye black help a football player?”

_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________

Name:_________________________              Date:__________
Goals/Objectives:
Students will:
- Define momentum
- Calculate momentum
- Analyze factors affecting momentum
- Define Newton’s third law of motion
- Explain the law of conservation of momentum
- Apply Newton’s third law of motion and the law of conservation of momentum to a football scenario

National Standards: 1-Science as inquiry; 2-Physical Science

Methods/Procedures:
- Using available resources, have students define momentum (inertia in motion) and determine how to calculate momentum (multiply the mass of an object by its velocity; momentum = mass x velocity or momentum = mv).
- Explain to students that a moving object can have a large momentum if it has a large mass, a high speed, or both. Give the following example to illustrate: a moving truck has more momentum than a car moving at the same speed because the truck has more mass. However, a fast car can have more momentum than a slow truck.
- Using available resources, have students define Newton’s third law of motion. (When one object exerts a force on a second object, the second object exerts a force on the first that is equal in size and opposite in direction. In other words, “to every action force there is an equal and opposite reaction force.”)
- Using available resources, have students define the law of conservation of momentum (the total amount of momentum of a group of objects does not change unless outside forces act on the objects).
- Brainstorm factors that would have an affect on the success of a running play in a football game (skills of the ball carrier, blockers, and defending players, size of the players, speed at which players are running, weather, condition of the field, etc.). Have students complete the Momentum and Football worksheet provided on the following page in which the only variables are the masses of the offensive and defensive players and their velocities. Share responses.

Materials:
- Physics resources
- Worksheet: Momentum and Football

Assessment:
- Correct responses to questions on worksheet
Given the four football scenarios below, assume that in each case the ball carrier meets the opposing defensive player head-on at the goal line. There, the defender wraps his arms around the ball carrier. Considering the only variables of masses of the offensive and defensive players and their velocities, respond to the questions.

**Scenario #1**

<table>
<thead>
<tr>
<th>Mass</th>
<th>Velocity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offensive Player 93 kg</td>
<td>5.2 m/s</td>
</tr>
<tr>
<td>Defensive Player 136 kg</td>
<td>2.2 m/s</td>
</tr>
</tbody>
</table>

**Scenario #2**

<table>
<thead>
<tr>
<th>Mass</th>
<th>Velocity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offensive Player 85 kg</td>
<td>8.8 m/s</td>
</tr>
<tr>
<td>Defensive Player 105 kg</td>
<td>6.9 m/s</td>
</tr>
</tbody>
</table>

**Scenario #3**

<table>
<thead>
<tr>
<th>Mass</th>
<th>Velocity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offensive Player 89 kg</td>
<td>6.5 m/s</td>
</tr>
<tr>
<td>Defensive Player 113 kg</td>
<td>5.7 m/s</td>
</tr>
</tbody>
</table>

**Scenario #4**

<table>
<thead>
<tr>
<th>Mass</th>
<th>Velocity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offensive Player 108 kg</td>
<td>5.9 m/s</td>
</tr>
<tr>
<td>Defensive Player 95 kg</td>
<td>8.3 m/s</td>
</tr>
</tbody>
</table>
Directions: Answer the following questions using the information from the chart above. Be sure to show all of your work.

1. Which ball carriers are most likely to score touchdowns? Explain.

2. Which defensive player has the greatest momentum? Considering all of the defensive players, what factor seems to be most significant in giving this player the greatest momentum?

3. In Scenario #3, whose momentum changes the most? Explain.

4. In Scenario #4, how is the total momentum of the players affected by their collision? Explain
Home Sweet Home: Get Me to My Biome

Goals/Objectives:
Students will:
- Look at a map and identify the different ecosystems in the United States and the world
- Identify the mascots of the NFL teams and the ecosystem where they belong
- Determine what makes up an ecosystem and what is unique to each one

National Standards: 3-Life Science

Methods/Procedures:
- Conduct a discussion of the basic needs of all living things. Determine what all living things need (food, water, shelter, and oxygen). Continue by discussing the definition of a habitat (a place where a living thing gets everything it needs).
- Look at the different biomes (land) and ecosystems and determine what the non-living factors are; the soil, water, and climate in the environment, and the living factors; the plants and animals that live in the environment.
- Divide the class into groups and have each group research a different ecosystem. Use the following: Forests (Deciduous, Coniferous, Tropical Rainforest), Grasslands, Deserts, Tundra, Marine, and Freshwater. Find out what characteristics are common in each ecosystem, such as the climate, (temperatures and rainfall) soil, plants, animals, and how the animals may need to adapt to their environments. Students can use a chart to keep their research notes.

Materials:
- Chart for research notes
- Internet access
- Research notes
- A large chart or bulletin board to compile information about the ecosystems and to show where each mascot belongs

Assessment:
- Complete and accurate chart of information regarding the assigned biome
- Be able to locate the biome on the map
- Be able to accurately place the mascot in the correct biome or ecosystem
## Home Sweet Home: Get Me to My Biome

<table>
<thead>
<tr>
<th><strong>Temperature</strong> (Climate- over a long period of time)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rainfall</strong> (Climate- over a long period of time)</td>
<td></td>
</tr>
<tr>
<td><strong>Soil and Water Information</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Plants</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Animals</strong></td>
<td></td>
</tr>
</tbody>
</table>

Have the students examine the NFL mascots and determine which ones would belong in which ecosystem. To find where the biomes are located, go to this website: [http://www.physicalgeography.net/fundamentals/9k.html](http://www.physicalgeography.net/fundamentals/9k.html)

**Know that the coniferous forest and the temperate boreal forest are the same.**

### NFL Mascots

<table>
<thead>
<tr>
<th>Baltimore Ravens</th>
<th>Atlanta Falcons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cincinnati Bengals</td>
<td>Carolina Panthers</td>
</tr>
<tr>
<td>Denver Broncos</td>
<td>Chicago Bears</td>
</tr>
<tr>
<td>Indianapolis Colts</td>
<td>Detroit Lions</td>
</tr>
<tr>
<td>Jacksonville Jaguars</td>
<td>Philadelphia Eagles</td>
</tr>
<tr>
<td>Miami Dolphins</td>
<td>St. Louis Rams</td>
</tr>
<tr>
<td>Arizona Cardinals</td>
<td>Seattle Seahawks</td>
</tr>
</tbody>
</table>
Goals/Objectives:
Students will:
• Students will identify the muscles needed for a variety of activities

National Standards: 1-Science as inquiry; 3-Life Science; 6-Science in personal and social perspective

Methods/Procedures:
• Students will take turns throwing and catching a football noting what muscles are being used and how they are used. (arm, hands, chest, upper back, legs, feet..) The notes will be used for the next step.
• Students will work in pairs or teams. Using bulletin board or butcher paper the students will trace each person’s body on the paper. This will be used to make the students’ “Muscle Maps”.
• Students will use different colored markers to label the areas where the muscles are used for throwing and catching. One color will be used to mark the muscles for throwing and one color can be used to show the muscles the muscles used for catching.
• Once their paper bodies are labeled, students can hang them on the wall in the room or hallway.
• Allow the students to look at each others muscle map.
• Return to partners or teams.
• Create a Venn Diagram based upon the creation and observations of the muscle maps.
• Use the muscle maps and Venn Diagram for discussion.
• Discussion Questions:
  * Was there anything on your muscle maps that surprised you? If yes, please explain.
  * Are there muscles that are used to both throw and catch? If so, do you think they are used in the same way? Please explain.

Materials:
• Colored Markers
• Bulletin Board /Butcher Paper
• Venn Diagram
• Pencil / paper

Assessment:
• Completed notes, maps and diagrams
• Observations of discussions
Goals/Objectives:
Students will:
- Be able to identify potential energy and kinetic energy in a “graph of motion”
- Review Newton’s First Law of Motion and apply it in football
- Be able to read a graph of an object in motion and create a story about it, relating it to football

National Standards: 2-Physical Science

Methods/Procedures:
- Hold a football and then throw it to a student, emphasizing the point of release. Have students discuss the difference between kinetic energy and potential energy and relate it to the action performed. (The kinetic energy is the energy which causes movement. Potential energy is the energy an object has due to its position...waiting to be thrown, for instance).
- Ask students what kind of energy a football has on its tee waiting to be kicked? (potential) What about while in the air right after the kick-off? (kinetic)
- Elicit from the students Newton’s First Law of Motion and emphasize the following: Newton’s First Law of Motion says that an object in motion will stay in motion, and an object at rest will stay at rest unless it is acted upon by an unbalanced force.
- Try to have students put this in their own words to be sure they understand it. An object that is not moving remains at rest until something pushes or pulls it (applies force). An object that is moving remains moving until something pushes or pulls it.
- Have students apply this law by looking at a graph of the movement of a football. The line on the graph represents the football’s flight. Have the students guess what is happening to the football and if they can determine when there is a change in motion due to a force. There should be a response for every point on the graph. An example is given for you to use with them for the first graph.
- Have them write what the force may be to cause the change in motion, creating a football story from the graph. The stories will vary. To differentiate and extend the activity, students should designate in the story where potential energy is used and where kinetic energy is used. They could also identify where gravitational force is likely. They can identify this in their story by the letters K, P, and G.
- Have students try several motion stories and relate it to football.

Materials:
- Football for demonstrating the idea of potential and kinetic energy
- Graphs with different lines to show motion
- Paper for writing the story

Assessment:
- Students will write their own story identifying the force that changes the motion based on the graph given.
- Then they will create their own graph showing motion and tell the story of what is happening as it relates to football or they can have another student create the scenario to go with their line graph. For extended learning, students can identify what type of energy is being used at each point in the story.
Distance

A quarterback got ready to throw the football to his receiver. The QB is 6 ft. 1 inch tall, so he begins with the football at 5 feet. He threw the ball but before it got to the receiver, a defending player tipped the ball away. Another defending player caught it and was tackled to the ground. [The energy of the football before the quarterback’s release is potential energy. The ball being tipped by the opposing player is kinetic energy because he made the ball change its motion. As the player was tackled, gravitational force brings him down with the ball.] These are examples of an object moving in a direction until there is a force pushing or pulling on it. (Add the possibility of a big wind gust or a huge bird flying into the ball for humor).

What happened to this football..... or player?

_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
Goals/Objectives:
Students will:
• Determine what factors influence the distance of a football that has been kicked.

National Standards: 1-Science as Inquiry; 2-Physical Science

Methods/Procedures:
• Divide the class into two groups. Group A will kick the football and Group B will observe and measure. Groups may then switch roles and repeat the activity.
• Mark the kicking position and mark the area if you are performing the activity anywhere but the football field.
• Create a chart or table on which to record observations. Record also condition of field and description of surface. If individual student body type is recorded, students can determine the role, if any, this plays in the distance the ball travels.
• Instruct Group A members to each kick the football six times, three times standing and three times running.
• Instruct Group B members to record the landing point each time. Group B can estimate angle of the kick as well.
• Have students analyze data.
• This would lend itself to a follow-up activity on another day with different weather and surface conditions.
• Have students draw conclusions and present the data and conclusions to the class.

Materials:
• School football field
• Paper
• Pencils or pens
• Footballs
• Tape measures

Assessment:
• Teacher-created rubric scoring data collected as well as analysis and conclusions.
Goals/Objectives:
Students will:
- Identify the difference between potential and kinetic energy

National Standards: 2-Physical Science

Methods/Procedures:
- Introduce to the students the terms potential and kinetic energy with the following demonstration. Hold a football in your hand. Ask the students if they think the ball has any energy. Explain that as you pick the ball up, it gains potential energy. Potential energy is stored energy.
- Let go of the football. What does the ball do? As the ball falls, the potential energy turns into motion. This energy of motion is kinetic energy. When the ball bounces back up, is it potential or kinetic energy? (Potential energy) The ball doesn't have any more energy when it stops bouncing.
- Make sure students realize that energy is always changing.
- Brainstorm some examples of potential and kinetic energy. Here are some examples:

  **Potential Energy**
  - Parked car
  - Rubber band between fingers
  - Quarterback holding a football

  **Kinetic Energy**
  - Moving car
  - Rubber band as it snaps back
  - Football as it is thrown

- Show a video clip of a football game. Have students identify examples of potential and kinetic energy.

Materials:
- Football
- Video clip of a football game, choose one from link below.
  www.nfl.com/videos/nfl-game-highlights

Assessment:
- Identification of examples of both types of energy
Science

The Flight of the Ball

Goals/Objectives:
Students will:
• Explore the Professional Football Hall of Fame and through the website.
• Find examples of the flight of the ball as they apply to the NFL.
• Identify trajectory.
• Find examples of a projectile.
• Find evidence of friction and how it affects the flight of the ball.
• Find evidence to support the presence of gravity.

National Standards: 1-Science as Inquiry; 2-Physical Science

Methods/Procedures:
• Students are to create posters, displays, power points or other forms of multimedia that support the goals and objectives of the lesson.
• Students will start with the Professional Football Hall of Fame website to find resources.
• Students will use the NFL site to find additional information, pictures, graphics or any other materials and information needed to complete the goals and objectives of the lesson.
• Visits to the Professional Football Hall of Fame may be used to gather information.

Materials:
• Access to computer
• Access to the Internet
• Science of the NFL Football: Projectile Motion and Parabolas
  * http://www.nbclearn.com/nfl
• Paper
• Pencils or pens
• How the Physics of Football Works

Assessment:
• Student/Teacher created scoring rubric for the presentation.
Throwing or punting the Football

The angle of a kick helps determine how far it will travel.

Throwing the Football

When the football travels through the air, it always follows a curved, or parabolic, path because the movement of the ball in the vertical direction is influenced by the force of gravity. As the ball travels up, gravity slows it down until it stops briefly at its peak height; the ball then comes down, and gravity accelerates it until it hits the ground. This is the path of any object that is launched or thrown (football, arrow, ballistic missile) and is called projectile motion. To learn about projectile motion as it applies to football, let's examine a punt (Figure 1). When a punter kicks a football, he can control three factors:

- The velocity or speed at which the ball leaves his foot
- The angle of the kick
- The rotation of the football

The rotation of the ball -- spiral or end-over-end -- will influence how the ball slows down in flight, because the ball is affected by air drag. A spiraling kick will have less air drag, will not slow down as much and will be able to stay in the air longer and go farther than an end-over-end kick. The velocity of the ball and the angle of the kick are the major factors that determine:

- How long the ball will remain in the air (hang-time)
- How high the ball will go
- How far the ball will go

When the ball leaves the punter's foot, it is moving with a given velocity (speed plus angle of direction) depending upon the force with which he kicks the ball. The ball moves in two directions, horizontally and vertically. Because the ball was launched at an angle, the velocity is divided into two pieces: a horizontal component and a vertical component. How fast the ball goes in the horizontal direction and
how fast the ball goes in the vertical direction depend upon the angle of the kick. If the ball is kicked at a steep angle, then it will have more velocity in the vertical direction than in the horizontal direction -- the ball will go high, have a long hang-time, but travel a short distance. But if the ball is kicked at a shallow angle, it will have more velocity in the horizontal direction than in the vertical direction -- the ball will not go very high, will have a short hang-time, but will travel a far distance. The punter must decide on the best angle in view of his field position. These same factors influence a pass or field goal. However, a field goal kicker has a more difficult job because the ball often reaches its peak height before it reaches the uprights.

Goals/Objectives: Students will:
- Describe the weather predicted at game time by measurable quantities, including temperature, wind direction, wind speed, precipitation and barometric pressure.
- Discuss the likelihood of a game being delayed or suspended when given real or hypothetical weather conditions.

National Standards: 1-Science as inquiry; 4-Earth and Space Science

Methods/Procedures:
- Severe weather conditions can threaten the safety of both football players and spectators during games and practice sessions. Here are a few guidelines that are generally used:
  * Weather conditions that can cause games to be delayed or cancelled include lightning, severe storms, tornadoes, high heat/humidity and a low wind-chill index.
  * Athletic programs should use a weather radio equipped with the emergency alert system provided by the nearest National Weather Service broadcast station.
  * If lightning exists, find the closest safe shelter. Monitor how near the lightning is striking and the number of seconds between the time lightning is sighted and the time thunder is heard. All players and spectators should have left the playing area before the flash-to-band count reaches 30 seconds. Play or practice should not continue until 15-30 minutes have passed after the last clap of thunder or flash or lightning.
  * If a severe thunderstorm watch or warning is issued during a game or within three hours of a game, the competition should be suspended and all players and spectators should move rapidly to safe shelter. If outdoors during a thunderstorm, players should avoid standing near structures in open areas, including tall objects that project above the landscape such as large isolated trees, water and grounded objects.
  * Wait at least 30 minutes after the storm has passed before returning to the game, or until the National Weather Service suspends the watch or warning.
  * When there is rain without a thunderstorm, teams usually play in spite of water and mud. Game officials and coaches must stay informed of the approach of severe weather and take cover early.
  * If a tornado watch or warning is issued during a game or within three hours of a game, the competition is usually cancelled. When there is a threat of a tornado, everyone should go indoors to the basement or lowest interior level of a building and crouch down with heads covered.
  * During extreme heat, professional games are usually played but coaches take precautions to protect players from heat illness/fatigue by providing plenty of cold water. If a player shows signs of heat illness, immediate medical attention is usually given. During extreme heat conditions, practice should include rest periods of 15 minutes per hour. Youth games are sometimes cancelled during very high risk conditions.
* During extremely cold temperatures, the risk of exposed flesh becoming frozen is greatly increased at wind chill factors below -20 degrees Fahrenheit. Temperature, wind chill and degree of wetness are taken into account during cold weather.

- Students should check with the National Weather Service three hours prior to attending a football game or practice. Otherwise, watch the Weather Channel on television, look at the weather forecast in a recent newspaper, or check the weather on www.weatherchannel.com. Have them record the temperature, wind direction, wind speed, precipitation and barometric pressure. Based on the above information, ask the students if they think there is a reason the game could be cancelled, delayed or suspended?
- In the classroom, have students jot down hypothetical temperatures, wind directions, wind speeds, precipitation conditions and barometric pressures that will be read to the class. The class will discuss the fate of upcoming football games based on information provided.

Materials:
- Access to computers
- Access to the Internet (Weather websites)
- Pen/pencil
- Paper

Assessment:
- Students list the various weather factors that could affect the playability of a football game
Science
What Happens to NFL Players’ Heart Rate As Exercise Increases?

Goals/Objectives:
Students will:
- Realize that heart rates increase as exercise increases.
- Understand why heart rate increases.

National Standards: 6-Science in personal and social perspective

Methods/Procedures:
- The class will talk about the functions of the heart. Students should be aware that the doctor uses a stethoscope to listen to their hearts.
- Students will either make a stethoscope out of 2 funnels and rubber tubing or use a real stethoscope.
- Students will measure two heart rates. The first one will be taken without any exercise, so students should be at rest. Have them take the heart rate for one minute. The second heart rate will be taken after students run in place for one minute (to symbolize NFL players’ exercise during a game). The second heart rate should also be calculated for an entire minute.
- Students will compare their resting and exercising heart rate. Ask them why was there a difference? Students should realize that when you exercise you cause your heart rate increase. This is because more oxygen is needed, so the heart needs to pump faster.
- Students will complete the worksheet provided on the following page

Materials:
- Stethoscope
- Paper to record heart rate
- Stopwatch or watch with second hand
- Worksheet: What happens to NFL Players’ Heart Rate as exercise increases?

Assessment:
- Acceptable performance on instructional activities
**What Happens to NFL Players’ Heart Rate As Exercise Increases?**

**Directions:** Look at each activity and determine if the heart rate would be normal or increased. Circle the correct answer.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Normal</th>
<th>Increased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dancing</td>
<td>Normal</td>
<td>Increased</td>
</tr>
<tr>
<td>Eating</td>
<td>Normal</td>
<td>Increased</td>
</tr>
<tr>
<td>Running with a football</td>
<td>Normal</td>
<td>Increased</td>
</tr>
<tr>
<td>Throwing a football</td>
<td>Normal</td>
<td>Increased</td>
</tr>
<tr>
<td>Kicking a football</td>
<td>Normal</td>
<td>Increased</td>
</tr>
<tr>
<td>Jogging</td>
<td>Normal</td>
<td>Increased</td>
</tr>
<tr>
<td>Sleeping</td>
<td>Normal</td>
<td>Increased</td>
</tr>
<tr>
<td>Watching Television</td>
<td>Normal</td>
<td>Increased</td>
</tr>
</tbody>
</table>
What If Footballs Weren’t Made of Leather

Goals/Objectives:
Students will:

- Formulate tested hypotheses; Develop and explain the appropriate procedures, controls and variables (dependent and independent) in scientific experimentation.
- Present scientific findings using clear language, accurate data, appropriate graphs, tables, maps and available technology.
- Use models to predict and analyze.
- Draw conclusions from inquiries based on scientific knowledge and principles, the use of logic, and evidence from investigations.
- Explain how new scientific data can cause any existing scientific explanation to be supported, revised, or rejected.

National Standards: 1- Science as inquiry

Methods/Procedures:
- The teacher must create a scenario where a fictional character, player or interested individual is concerned that leather, an animal product, is used to make all NFL footballs. This individual, being an ardent vegetarian, believes that there have to be other choices and options available for football construction. As a beginning activity, each student will be asked to pretend he/she is this individual and state a hypothesis in writing. Then explain the procedures he/she must go through to test the hypothesis for a leather replacement football.
- Students will construct a chart comparing the leather football and the new ball including statistics such as ease of construction, throwing capability, passing capability, kicking capability and any other areas they feel the new ball and the traditional leather ball can be tested.
- The class will be convened so each student or group of students can present its findings from the experiment.
- Students’ and or their groups’ results will be charted so the class can either accept or reject the materials chosen as leather replacements.
- If a field trip can be made to the Hall of Fame, students will search for early and current examples of footballs used in the NFL and jot down observations and impressions.

Materials:
- Teacher created scenario
- Traditional footballs
- Footballs of variously constructed materials
- Access to the Internet
- Access to HOF’s website at ProFootballHOF.com

Assessment:
- Teacher and student created format (stencil) for student use and evaluation of variously constructed footballs.
- Students will deliver a formal presentation on their tested hypothesis.
- Teacher posts results and student experiments.
## What If Footballs Weren’t Made of Leather

<table>
<thead>
<tr>
<th>Name:</th>
<th>Traditional 21st Century Football</th>
<th>Football Made From Plastics i.e. Pleather</th>
<th>Football Made From Wood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance: Football can be kicked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance: Football can be passed</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Goals/Objectives:
Students will:
- Examine objects, (matter) which could be found at a football game and categorize them based on various attributes, or physical properties
- Determine the materials the matter is made of and what the physical properties are for those materials (eg., solid, liquid, gas, or living, non-living)
- Understand that objects can be classified in more than one way because all objects have more than one property

National Standards: 2-Physical Science

Methods/Procedures:
- The teacher asks for the definition of matter to see if there is a consensus, (anything that takes up space and has weight) and asks for examples. Come to the consensus that every object or substance in the universe is made up of matter.
- The teacher then explains or reviews that the characteristics that help us describe and identify matter are called properties. Explain that in this lesson, students will be looking at objects by determining the materials they are made of and considering the physical properties of those materials. Point out that physical properties are observable with the use of the five senses.
- Have students brainstorm some physical properties, and then the teacher might decide which to focus on, or narrow the focus. Generate examples such as, color, texture, state of matter (solid, liquid, gas), living/nonliving, man-made/ natural, hardness, compound, bio-degradable/ non-bio-degradable, etc. There is room for differentiation in this list.
- The teacher has either pictures or preferably, actual objects on a table. They include items found in football, such as, a metal whistle, a shirt, a paper cup filled with water, a napkin, a football, a football helmet, water in a plastic jug, a band aid, leather gloves, metal goal posts (made of metal pens taped together), people(fans and/or players and coaches), program with players’ names and stats, wooden benches (made of popsicle sticks glued together), grass from the field, paper ticket, etc. There is a yes/no label on a desk or table in front of the room.
- Students will need their notebooks or journals to serve as “Research Notes” for this activity.
- Students will draw the following diagram from the board into their “Research Notes.”

<table>
<thead>
<tr>
<th>Yes</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Concept ____________________________
• Place students in groups of 3 or 4. Explain that each group will be looking for similarities in the objects shown based on the designated physical properties generated by the students and teacher. The groups will figure out what the items have in common and what attributes the items do not share. The concept or property they are basing this on should be written in their notes under the diagram.
• The teacher shows one item at a time by holding it up in front of the class or walking around the classroom. Students may touch the objects. No writing is done at this time.
• Have the items on a table so that groups can see all of them together to help them see what properties they have and do not have in common.
• Place each item as it is shown, on a table surface marked with YES or NO signs based on student responses. Begin with 3 or 4 more obvious items, and move on to the less obvious. Let the students develop their own ideas in groups and listen to their proposals.
• Hypothesize/Propose the Concept: As the activity proceeds, tell students to try to determine the concept being illustrated, and jot it in the data sheet (above).
• Explain that when students think they know the concept, they should continue to add items to each side of the diagram. The groups need to continue with items until they have all been recorded and “placed” by the students.
• CONFIRM THE CONCEPT: Determine who has a viable prediction of the concept. Ask the student how he/she made the determination. Ask for explanations…biodegradable, non-bio-degradable, or living, non-living.
• Ask students to list the characteristics or attributes of the YES items. Compare these items with the concept.
• Assign students to work with a partner to compare their lists. Reconcile them to make a common list. Ask students to add new examples to their YES list, making sure that the new items listed have the same attributes as the objects originally listed, and that they all have a place in football games.

Materials:
• Pen/Pencil
• Notebook or Journal
• Items found at a football game

Assessment:
• Check the chart for accuracy. Then have the students write an extended response explaining why the items chosen have the property and why the others don’t.
• The teacher adds additional items from a football game and students place these under YES or NO based on a concept, or property.
Goals/Objectives:
Students will:
• Understand what reaction time is.
• Determine their own reaction time.

National Standards: 1-Science as inquiry; 6-Science in personal and social perspective

Methods/Procedures:
• Students will begin by listening to this story: “It’s the 4th quarter of the football game with only 15 seconds to go. The Pittsburgh Steelers (or any other team you choose) are playing the Cleveland Browns (or any other team you choose). The game is tied. One player from the Cleveland Browns is standing by the end zone waiting for the football to be passed to him. All of a sudden a Pittsburgh Steeler comes out of nowhere and tries to tackle him right as the ball is coming his way. What should he do- jump to catch the ball or run out of the way?”
• Have students brainstorm what he should do. The students should end up discussing how he has to react very quickly with a decision. Ask students: What is it called when you have to quickly react? How long does it take to react to a situation like this?
• Introduce the term reaction time. Explain to students that reaction time is how quickly you can react to a situation. For example, you see your pencil rolling off of your desk. Maybe your dog runs out into the middle of the street when cars are coming. How quickly can you catch your pencil or get your dog?
• Teacher should share with students that when your eyes see a situation occurring, it needs to send a message to your brain, which then sends a message to the necessary muscles to react.
• Discuss other situations that may occur in a football game in which the players need to make quick reactions? What are other situations in students’ lives?
• Have students perform the following activity to see how fast their reaction time is:

Experiment Directions:
1. Students will place hand at the end of a table with palm facing up. Hold out fingers and thumb so that there is a 3 inch space between them. Student should make sure that his/her fingers and thumb are exactly 3 inches apart because if some aren’t, their times wouldn’t be reliable.
2. A friend will hold a ruler between the student’s thumb and fingers (without touching them) so that the beginning of the ruler is lined up at the top of the student’s thumb.
3. Without any warning, the ruler will be dropped. The student is to catch the ruler between his/her thumb and forefingers as quickly as possible.
4. Record the number on the ruler where the student caught the ruler. Record how far up the ruler the subject caught it. Redo this activity 2 more times. The lower the number, the quicker the reaction time.
What’s Your Reaction Time?

- After students perform this experiment pose several questions: Do you think your time is fast enough to be an NFL player? Is it possible to change your reaction time?
- Teacher can extend this activity to have students create a class graph and find measures of central tendency with the data.

Materials:
- Ruler
- Paper and pencil for recording reaction time

Assessment:
- Discussion
- Ability to perform activity
Goals/Objectives:
Students will:
- Explain how technology influences the quality of life.
- Discuss how decisions about the use of products can result in desirable or undesirable consequences.
- Use examples to predict and analyze.
- Recognize that science can only answer some questions and technology can only solve some human problems.
- Describe examples of scientific advances and emerging technologies and how they impact society.

National Standards: 5-Science and Technology

Methods/Procedures:
- The students and teacher will compile a list of objects that accumulate from fans, players and workers at any NFL game.
- Students gather, if possible, concrete examples of listed items.
- Students determine which listed objects can be recycled.
- Through letters, calls, emails, and possibly personally, determine which stadiums recycle and what items they recycle.
- After compiling all three lists, using a mathematical formula, including amount of each product sold, students determine the weight of each recyclable item/team’s game and or season through extrapolation.

Materials:
- Students and teacher created item list
- Access to the Internet
- Access to HOF’s website at ProFootballHOF.com
- Scales for weighing objects

Assessment:
- Student created tables of items sold, recyclable items, items recycled and total poundage.
- Students will deliver a formal presentation on their findings.
- Teacher posts results and student findings (charts).
### How Much Can Be Recycled?

**Lambeau Field** *(Green Bay, WI)*

<table>
<thead>
<tr>
<th>Items Sold</th>
<th>Item A</th>
<th>Item B</th>
<th>Item C</th>
<th>Item D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Game 1</strong></td>
<td>Total Weight:</td>
<td>Total Weight:</td>
<td>Total Weight:</td>
<td>Total Weight:</td>
</tr>
<tr>
<td><strong>Game 2</strong></td>
<td>Total Weight:</td>
<td>Total Weight:</td>
<td>Total Weight:</td>
<td>Total Weight:</td>
</tr>
<tr>
<td><strong>Game 3</strong></td>
<td>Total Weight:</td>
<td>Total Weight:</td>
<td>Total Weight:</td>
<td>Total Weight:</td>
</tr>
</tbody>
</table>

Students may add items, delete items, add games, delete games depending on time constraints.
Which NFL Cities Have The Most Rainfall?

Goals/Objectives:
Students will:
• Graph the amount of average monthly rainfall for each NFL city.
• Compare the average monthly rainfall of NFL cities.
• Draw a picture of the city during football season.

National Standards: 1-Science as inquiry; 4-Earth and Space Science

Methods/Procedures:
• Students will discuss where NFL cities are located and find the cities on the map.
• Teacher will let the students (individually or in pairs) choose a city to research.
• Students will access the Internet or use another reference material to determine the amount of average monthly rainfall of that city. They will fill in the bar graph on the next page.
• They will then draw a picture of football players playing a game in that climate during football season.
• Students will compare the similarities and differences among the cities

Materials:
• Internet access
• Classroom map
• Worksheet

Assessment:
• Worksheet
• Discussion
Which NFL Cities Have The Most Rainfall?

Directions: Complete a bar graph of monthly rainfall in your NFL city.

Average Amount of Monthly Rainfall

(Name of City)

<table>
<thead>
<tr>
<th>Inches</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
</tr>
</thead>
</table>

This is a picture of football players in my city during football season. (Make sure you include what the weather will look like.)

ProFootballHOF.com SC37 Pro Football Hall of Fame Youth/Education
# Which NFL Cities Have The Most Rainfall?

<table>
<thead>
<tr>
<th>AFC</th>
<th>NFC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baltimore Ravens</td>
<td>Arizona Cardinals</td>
</tr>
<tr>
<td>Baltimore, Maryland</td>
<td>Glendale, Arizona</td>
</tr>
<tr>
<td>Buffalo Bills</td>
<td>Atlanta Falcons</td>
</tr>
<tr>
<td>Orchard Park, New York</td>
<td>Atlanta, Georgia</td>
</tr>
<tr>
<td>Cincinnati Bengals</td>
<td>Carolina Panthers</td>
</tr>
<tr>
<td>Cincinnati, Ohio</td>
<td>Charlotte, North Carolina</td>
</tr>
<tr>
<td>Cleveland Browns</td>
<td>Chicago Bears</td>
</tr>
<tr>
<td>Cleveland, Ohio</td>
<td>Chicago, Illinois</td>
</tr>
<tr>
<td>Denver Broncos</td>
<td>Dallas Cowboys</td>
</tr>
<tr>
<td>Denver, Colorado</td>
<td>Arlington, Texas</td>
</tr>
<tr>
<td>Houston Texans</td>
<td>Detroit Lions</td>
</tr>
<tr>
<td>Houston, Texas</td>
<td>Detroit, Michigan</td>
</tr>
<tr>
<td>Indianapolis Colts</td>
<td>Green Bay Packers</td>
</tr>
<tr>
<td>Indianapolis, Indiana</td>
<td>Green Bay, Wisconsin</td>
</tr>
<tr>
<td>Jacksonville Jaguars</td>
<td>Minnesota Vikings</td>
</tr>
<tr>
<td>Jacksonville, Florida</td>
<td>Minneapolis, Minnesota</td>
</tr>
<tr>
<td>Kansas City Chiefs</td>
<td>New Orleans Saints</td>
</tr>
<tr>
<td>Kansas City, Missouri</td>
<td>New Orleans, Louisiana</td>
</tr>
<tr>
<td>Miami Dolphins</td>
<td>New York Giants</td>
</tr>
<tr>
<td>Miami Gardens, Florida</td>
<td>East Rutherford, New Jersey</td>
</tr>
<tr>
<td>New England Patriots</td>
<td>Philadelphia Eagles</td>
</tr>
<tr>
<td>Foxborough, Massachusetts</td>
<td>Philadelphia, Pennsylvania</td>
</tr>
<tr>
<td>New York, Jets</td>
<td>St. Louis Rams</td>
</tr>
<tr>
<td>East Rutherford, New Jersey</td>
<td>St. Louis, Missouri</td>
</tr>
<tr>
<td>Oakland Raiders</td>
<td>San Francisco 49ers</td>
</tr>
<tr>
<td>Oakland, California</td>
<td>Santa Clara, California</td>
</tr>
<tr>
<td>Pittsburgh Steelers</td>
<td>Seattle Seahawks</td>
</tr>
<tr>
<td>Pittsburgh, Pennsylvania</td>
<td>Seattle, Washington</td>
</tr>
<tr>
<td>San Diego Chargers</td>
<td>Tampa Bay Buccaneers</td>
</tr>
<tr>
<td>San Diego, California</td>
<td>Tampa, Florida</td>
</tr>
<tr>
<td>Tennessee Titans</td>
<td>Washington Redskins</td>
</tr>
<tr>
<td>Nashville, Tennessee</td>
<td>Landover, Maryland</td>
</tr>
</tbody>
</table>
Goals/Objectives:
Students will:
- Explore the Pro Football Hall of Fame through the website and/or field trip.
- Find real life examples of the motions and forces as they apply to the NFL.
  - Identify balanced and unbalanced forces.
  - Identify examples of Newton’s first, second and third law of motion.
  - Find examples showing how force and mass are related to acceleration.
  - Find evidence of friction and how it applies to football.
  - Find evidence to support the presence of gravity.

National Standards: 1-Science as Inquiry, 2-Physical Science

Methods/Procedures:
- Students are to create posters, displays, PowerPoints or other forms of multimedia that support the goals and objectives of the lesson.
- Students will start with ProFootballHOF.com to find resources.
- Students will use the NFL.com to find additional information, pictures, graphics or any other materials and information needed to complete the goals and objectives of the lesson.
- If able to, a visit to the Pro Football Hall of Fame may be used to gather information.
- A summation of the lesson will be written in paragraph format. This summation will address each of the goals and objectives including an explanation of each of the examples.
  * Identify balanced and unbalanced forces.
  * Identify examples of Newton’s first, second and third law of motion.
  * Find examples showing how force and mass are related to acceleration.
  * Find evidence of friction and how it applies to football.
  * Find evidence to support the presence of gravity.

Materials:
- Students may use a variety of materials to complete the lesson.
- Material selection will be determined by the type of presentation used.

Assessment:
- Student/Teacher created scoring rubric for the presentation and written summation
Science
Movement and Motion in the NFL

Goals/Objectives:
Students will:
- Review how objects can be moved in a variety of ways such as straight, zigzag, circular and back and forth
- Review how objects can be affected by pushing or pulling

National Standards: 1-Science as Inquiry; 2-Physical Science

Methods/Procedures:
- Children can be encouraged to look throughout the Pro Football Hall of Fame to find examples of how objects move.
- Children can complete a My Professional Football Hall of Fame Movement and Motion Booklet
- Children write their own sentences or additional sentences on the bottom of each page. The sentences can give additional details and/or definitions
- If not able to visit the Hall of Fame, visit http://www.nfl.com/videos/nfl-network-total-access/09000d5d81bab0b3/Top-100-Barry-Sanders to view a video on Hall of Fame Running Back Barry Sanders

Materials:
- My Professional Football Hall of Fame Movement and Motion Booklet
- Barry Sanders Video

Assessment:
- Teachers or class can create a rubric to fit the needs of the class
Science

Movement and Motion in the NFL II

Goals/Objectives:
Students will:

• Review how objects can be moved in a variety of ways such as straight, zigzag, circular and back and forth
• Review how objects can be affected by pushing or pulling.
• Use technology to research and create

National Standards: 1-Science as Inquiry; 2-Physical Science

Methods/Procedures:

• The teacher can use NFL.com and/or the Pro Football Hall of Fame’s website ProFootballHOF.com to locate examples of how objects move as well as objects being pushed or pulled
• Students can demonstrate how objects move and objects being pushed or pulled by using a football
• The students can use tablets or computers to locate and print examples of how objects move and objects being pushed or pulled in the sport of football
• Students can work individually or in teams to create slide shows, books, posters or dioramas
• If able, the amount of change in movement of an object depends on the mass of the object and the amount of force exerted can be labeled
  * Add photos or draw pictures of objects of varying mass or varying force applied.
  * For example, a kicker’s foot kicking the football would show the varying force on an object. Discuss what happens with a light kick as opposed to a hard kick

Materials:
• Access to NFL.com and/or ProFootballHOF.com by computer
• Objects that can be pushed or pulled
• Possible need for tablets
• Football

Assessment:
• Teacher or class can create a rubric based on class needs
My Pro Football Hall of Fame Movement and Motion Book

Name_____________________
Date_____________________

Pro Football Hall of Fame Youth/Education  SC42  ProFootballHOF.com
This is an example of straight movement.

Explain:
This is an example of zig-zag movement.

Explain:
This is an example of circular movement.

Explain:
This is an example of a back and forth movement

Explain:
This is an example of an object being pushed.

Explain:
This is an example of an object being pulled

Explain:
Momentum and Football
1. The ball carriers in Scenarios #1 and #2 will score. The momentum of these ball carriers is greater than those of their defenders. Thus, the ball carrier/defender unit will move toward the goal line.
2. The defender in Scenario #4 has the greatest momentum. The velocity of this player is the most significant factor in giving this defender the greatest momentum of all the defenders because the other defenders are all more massive that this one.
3. The offensive player’s momentum changes the most because he stops and is pushed backward by the defensive player whose velocity is greater.
4. The total momentum is not affected by the collision. According to the law of conservation of momentum, the momentum of any closed, isolated unit does not change. The pairs of players in each scenario make up such a unit.

Newton’s Law
# Social Studies Table of Contents

<table>
<thead>
<tr>
<th>Lesson</th>
<th>National Standards</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Across America</td>
<td>Geo: 2 and 6</td>
<td>SS 1-3</td>
</tr>
<tr>
<td>Dealing with the Elements Is No EasyFeat for Football</td>
<td>Geo: 2 and 5</td>
<td>SS 4</td>
</tr>
<tr>
<td>From Humble Beginnings: The Story of Pro Football</td>
<td>US History: Era 7, 8, 9, 10</td>
<td>SS 5</td>
</tr>
<tr>
<td>Studying Football States</td>
<td>Geo: 2 and 5</td>
<td>SS 6-9</td>
</tr>
<tr>
<td>The Game Is On! Who will win: the AFC or the NFC?</td>
<td>Geo: 2 and 5</td>
<td>SS 10-13</td>
</tr>
<tr>
<td>The Movement of the Population to the South and West</td>
<td>Geo: 4 and 5</td>
<td>SS 14-15</td>
</tr>
<tr>
<td>The Origins of the Football Stadium</td>
<td>World History: Era 4</td>
<td>SS 16</td>
</tr>
<tr>
<td>The Roads to Excitement: Destination Canton</td>
<td>Geo: 2, 4, 5</td>
<td>SS 17</td>
</tr>
<tr>
<td>Tickets, Anyone? The Law of Supply and Demand in the NFL</td>
<td>Eco: 7, 8</td>
<td>SS 18-19</td>
</tr>
<tr>
<td>Miscellaneous Activities</td>
<td></td>
<td>SS 20</td>
</tr>
<tr>
<td>NFL Cities Word Search</td>
<td></td>
<td>SS 21</td>
</tr>
<tr>
<td>NFL Team Nickname Match</td>
<td></td>
<td>SS 22</td>
</tr>
<tr>
<td>Answer Key</td>
<td></td>
<td>SS 23-24</td>
</tr>
</tbody>
</table>
Goals/Objectives:
Students will:
- Recognize the states by their shape and location on a blank (continental) map of the USA.
- Learn more background information about an area of the USA through research.

National Standards: Geography: 2-Places and Regions; 6-Uses of Geography

Methods/Procedures:
- Students will use a blank map of the USA to plot where existing NFL teams are located.
- Students will then determine where a team is needed and present arguments as to why this region should have a team.
- Students will research that specific area to learn more information before choosing a name, mascot, etc. Research may be done through encyclopedias, the internet, AAA Travel Guides, etc.

Materials:
- Blank map of the USA
- List of all existing NFL teams

Assessment:
- Students will successfully fill in an area that is void of a NFL team and explain why this area was chosen.
- Student’s team and mascot will reflect the information gathered for that area through a presentation to emphasize for their choices.
### AFC
- Baltimore Ravens
  - Baltimore, Maryland
- Buffalo Bills
  - Orchard Park, New York
- Cincinnati Bengals
  - Cincinnati, Ohio
- Cleveland Browns
  - Cleveland, Ohio
- Denver Broncos
  - Denver, Colorado
- Houston Texans
  - Houston, Texas
- Indianapolis Colts
  - Indianapolis, Indiana
- Jacksonville Jaguars
  - Jacksonville, Florida
- Kansas City Chiefs
  - Kansas City, Missouri
- Miami Dolphins
  - Miami Gardens, Florida
- New England Patriots
  - Foxborough, Massachusetts
- New York, Jets
  - East Rutherford, New Jersey
- Oakland Raiders
  - Oakland, California
- Pittsburgh Steelers
  - Pittsburgh, Pennsylvania
- San Diego Chargers
  - San Diego, California
- Tennessee Titans
  - Nashville, Tennessee

### NFC
- Arizona Cardinals
  - Glendale, Arizona
- Atlanta Falcons
  - Atlanta, Georgia
- Carolina Panthers
  - Charlotte, North Carolina
- Chicago Bears
  - Chicago, Illinois
- Dallas Cowboys
  - Arlington, Texas
- Detroit Lions
  - Detroit, Michigan
- Green Bay Packers
  - Green Bay, Wisconsin
- Minnesota Vikings
  - Minneapolis, Minnesota
- New Orleans Saints
  - New Orleans, Louisiana
- New York Giants
  - East Rutherford, New Jersey
- Philadelphia Eagles
  - Philadelphia, Pennsylvania
- St. Louis Rams
  - St. Louis, Missouri
- San Francisco 49ers
  - Santa Clara, California
- Seattle Seahawks
  - Seattle, Washington
- Tampa Bay Buccaneers
  - Tampa, Florida
- Washington Redskins
  - Landover, Maryland
Dealing with the Elements Is No EasyFeat for Football

Goals/Objectives:
Students will:
- Describe human adaptations to different physical environments.
- Describe how the activity of watching football games is influenced by environmental factors (climate, landforms) in different places and regions.
- Describe how humans change the environment to fit their needs to enable an NFL football team to play in their city.

National Standards: Geography: 2-Places and Regions; 5-Environment and Society

Methods/Procedures:
- Begin by wearing sunglasses and a sun hat and ask the students why someone would wear those. Then put on a raincoat and open an umbrella and ask why someone would need those items.
- Discuss the idea of human environmental interaction in the examples above. Explain that people learn to adapt to the conditions of their environment. Explain that it also means learning to use and change the surrounding environment. Have students locate pictures from magazines or the internet of examples of human environmental interaction.
- Ask students how they would adapt to weather conditions if they were going on a vacation to a snowy, cold climate. What would they take with them to be comfortable? What would need to be done so the family could get through the streets by taxi or car to get to their location? (City or town uses snow plows, salt, or cinders) Explain that this is changing what the environment has presented so humans can continue to carry on their lives.
- Have students list several examples of how fans at a football game adapt to their weather conditions. What do they wear? What might they carry with them to be assured of comfort? See pictures and videos from the website; www.ProFootballHOF.com
- Have students examine the football stadium to determine how it provides comfort from the environment. Is it covered? Does it have any areas which are covered? Why?
- Was the stadium built in a certain way due to landforms in the area?
- How do the football players adapt to cold weather? What do they do if it is very hot to stay hydrated?
- What was in the location before the stadium was built? What did the architects and builders need to do in order to use the land to build the stadium? (This requires a look at the history of the site).

Materials:
- Pictures of people from magazines
- Scissors
- Access to the internet
- Archival history of the stadium nearest the students’ city or town
- Coloring materials
- Paper

Assessment:
- Students should be able to find or draw pictures of fans at a football game adapting to their environment, showing several examples to convey their understanding of human environmental interaction (HEI).
- Students can do a study of the construction of the stadium and see how builders and architects had to change what existed at the site in order to build the stadium. The students can show how this is an example of HEI.
Goals/Objectives:
Students will:
- Understand the beginnings of football as we know it today.

National Standards: U.S. History: Era 7 - The Emergence of Modern America (1890-1930); Era 8 - The Great Depression and World War II (1929-1945); Era 9 - Postwar United States (1945 to early 1970's); Era 10 - Contemporary United States (1968 to the Present)

Methods/Procedures:
- Students will visit the Pro Football Hall of Fame’s website at ProFootballHOF.com. A tour through the website teaches students how and where the game began, who were the early superstars, and who helped the game become what it is today.
- Students will take notes.
- If the class can take a field trip to the Hall of Fame, students should take notes as they tour.
- Students will complete a one page report on the beginning of pro football from the information gathered online and from their field trip.
- Students will then present this information (first game, first paid player, early equipment) to the class.

Materials:
- Access to Internet
- Paper and Pen/Pencil for taking notes

Assessment:
- After writing a one page report, students will be able to share verbally with others their experience at the Hall of Fame explaining how the game began.
Goals/Objectives:
Students will:
  • Improve geography skills using football team facts and locations.
  • Use map skills with football facts.
  • Explore data from NFL teams.

National Standards: Geography: 2-Places and Regions; 5-Environment and Society.

Methods/Procedures:
  • Have students complete the social studies worksheets provided on the following pages by using resources such as maps, the internet, and on-line resources such as ProFootballHOF.com.
  • Make adaptations as necessary.
  • Answers are located in the back of the publication.
  • Geography Search
  • Team Travel
  • Social Studies Activities

Materials:
  • Geography Search worksheet
  • Team Travel worksheet
  • Maps, atlas, online resources
  • Writing utensils and paper or poster board
  • Pushpins and string

Assessment:
  • Students will be assessed on accuracy.
Directions: Use an atlas or the Internet to complete the following questions about National Football League cities and states.

1. This state, which borders eight other states, is now home to an NFL team formerly located in Texas. Name the state and the team.

2. The Everglades is a large wetland area nearest which NFL city?

3. This NFL team originally was located in Cleveland, moved to Los Angeles and now resides in a city with a big arch. They also were the first team to have a logo on their helmet. What is the team?

4. Name the city that is south of Los Angeles, California and only the second team to play in the Hall of Fame Game and the Super Bowl in the same season.

5. Name the NFL city located on Elliott Bay in Puget Sound.

6. This city in northern Florida is home to a team whose mascot has the same name as a luxury car. What city is it?

7. Which New England state do the New England Patriots call home?

8. This city has hosted ten Super Bowls including Super Bowl XLVII. Mardi Gras is also held here every year. Name the city and state.

9. In which state do the Carolina Panthers play their home games?

10. Name the NFL city nearest the Continental Divide.

11. The Pittsburgh Steelers stadium used to be Three Rivers Stadium. What three rivers join together in Pittsburgh?

12. This NFL team gained its unusual name for the meat packing industry so important to the area. This team won Super Bowls I, II, XXXI & XLV. Name the team.

13. Which state has an NFL team closest to the equator?

14. Name the eight states with NFL teams that border the Great Lakes.

   1. 
   2. 
   3. 
   4. 
   5. 
   6. 
   7. 
   8. 
15. Which NFL city is associated with the development of the automobile?

16. The California Gold Rush gave this NFL team its name. Name the team.

17. What eastern city is the only one with two NFL teams?

18. What team represents our nation’s capital?

19. Name two landlocked NFL cities.
   1. 
   2. 

20. Name six states that do not have an NFL team.
   1. 
   2. 
   3. 
   4. 
   5. 
   6. 

21. Which NFL city is closest to Niagara Falls?

22. Name the three states with NFL teams that border the Gulf of Mexico.
   1. 
   2. 
   3. 

23. This NFL team was named after the fighting ancestors of many Scandinavian settlers of the area. Name the team.
Directions: Using a blank United States map (page SS 2) and a 2015 NFL schedule, complete the following activities.

1. Label each individual state.

2. Label each NFL team in its correct city. On a separate piece of paper, list those states that do not have a NFL team.

3. Secure the map to a piece of cardboard to push pins through. Locate your favorite team’s state and city and mark it by attaching a string to a pin and placing the pin on your favorite team.

4. Refer to a copy of the team’s schedule for the current NFL season (pp. 12-14). Using the pins and string, locate and mark your team’s away games. How many away games do they play?

5. Determine and keep track of the direction your team traveled to play their away games.

6. Using an atlas, determine how many miles the team traveled to each of their away games. How many total miles did the team travel throughout the season?

7. Determine if your favorite team is in a different time zone than Canton, Ohio. What is the time difference? If the starting time of a game is 4:00 p.m. in Canton Ohio, what time is the game starting in your favorite team’s city?

8. Keep a log of your team’s win-loss record for the season plus the number of points they have scored during each game.

9. Did your team win more home or away games?

10. How many miles is it from your favorite team’s city to Santa Clara, CA, site of Super Bowl 50?
The Game Is On! Who Will Win: the AFC or the NFC?

Goals/Objectives:
Students will:
• Be able to locate and identify the different teams’ locations based on the latitude and longitude of each.

National Standards: Geography: 2-Places and Regions; 4-Human Systems.

Methods/Procedures:
• Each group of students will be given a blank map of the United States with the latitude and longitude on the map.
• Students will be given the list of NFL football teams with the address of the training facility for each one.
• Divide the class into 4 groups with 2 of the 4 groups taking the NFC teams representing the NFC Conference and the other 2 groups taking the AFC teams, representing the AFC Conference.
• Divide the NFC teams in half, giving 8 teams to one group and 8 teams to the other group. Divide the AFC teams the same way, giving 8 teams to one group and 8 teams to the other group.
• Using an atlas or maps on line, locate the city and state of each of the teams and draw a small football there, or a dot if desired. (absolute location)
• Locate the coordinates, latitude and longitude, of the 8 teams and write them on an answer sheet provided. The conference that gets the coordinates correct for all of their teams wins the contest and therefore the “big game.”

Alternative Methods/Procedures (Regions of the United States):
• Discuss the cardinal directions and the secondary directions (midway between them ie., northwest) and locate them on a classroom map or globe.
• Have students put up labels of the correct cardinal directions that apply to the classroom after discussing which direction would be north, south, east, and west.
• Hand out a blank outline map of the United States to each student.
• Go to the website www.50states.com and click on the link of “United States Map” to associate the abbreviations with the correct states if needed. Have the students label the states.
• Divide the students as above, and give the list of NFL teams with their address to each group, focusing on the city and state.
• The groups will try to determine the regions of the United States where their teams are located. They should place the name of the team on the city and/or state where the team is located.
• Point out that there are groups representing the NFC teams and groups representing the AFC teams. There will be a contest to see which “conference” can find the correct regions first and write them on the answer sheet given. This will determine which conference wins the game!
(For those who know the teams in the NFC North, South, East and West, it won’t matter in this contest!)
The Game Is On! Who Will Win: the AFC or the NFC?

Materials:
- Blank map of the United States (SS 2)
- List of all existing teams by conference, with the address for each (SS 13)
- Access to the internet for a map of United States regions as listed above
- The Game Is On worksheet

Assessment:
- Students will label the states correctly on their maps.
- Students will successfully locate the city or state of the teams in their conference on the map.
- Students will complete the answer sheet with the correct latitude and longitude coordinates for each of their teams’ cities.
- Students will correctly indicate the region in which each team in their conference is located.
Name/Names ____________________________________________

National Football Conference
Arizona Cardinals _______________________
Atlanta Falcons _______________________
Carolina Panthers _______________________
Chicago Bears _______________________
Dallas Cowboys _______________________
Detroit Lions _______________________
Green Bay Packers _______________________
Minnesota Vikings _______________________
New Orleans Saints _______________________
New York Giants _______________________
Philadelphia Eagles _______________________
St. Louis Rams _______________________
San Francisco 49ers _______________________
Seattle Seahawks _______________________
Tampa Bay Buccaneers _______________________
Washington Redskins _______________________

American Football Conference
Baltimore Ravens _______________________
Buffalo Bills _______________________
Cincinnati Bengals _______________________
Cleveland Browns _______________________
Denver Broncos _______________________
Houston Texans _______________________
Indianapolis Colts _______________________
Jacksonville Jaguars _______________________
Kansas City Chiefs _______________________
Miami Dolphins _______________________
New England Patriots _______________________
New York Jets _______________________
Oakland Raiders _______________________
Pittsburgh Steelers _______________________
San Diego Chargers _______________________
Tennessee Titans _______________________

Pro Football Hall of Fame Youth/Education  SS12  ProFootballHOF.com
# Social Studies
## The Game Is On

<table>
<thead>
<tr>
<th>AFC</th>
<th>NFC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baltimore Ravens</strong></td>
<td>Arizona Cardinals</td>
</tr>
<tr>
<td>1 Winning Drive Owings Mills, Maryland 21117</td>
<td>8701 S. Hardy Drive Tempe, Arizona 85284</td>
</tr>
<tr>
<td><strong>Buffalo Bills</strong></td>
<td>Atlanta Falcons</td>
</tr>
<tr>
<td>One Bills Drive Orchard Park, New York 14127</td>
<td>4400 Falcon Parkway Flowery Branch, Georgia 30542</td>
</tr>
<tr>
<td><strong>Cincinnati Bengals</strong></td>
<td>Carolina Panthers</td>
</tr>
<tr>
<td>One Paul Brown Stadium Cincinnati, Ohio 45202</td>
<td>800 South Mint Street Charlotte, North Carolina 28202</td>
</tr>
<tr>
<td><strong>Cleveland Browns</strong></td>
<td>Chicago Bears</td>
</tr>
<tr>
<td>76 Lou Groza Boulevard Berea, Ohio 44017</td>
<td>1920 Football Drive Lake Forest, Illinois 60045</td>
</tr>
<tr>
<td><strong>Denver Broncos</strong></td>
<td>Dallas Cowboys</td>
</tr>
<tr>
<td>13655 Broncos Parkway Englewood, Colorado 80112</td>
<td>One Cowboys Parkway Irving, Texas 75063</td>
</tr>
<tr>
<td><strong>Houston Texans</strong></td>
<td>Detroit Lions</td>
</tr>
<tr>
<td>Two Reliant Park Houston, Texas 77054</td>
<td>222 Republic Drive Allen Park, Michigan 48101</td>
</tr>
<tr>
<td><strong>Indianapolis Colts</strong></td>
<td>Green Bay Packers</td>
</tr>
<tr>
<td>P.O. Box 535000 Indianapolis, Indiana 46253</td>
<td>1265 Lombardi Avenue Green Bay, Wisconsin 54304</td>
</tr>
<tr>
<td><strong>Jacksonville Jaguars</strong></td>
<td>Minnesota Vikings</td>
</tr>
<tr>
<td>One EverBank Field Drive Jacksonville, Florida 32202</td>
<td>9520 Viking Drive Eden Prairie, Minnesota 55344</td>
</tr>
<tr>
<td><strong>Kansas City Chiefs</strong></td>
<td>New Orleans Saints</td>
</tr>
<tr>
<td>One Arrowhead Drive Kansas City, Missouri 64129</td>
<td>5800 Airline Drive Metairie, Louisiana 70003</td>
</tr>
<tr>
<td><strong>Miami Dolphins</strong></td>
<td>New York Giants</td>
</tr>
<tr>
<td>7500 S.W. 30th Street Davie, Florida 33314</td>
<td>1925 Giants Drive East Rutherford, New Jersey 07073</td>
</tr>
<tr>
<td><strong>New England Patriots</strong></td>
<td>Philadelphia Eagles</td>
</tr>
<tr>
<td>One Patriot Place Foxborough, Massachusetts 02035</td>
<td>One NovaCare Way Philadelphia, Pennsylvania 19145</td>
</tr>
<tr>
<td><strong>New York, Jets</strong></td>
<td>St. Louis Rams</td>
</tr>
<tr>
<td>1 Jets Drive Florham Park, New Jersey 07932</td>
<td>One Rams Way St. Louis, Missouri 63045</td>
</tr>
<tr>
<td><strong>Oakland Raiders</strong></td>
<td>San Francisco 49ers</td>
</tr>
<tr>
<td>1220 Harbor Bay Parkway Alameda, California 94502</td>
<td>4949 Centennial Blvd. Santa Clara, California 95054</td>
</tr>
<tr>
<td><strong>Pittsburgh Steelers</strong></td>
<td>Seattle Seahawks</td>
</tr>
<tr>
<td>3400 South Water Street Pittsburgh, Pennsylvania 15203</td>
<td>12 Seahawks Way Renton, Washington 98056</td>
</tr>
<tr>
<td><strong>San Diego Chargers</strong></td>
<td>Tampa Bay Buccaneers</td>
</tr>
<tr>
<td>P. O. Box 609609 San Diego, California 92160</td>
<td>One Buccaneer Place Tampa, Florida 33607</td>
</tr>
<tr>
<td><strong>Tennessee Titans</strong></td>
<td>Washington Redskins</td>
</tr>
<tr>
<td>460 Great Circle Road Nashville, Tennessee 37228</td>
<td>21300 Redskins Park Drive Ashburn, Virginia 20147</td>
</tr>
</tbody>
</table>
Goals/Objectives:
Students will:
- Understand the growth of the southern and western areas of the United States.

National Standards: Geography: 4-Human Systems; 5-Environment and Society

Methods/Procedures:
- Students will be given a list of cities that currently host a National Football League team.
- Then students will examine the following website: http://www.infoplease.com/ipa/A0922422.html
- Have students examine the list of cities for 1940:
  A) Which have NFL Teams today?
  B) Which cities that have NFL Teams today are missing?
- Go to an atlas and locate the top 20 cities from 1940.
  A) If you were to classify these cities, are the majority located in the North, East, South, West, etc?
  B) Of the NFL cities missing are they located in the North, East, South, West, etc?
- Now go back to the website and examine the Top 20 cities of 2012.
  A) Which have NFL Teams today?
  B) Which cities that have NFL Teams today are missing?
- What NFL cities are now considered in the Top 20 that were not in 1940: http://www.infoplease.com/ipa/A0922422.html

Other Activities:
- Students will determine (based on population - 2014) the Top 4 places that the NFL might put expansion teams.
- Have students examine expansion, but this time ask them to also take into account distance to other teams.
- Have students use the United States Census Bureau website to compare income, etc. of those cities.
- Here is an example of steps to gather data from the Census website:
  * Census Data:
    2. Click American Factfinder under the “Data” dropdown menu.
    3. Click “Get Data” under “What We Provide - Population Estimates.”
    4. Click on any table the student wishes.
The Movement of the Population to the South and West

Materials:
- Access to the Internet
- Access to HOF’s web site at www.ProFootballHOF.com
- Paper and writing tool

Assessment:
- Students will explain possible reasons or factors for a shift in population with enormous growth in the southern and western locations after World War II.
- Students will deliver a formal presentation on a particular location.
Goals/Objectives:
Students will:
- Study the history of the amphitheater.
- Compare modern football stadium designs to the design of the ancient amphitheaters.

National Standards: World History: 4 - The History of Peoples of Many Cultures Around the World

Methods/Procedures:
- Students will explore the architecture and design of the ancient amphitheater by researching the Greek amphitheaters and the Roman amphitheaters.
- Have the students write down several facts about the design and architecture of these ancient structures.
- Once the students have an idea as to the purpose of the stadium and the design, go to: www.worldstadiums.com/north_america/countries/united_states.shtml and have the students explore all of the stadiums in the state in which they live.
- Have the students select the NFL stadium closest to their home and explore the design of it.
- Compare the stadium of ancient Greece or ancient Rome to the stadium closest to them by comparing size, capacity, entryways, the way the seats are set up, etc.
- Have students make note of the similarities especially.
- Have students design a football stadium of their own, but have them incorporate at least some of the characteristics or elements from ancient Roman or Greek amphitheaters and note what they are.

Materials:
- Access to the internet
- Books with information on Greek and Roman amphitheaters
- Paper, pencil and a notebook to take notes on the design of ancient stadiums
- Drawing paper for the new stadium design

Assessment:
- The design of the new stadium will show the features from the ancient stadiums incorporated into the new design. The students will need to highlight what design or elements of architecture were taken from the ancient design on the back of the drawing.
Goals/Objectives:
Students will:
- Identify and locate the 50 states, the NFL states and the NFL cities.
- Interpret a map legend (scale of miles, directions).
- Write a descriptive paragraph.
- Calculate expenses and mileage.
- Research historical information about the franchise, city, etc.
- Produce a travel guide.

National Standards: Geography: 2-Places and Regions; 4-Human Systems; 5-Environment and Society

Methods/Procedures:
- All students will be expected to complete a map of the USA, locating all states and then all states with NFL teams and the cities in which these teams are located.
- Teacher will provide students with background information about the formation of the NFL.
- Through a lottery, students will be assigned a NFL team to research. They must find pertinent background information about the formation of the franchise, information about the city, etc.
- Students will examine the cost of airfare, hotel rooms, bus rentals, catering costs, etc., to estimate the amount of money their chosen team must expend to attend away games.
- After examining a team’s away schedule, students must calculate the total expenses for all away games.
- Students will create an NFL team tri-fold travel brochure.
  * One panel should include a descriptive paragraph about pertinent background information for that franchise.
  * One panel should include pertinent information about the city tourist friendly information.
  * One panel should include information about the team’s “away” schedule and the costs incurred.
  * Students may select graphics and other data to include on the remaining 3 panels.
- Students will present their brochures to the class.

Materials:
- Access to computers
- Access to the internet
- Paper
- Pen/Pencil

Assessment:
- Visit rubistar.4teachers.org to develop a rubric for grading brochures.
Social Studies
Tickets, Anyone? The Law of Supply and Demand in the NFL

Goals/Objectives:
Students will:
- Be able to understand how prices are determined based on the Law of Supply and Demand.
- Learn the basic terms of economics and relate them to football teams and football games.

National Standards: Economics: 7- Markets and Prices; 8-Role of Prices

Methods/Procedures:
- The teacher introduces the terms “goods” and “services” or the things that people want, and defines them.
  * **Goods**- things that can be seen and touched that people buy.
  * **Services**- things people do for others.
- The teacher explains the concept of **scarcity**:
  * There are only a certain amount of goods and services that can be produced. People have unlimited wants, but they have only so much money to buy what they want.
- The teacher explains that the students and their families are consumers, or people who buy goods and services to satisfy their wants.
- Create a scenario for the NFL team closest to your school. The team has been winning all of its games. It’s the best season it has ever had. Most of the seats have been pre-sold to season ticket holders. Everyone wants to go the games, but there are only 20 seats that aren’t pre-sold for the next game. People are willing to pay a great deal of money for a seat to see their team win and probably go to the Super Bowl. The demand for the last available seats at the game is high. The supply of available seats is low, only 20! So the cost for the seats can be high because people are willing to pay more for them. When the demand is high and the supply is low, price goes up.
- Create a scenario for a team that has not been winning and has mostly empty seats at the games. The stadium has a large number of seats available because people probably don’t want to spend much money on watching the team lose. In this case, the demand is low, but the supply of seats is high. The price for the seats goes down.
- Explain that this is the Law of Supply and Demand.
- Have students complete the Supply and Demand Worksheet.
- Place students in groups to create two scenarios at a football game, one where the prices will go up and one where the prices will go down. Have them write it down and share with the class.

Materials:
- Supply and Demand Worksheet
- Paper
- Pen/Pencil
- Chalkboard or dry erase board
- Pictures of typical sights at football games to help students create their scenarios

Assessment:
- Have students give examples of goods and services at a NFL game.
- Using a scenario created by a group in the lesson above where the demand is high and the supply low, ask what would happen to the price.
- Using an example created by a group in the lesson above where the supply is high and the demand low, ask what would happen to the price.
Directions: Identify which of these are examples of goods and which are examples of services. Then add 3 more examples of each that might be seen at a football game.

1. Team pennant _______________________
2. Team doctor _________________________
3. Hotdogs and hamburgers __________________
4. The cashier at the team gift shop _________________
5. Ushers to help you find your seats ________________
6. Footballs in the team gift shop __________________

Goods
1. ______________________
2. ______________________
3. ______________________

Services
1. ______________________
2. ______________________
3. ______________________

Scarcity- ______________________________________________________________________
_______________________________________________________________________________
_______________________________________________________________________________

Scenario:
The weather suddenly changes at a game, the temperature has dropped by 30 degrees. There are only so many sweatshirts or jackets left in the store, so the demand is high, but the supply is low. What will happen to the price and why? _____________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
Teachers: The following are suggested classroom social studies activities for you and your students to enjoy. Feel free to adapt these ideas to suit your classroom.

BATTLE OF OHIO: Draw a map of Ohio and label the two Ohio NFL teams in their appropriate cities. Find out more about these two cities. Have there been any other professional football teams in Ohio through the years? Label these cities as well.

DISTANCE STUDIES: Each NFL team is part of a specific conference. On a United States map use push pins and string to label the different conferences and the distance traveled in order to get to the teams in their own conferences.

MAP READING: Can your students find their way to their favorite team’s city? Using maps, Internet, and any other resources, determine what major highways and roads will be traveled on during a trip to the game.

HOMETOWN FUN: Using a United States map and an NFL team roster, locate and label the cities that each player is originally from. Are there any players from outside of the United States?

The Hall of Fame welcomes any suggestions for classroom activities. Please share your thoughts and ideas by contacting the Educational Programs Staff at (330) 456-8207 or e-mail at Education@ProFootballHOF.com.
Can you find the cities of the thirty-two teams in the National Football League? The cities run in all directions: forward, backward, up, down and diagonally. Good Luck!

| Y | B | F | I | L | S | V | D | N | A | L | K | A | O | W | R | D | K | S | P |
| A | G | L | C | H | J | N | R | E | O | M | I | T | L | A | B | A | V | H | T |
| B | R | P | A | H | I | O | U | E | T | V | I | D | C | E | N | L | I | S | P |
| A | U | R | V | M | I | N | N | E | S | O | T | A | L | S | Q | L | N | A | I |
| P | B | F | C | K | E | T | P | Q | S | R | L | A | U | A | A | O | N | T |
| M | Z | D | F | N | S | O | A | N | U | E | S | T | D | P | S | T | F | T |
| A | M | V | U | A | I | N | E | G | L | T | C | N | E | B | Y | L | S | R | S |
| T | N | H | V | I | L | R | A | I | O | I | A | L | N | G | K | E | U | A | B |
| B | E | Y | E | T | O | O | N | E | T | B | P | M | L | E | L | T | O | N | U |
| D | W | Y | P | U | P | A | B | Y | L | H | S | A | R | L | T | E | H | C | R |
| M | E | A | M | N | A | R | D | I | I | R | T | K | I | E | L | H | L | I |
| T | N | B | S | D | N | I | F | A | H | N | O | V | K | T | N | E | W | S | H |
| N | G | N | A | H | A | Z | C | F | A | D | N | W | T | G | V | K | T | C | D |
| E | L | E | N | G | I | O | M | L | P | O | R | A | E | E | U | L | I | O | A |
| W | A | E | D | F | D | N | T | G | S | H | E | J | L | N | O | C | O | V | I |
| Y | N | R | I | M | N | A | G | K | Z | S | V | A | W | U | R | B | R | D | H |
| O | D | G | E | B | I | N | C | T | C | I | N | C | I | N | N | A | T | I | L |
| R | T | V | G | Y | R | A | O | W | O | D | E | E | S | O | N | C | R | E | A |
| K | M | S | O | W | J | N | M | S | N | N | D | M | I | S | T | H | D | E |
| H | L | F | J | K | I | A | U | I | A | M | S | Y | N | E | W | Y | O | R | K |

Arizona  
Atlanta  
Baltimore  
Buffalo  
Carolina  
Chicago  
Cincinnati  
Cleveland  
Dallas  
Denver  
Detroit  
Green Bay  
Houston  
Indianapolis  
Jacksonville  
Kansas City  
Miami  
Minnesota  
New England  
New Orleans  
New York  
New York  
Oakland  
Philadelphia  
Pittsburgh  
San Diego  
San Francisco  
Seattle  
St. Louis  
Tampa Bay  
Tennessee  
Washington
Directions: Match the team city with the correct team nickname.

1. Ravens________  A. Arizona
2. Bills ________  B. Washington
3. Seahawks_______  C. Tampa Bay
4. Bengals ________  D. Atlanta
5. Chargers ________  E. Carolina
6. Broncos________  F. San Francisco
7. Titans________  G. Chicago
8. Steelers_______  H. Dallas
9. Raiders_______  I. Detroit
10. Colts_______  J. St. Louis
11. Jaguars_______  K. New Orleans
12. Jets_______  L. Philadelphia
13. Patriots_______  M. Green Bay
14. Chiefs_______  N. Minnesota
15. Dolphins_______  O. New York
16. Redskins_______  P. Baltimore
17. Cardinals_______  Q. Seattle
18. Buccaneers_______  R. San Diego
19. Falcons______  S. New York
20. Panthers______  T. Pittsburgh
21. Rams______  U. Cincinnati
22. Eagles______  V. Denver
23. Bears______  W. Oakland
24. Browns______  X. Cleveland
25. Cowboys______  Y. Miami
27. Texans______  AA. Tennessee
28. Vikings______  AB. Indianapolis
29. Lions______  AC. Jacksonville
30. Packers______  AD. Kansas City
31. 49ers______  AE. Buffalo
32. Giants______  AF. Houston
Social Studies

Answer Key

Geography Search
1. Tennessee Titans
2. Miami Dolphins
3. St. Louis Rams
4. San Diego Chargers
5. Seattle Seahawks
6. Jacksonville Jaguars
7. Massachusetts
8. New Orleans, Louisiana
9. North Carolina
10. Denver
11. Allegheny, Monongahela, Ohio
12. Green Bay Packers
13. Florida
15. Detroit
16. San Francisco 49ers
17. New York
18. Washington Redskins
19. Denver, Kansas City
21. Buffalo
22. Florida, Louisiana, Texas
23. Minnesota Vikings

NFL Team Nicknames
1. P
2. AE
3. Q
4. U
5. R
6. V
7. AA
8. T
9. W
10. AB
11. AC
12. O or S
13. Z
14. AD
15. Y
16. B
17. A
18. C
19. D
20. E
21. J
22. L
23. G
24. X
25. H
26. K
27. AF
28. N
29. I
30. M
31. F
32. O or S

The Game is On
NFC
Arizona Cardinals - S.W.
Atlanta Falcons - S.E.
Carolina Panthers - S.E.
Chicago Bears - M.W.
Dallas Cowboys - S.W.
Detroit Lions - M.W.
Green Bay Packers - M.W.
Minnesota Vikings - M.W.
New Orleans Saints - S.E.
New York Giants - N.E.
Philadelphia Eagles - N.E.
St. Louis Rams - M.W.
San Francisco 49ers - W.
Seattle Seahawks - W.
Tampa Bay Buccaneers - S.E.
Washington Redskins - S.E.
The Game is On
AFC
Baltimore Ravens - N.E
Buffalo Bills - N.E.
Cincinnati Bengals - M.W.
Cleveland Browns - M.W.
Denver Broncos - W.
Houston Texans - S.W.
Indianapolis Colts - M.W.
Jacksonville Jaguars - S.E.
Kansas City Chiefs - M.W.
Miami Dolphins - S.E.
New England Patriots - N.E.
New York Jets - N.E.
Oakland Raiders - W.
Pittsburgh Steelers - N.E.
San Diego Chargers - W.
Tennessee Titans - S.E.

NFL Cities Word Search

Y B F I L S V D N A L K O W R D K S P
B R P A H I O U E T V I D C E N L I S P
A U R V M I N N E S O T A L S Q L N A I
P B F C K E C T P Q S R L A U A A O N T
M Z D F N S O A N U O E S T D P S T F T
A M V U A I N E G L T C N E B Y L S R S
T N H V I L R A I O I A L N G K E U A B
B E Y E T O O N E T B P M L E L T O N U
D W Y P U P A B Y L H S A R L T E H C R
M E A M N A R D I I I R T K I E L H L I G
T N B S D N I F A H N O V K T N E W S H
N G N A H A Z C F A D N W T G V K T C D
E L E N G I O M L P O R A E E U L I O A
W A E D F D N T G S H E J L N O C O V I
Y N R I M N A G K Z S V A W U R B R D H
O D G E B I N C T C I N C I N N A T I L
R T V G Y R A O W O D E S O N C R E A I
K M S O W J N M S N N D M I S T H D L E
H L F J K I A U I A M S Y N E W Y O R K
Pro Football Hall of Fame
Youth/Education

Technology
Activity Guide 2015-2016
<table>
<thead>
<tr>
<th>Lesson</th>
<th>National Standards</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Football Trading Cards</td>
<td>5 - Citizenship, 2 - Communication, 4 - Solving</td>
<td>TC 1</td>
</tr>
<tr>
<td>Sundays Are Fun Days With High Tech</td>
<td>3 - Research</td>
<td>TC 2-3</td>
</tr>
<tr>
<td>Create a Graphic and Capture the Main Ideas of your Research</td>
<td>6 - Operations, 5 - Citizenship, 2 - Communications, 4 - Solving</td>
<td>TC 4-5</td>
</tr>
<tr>
<td>The Internet and Football</td>
<td>2 - Collaborate, 5 - Citizenship, 3 - Research; 4 - Solving</td>
<td>TC 6-11</td>
</tr>
<tr>
<td>Additional Internet sites</td>
<td></td>
<td>TC 12</td>
</tr>
<tr>
<td>Answer Key</td>
<td></td>
<td>TC 13-14</td>
</tr>
</tbody>
</table>
Goals/Objectives: Students will:
- Investigate, analyze and interpret what is found on football trading cards
- Use the Internet to retrieve information needed to construct a card
- Use WORD, In-Design, Publisher, etc. or a similar program to construct a card
- Effectively create a card
- Learn and internalize terminology associated with the trading card industry

National Standards: 5-Digital Citizenship, 2-Communication and Collaboration, 4-Critical-Thinking, Problem-Solving and Decision-Making

Methods/Procedures:
- Students examine a variety of cards provided by the teacher and students from personal collections. Students can see a variety from companies such as Panini, Pinnacle, and Upper Deck, to name a few.
- Teacher, or a chosen student, records on the board or flip chart items identified by class as a whole as to what is found on a variety of cards. Examples of what can be found on various cards are: team name, player name, player picture, statistics of player for past years, records broken, card number, team played for, player number etc. Students may also suggest items they would like to see on cards not listed.
- Teacher passes out a card stencil for students to design a card of their choosing for a player of their choosing. The card is oversized and students are to be reminded that the card will be shrunk, so too much on a card may be a problem later on.
- Students use items from list the class compiled to ‘design’ their card, in WORD, In-Design, Publisher, etc.
- After designing their card, students use the Internet to retrieve, resize and gather pictures of their chosen player along with stats etc. to place on the card to turn their rough sketched card into a finished product.
- If time is available, students can design a set of cards that they believe would be of value in the trading card industry.
- Teacher places on the board the terminology used in the trading card industry, and students, using the Internet, define what each term means. Terms to be listed are: pristine, mint, excellent, very good, good, good and poor.
- If time permits, students can use the Internet to define terms used in the trading card industry such as, 9-up sheet, autograph card, base set, box set, card sleeve, blister pack, factory set, insert card, parallel card, uncut sleeve, wrapper and retail card.

Materials:
- Sample cards from various companies
- Sketch Pad
- Internet access
- Computers
- Card Stencil: oversized and regular

Assessment:
- Assessment from this lesson can be handled in numerous fashions. The most enjoyable one may be having students trade cards to determine which card most students desire and has the greatest value to the class as a whole to a mere displaying of cards to determine which card or cards are most visually appealing.
Goals/Objectives:
Students will:
- Understand the immense role that technology plays in creating an NFL game for the public’s enjoyment.

Common Core Standards: 3-Research and Information Fluency

Methods/Procedures:
- Begin by discussing football games, including those in which students have played, seen in person, or watched on television or computer.
- Define technology as people’s use of knowledge, tools, and inventions to help meet their needs. Have students write this down.
- Identify examples of technology in the classroom such as the system used for announcements at your school, televisions, computers, or even a pencil sharpener.
- Show a short video clip of an NFL game, and have the students note the different technology used.
- Distribute the worksheet and have the students complete as much as they can as a group or independently, after several examples of technology relating to a football game have been offered by students. (airplane flying above is acceptable for letter A block)

Materials:
- Video clip of a football game
- Sundays Are Fun Days With High Tech worksheet

Assessment:
- Discussion and checking of worksheet for as many examples as possible to show understanding.
**Technology**

**Sundays Are Fun Days**
**With High Tech**

Name: ____________________________________________

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>Q</td>
<td>R</td>
<td>S</td>
<td>T</td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>V</td>
<td>W</td>
<td>X</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Z</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Goals/Objectives:
Students will:
- Employ the Internet as a viable source of info.
- Use suggested sites and other reliable sites to gain information.
- Identify main points in an article.
- Write a summary of facts obtained.
- Be able to create a graphic cloud of what is known about the topic before research.
- Be able to create a graphic “cloud” of what was learned about the topic.
- Compare the differences between the original and the final graphic.

Common Core Standards: 6-Technology Operations and Concepts; 5-Digital Citizenship; 2-Communication and Collaboration; 4-Critical Thinking, Problem Solving and Decision Making

Methods/Procedures:
- Students go to Wordle.net to create a graphic that illustrates what they know about a topic such as the history of football, a particular hall of famer, or an enshrinee selected from the class of 2013.
  1. Student creates a paragraph based on student’s knowledge of the topic selected and writes it in the space provided on the website.
  2. Student clicks on “create,” and a graphic will appear that contains the important words about the topic.
  3. Student prints out the graphic so a comparison can be made between it and the final graphic.
- Then the work begins! Students should be encouraged to use the following websites to research selected topic thoroughly:
  * ProFootballHOF.com
  * NFL.com
  * ESPN.go.com
  * Biography.com
  * Additional internet sites
- After notes have been taken on subtopics such as early life, professional life, achievements, etc., student will write a summary of the facts obtained.
- Student then transfers the new information to wordle.net in the space provided. Student should be sure to make a copy of the new information since the text disappears once the graphic is created.
- Student clicks on “create,” and a graphic will appear that contains the important words about the topic. The more a word is used, the larger it appears on the graphic. The student can interact with the site by changing the color or layout of the graphic. Student can eliminate small words or numbers if desired.
- Student prints out the final graphic and can compare it to the original and note the differences based on the information learned.

# If there is difficulty in printing the graphic, student may need to download a tool to capture the screenshot. Jing by TechSmith is a free download that will allow the student to take a screenshot to capture the picture of the graphic, and then it should print.
Materials:
- Access to the Internet
- Access to the Hall of Fame’s website at ProFootballHOF.com
- Access to the school and/or public library computer center with printing capabilities

Assessment:
- Students will be assessed based upon their completed graphic and their presentation of information about the topic.
Goals/Objectives:
Students will:
- Identify the Internet as a viable source for information and research.
- Identify key phrases and words in searching the Internet for football related information.
- Identify various and reliable Internet sites.
- Identify main points of article.
- Effectively analyze Internet sites.

Common Core Standards: 2-Communication and Collaboration; 5-Digital Citizenship;
3-Research and Information Fluency; 4-Critical Thinking, Problem Solving and Decision Making

Methods/Procedures:
- Students complete the worksheets provided on the following pages in this section concentrating on one activity at a time.
- Teachers are encouraged to adjust, adapt, and alter activities to suit class needs.
- Answers are located in the back of this publication.
  * ProFootballHOF.com
  * NFL.com
  * Letsmove.gov
  * Mascot Mania
  * Stadiums
  * Additional Internet Sites
- Students would be encouraged to access the Hall’s official site: Profootballhof.com. On this site students can examine articles to analyze and discuss.
- Students can present the information gathered from the lessons to the class.

Materials:
- Internet Activity Sheets
- Access to the Internet
- Access to the Hall of Fame’s website at ProFootballHOF.com
- Access to the school and/or public library as well as a computer center

Assessment:
- Students will be assessed based upon completed worksheets and/or presentations.
Directions: After finding your way to the Pro Football Hall of Fame website, find the answers to the following questions.

1. What are the three reasons the Pro Football Hall of Fame is located in Canton, Ohio?
   A. _______________________________________
   B. _______________________________________
   C. _______________________________________

2. In the “History of Football” section, find one story about the decade of the 80’s. Summarize that article below.

3. List two players talked about in the African Americans in Pro Football section.
   A. _______________________________________
   B. _______________________________________

4. Who were the enshrinees in the Class of 2015?
   A. _______________________________________
   B. _______________________________________
   C. _______________________________________
   D. _______________________________________
   E. _______________________________________
   F. _______________________________________
   G. _______________________________________
   H. _______________________________________

5. One jersey number has been worn by more Hall of Famers (11) than any other number. Which number is it? _________
Name: ____________________________________

Directions: After accessing the website NFL.com, find the answers to the following questions:

1. Locate the week by week schedule. Locate playoffs. What is the date of Super Bowl 50?
   ______________________

2. Locate one major story. What is the title of the story? Who wrote the story?
   ______________________________________________________________________________________

3. In the statistics section find the answers to the following questions:
   A. What player is presently the NFL leading rusher? _________________
   B. What team is leading the league in offense? _________________
   C. What player presently has the most touchdowns in the NFL? _________________

4. In the AFC West Division, what team is in last place? What is its record?
   ______________________

5. How many total wins do the teams in the NFC North have?
   ______________________

6. The NFL.com website “links” you to many other interesting sports websites. What does link mean?
   ______________________________________________________________________________________

7. Complete the line graph below for the NFC North Division’s standings.

   NFC North Division - Winning Percentages

<table>
<thead>
<tr>
<th>Winning Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
</tr>
<tr>
<td>0.90</td>
</tr>
<tr>
<td>0.80</td>
</tr>
<tr>
<td>0.70</td>
</tr>
<tr>
<td>0.60</td>
</tr>
<tr>
<td>0.50</td>
</tr>
<tr>
<td>0.40</td>
</tr>
<tr>
<td>0.30</td>
</tr>
<tr>
<td>0.20</td>
</tr>
<tr>
<td>0.10</td>
</tr>
<tr>
<td>0.00</td>
</tr>
</tbody>
</table>

   Ravens | Bengals | Browns | Steelers
Name: ____________________________________

Directions: Find the answers to the following questions by going to Letsmove.gov, click on “Take Action,” and click on the kids section.

1. What are the five steps for being successful at being healthy?
   A. 
   B. 
   C. 
   D. 
   E. 

2. Drinking water is a very important part of being healthy. Name three ways to make water more exciting?
   A. 
   B. 
   C. 

Now click on “Learn the Facts.” Under the heading “Obesity by the Numbers” answer the following questions.


4. Name four chronic health problems that obesity can cause.
   A. 
   B. 
   C. 
   D.
Name: ____________________________________

Directions: Many of the NFL teams have team mascots. These mascots have an important job - entertaining and educating! What information can you find about the following team mascots? Visit the team websites to answer the questions about each mascot.

**Baltimore Ravens - baltimoreravens.com**
- Ravens Town
  - Mascots
What is the name of the Ravens’ mascot? __________
What is its height? __________
What is its weight? __________

**Houston Texans - houstontexans.com**
- Kids
  - Toro
When was he born? __________
What is his education? __________
How much does he weigh? __________

**Buffalo Bills - buffalobills.com**
- Fans
  - Billy Buffalo
Where did he go to college? __________
What are his favorite colors? __________
What is his favorite movie? __________

**San Francisco 49ers - 49ers.com**
- Fans Only
  - Kids Country
    - Sourdough Sam
What is his name? __________
Where was he born? __________
What is his favorite Food? __________

**Philadelphia Eagles - philadelphiaeagles.com**
- Fans
  - Swoop
What is his height? __________
What is his weight? __________
What is his position? __________

**Detroit Lions - detroitlions.com**
- Youth Programs
  - Roary - Mascot
What is his height? __________
What is his shoe size? __________
What is his favorite movie? __________
**NFL Stadiums**

**Name:** ________________________________

**Directions:** Using the World Wide Web or any other resources, figure out which team calls each of the following Stadiums their HOME!

<table>
<thead>
<tr>
<th>Stadium</th>
<th>Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lincoln Financial Field</td>
<td>A. St. Louis Rams</td>
</tr>
<tr>
<td>Edward Jones Dome</td>
<td>B. Cincinnati Bengals</td>
</tr>
<tr>
<td>Qualcomm Stadium</td>
<td>C. Kansas City Chiefs</td>
</tr>
<tr>
<td>EverBank Field</td>
<td>D. Philadelphia Eagles</td>
</tr>
<tr>
<td>Paul Brown Stadium</td>
<td>E. Chicago Bears</td>
</tr>
<tr>
<td>Ford Field</td>
<td>F. Denver Broncos</td>
</tr>
<tr>
<td>Sun Life Stadium</td>
<td>G. San Francisco 49ers</td>
</tr>
<tr>
<td>Lambeau Field</td>
<td>H. Carolina Panthers</td>
</tr>
<tr>
<td>Heinz Field</td>
<td>I. Miami Dolphins</td>
</tr>
<tr>
<td>Gillette Stadium</td>
<td>J. Jacksonville Jaguars</td>
</tr>
<tr>
<td>Sports Authority Field at Mile High</td>
<td>K. Detroit Lions</td>
</tr>
<tr>
<td>Bank of America Stadium</td>
<td>L. Pittsburgh Steelers</td>
</tr>
<tr>
<td>Soldier Field</td>
<td>M. San Diego Chargers</td>
</tr>
<tr>
<td>Arrowhead Stadium</td>
<td>N. New England Patriots</td>
</tr>
<tr>
<td>Levi’s Stadium</td>
<td>O. Green Bay Packers</td>
</tr>
</tbody>
</table>
Additional Internet Sites

The following websites can be accessed for additional information for your students.

www.usatoday.com
www.espn.com
www.cbssports.com
www.sportsillustrated.com
www.nfl.com/superbowl
ProFootballHOF.com
1. A. The American Prof. Football Association, the forerunner of the NFL, was founded in Canton in 1920.
   B. The Canton Bulldogs were an early day pro football power. First two-time champion of the NFL. Jim Thorpe played for Bulldogs.
   C. Canton citizens launched a determined and organized campaign in the 1960’s to earn the site.
2. Answer varies
3. Answer varies
5. 22

NFL.com
1. February 7th, 2016
2. Answer Varies
3. Answer Varies
4. Answer Varies
5. Answer Varies
6. When a web site “links” you to another site it simply gives you options of visiting other web sites with information similar to what you are presently looking at
7. answer varies

Mascot Mania
Baltimore Ravens:
Name: Poe
Height: 6ft 0in
Weight: 692,537 feathers
Houston Texans:
Birthdate: 4/21/2001
Education: MA (Master’s of Acrobatics)
Weight: Big enough to BULL you over
Buffalo Bills:
College: Bovine University
Colors: Red, White, and Blue
Movie: NFL Archives: Buffalo Bills vs. Houston Oilers 1993 AFC Playoffs/ NFL: History of the Buffalo Bills
San Francisco 49ers:
Name: Sourdough Sam
Place of Birth: Dem Dare Hills
Food: Garlic Fries
Philadelphia Eagles:
Height: 6ft 3in
Weight: 216 lbs.
Position: Center of Attention
Detroit Lions:
Height: 10 Paws High
Shoe Size: Bigger than Shaq
Movie: The Lion King

Stadiums
1. D
2. A
3. M
4. J
5. B
6. K
7. I
8. 0
9. L
10. N
11. F
12. H
13. E
14. C
15. G

Letsmove.gov
1. Move Everyday
   - A. Try new fruits and veggies
   - C. Drink lots of water
   - D. Do jumping jacks to break TV time
   - E. Help make dinner
2. A. answer varies
   B. answer varies
   C. answer varies
3. 3
4. A. Heart Disease
   - B. High Blood Pressure
   - C. Cancer
   - D. Asthma

Answer Key
**Technology**

**Sundays Are Fun Days with High Tech Answer Key**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airplane above</td>
<td>Broadcasting system</td>
<td>Cell phones Computers</td>
<td>Digital clock</td>
<td>Equipment to protect players from injury</td>
</tr>
<tr>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
</tr>
<tr>
<td>Fans circulating to keep air flowing</td>
<td>GPS system to get there!</td>
<td>Helmets improved for safety</td>
<td>Ipods for music</td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>O</td>
</tr>
<tr>
<td></td>
<td>Lights</td>
<td>Microwave oven for cooking food ordered</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>Q</td>
<td>R</td>
<td>S</td>
<td>T</td>
</tr>
<tr>
<td></td>
<td>Restroom with automatic faucets</td>
<td>Scoreboard</td>
<td></td>
<td>Television cameras</td>
</tr>
<tr>
<td>U</td>
<td>V</td>
<td>W</td>
<td>X</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Pro Football Hall of Fame
Youth/Education

Visual Art
Activity Guide 2015-2016
<table>
<thead>
<tr>
<th>Lesson</th>
<th>National Standards</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hands of Many Colors</td>
<td>1 - Understand/Apply</td>
<td>VA 1</td>
</tr>
<tr>
<td>Create a Football Card</td>
<td>1 - Understand/Apply</td>
<td>VA 2-3</td>
</tr>
<tr>
<td>Drawing a Cartoon Football Player</td>
<td>1 - Understand/Apply</td>
<td>VA 4-5</td>
</tr>
<tr>
<td>Ernie Barnes: Athlete and Sports Artist</td>
<td>4 - History/Culture</td>
<td>VA 6-7</td>
</tr>
<tr>
<td>Football Field in One-Point Perspective</td>
<td>1 - Understand/Apply, 2 - Structures</td>
<td>VA 8-9</td>
</tr>
<tr>
<td>Football Hero</td>
<td>1 - Understand/Apply, 2 - Structures, 3 - Evaluate</td>
<td>VA 10-11</td>
</tr>
<tr>
<td>Football Themed Action Figures</td>
<td>1 - Understand/Apply</td>
<td>VA 12-13</td>
</tr>
<tr>
<td>Football Themed Tessellations</td>
<td>1 - Understand/Apply</td>
<td>VA 14-15</td>
</tr>
<tr>
<td>Gear for Spectators</td>
<td>1 - Understand/Apply</td>
<td>VA 16-17</td>
</tr>
<tr>
<td>Designer Cleats</td>
<td>1 - Understand/Apply</td>
<td>VA 18-19</td>
</tr>
<tr>
<td>Jersey Design</td>
<td>1 - Understand/Apply</td>
<td>VA 20-21</td>
</tr>
<tr>
<td>Jewelry Design: Create Your Own Super Bowl Ring</td>
<td>3 - Evaluate</td>
<td>VA 22-23</td>
</tr>
<tr>
<td>LeRoy Neiman, Sports Painter</td>
<td>4 - History/Culture</td>
<td>VA 24-25</td>
</tr>
<tr>
<td>Photographer</td>
<td></td>
<td>VA 26</td>
</tr>
<tr>
<td>Nametags</td>
<td></td>
<td>VA 27</td>
</tr>
<tr>
<td>Pennant</td>
<td></td>
<td>VA 28</td>
</tr>
</tbody>
</table>
Goals/Objectives:
Students will:
- Reinforce visual awareness of hand shape, skin color, value and overlapping

National Standards: 1-Understanding and applying media, techniques, and processes

Methods/Procedures:
- Students may orient paper horizontally or vertically. Present them with the challenge of drawing an action picture featuring hands and forearms of football players. In order to accomplish this, younger students may trace their hands, while intermediate elementary and middle school artists will likely chose to create freehand drawings by observing their own hands. Ask students to pay close attention to details, such as fingernails and line on finger joints and palms: Details such as wrist bands would provide interesting detail.
- The picture should show a form of action, such as hands reaching to catch a pass of hands raised in victory. For visual interest, students should overlap several hands. For variety, hands should be turned different directions.
- Discuss the wide range of skin colors and decide what crayons or pencils could be used to produce them. Value describes the intensity of lightness/darkness of a color. For light value skin tones, press very lightly with the coloring material. Darker skin tones are produced by using heavier pressure. Colors can be blended for richer tones. Ask students to experiment with colors. When coloring the picture, make certain drawing details are easily visible. Final details such as an airborne football, confetti, banners and team colors could be considered.

Materials:
- 12” x 18” white or manila drawing paper
- Pencil
- Crayons or colored pencils

Assessment:
- Ask each student to write a paragraph about his/her art work, answering the following questions: What skin colors did you use? Did you use light or dark values of these colors? Explain how overlapping helps make your picture interesting. When you look at this picture, what does it say to you?
Goals/Objectives:
Students will:

- Create an original football card for a real or fictitious football player. This will be a 2-sided project with a portrait on one side and statistics on the reverse side.
- Research a real player or creative facts and images about a fictitious character.

National Standards: 1 -Understanding and applying media, techniques and processes

Methods/Procedures:

- Decide on the orientation of your card - horizontal or vertical.
- Research and find a photograph and statistical information about the your chosen player, or create an image and statistics for an imaginary player. Girls might want to feature a female player.
- Look at real football cards to help you decide on a layout, frame and general design for your card.
- Draw the front of the card with pencil and then fill in with colors.
- Create the back of the card by designing a layout for your statistics. Try to incorporate creative lettering into both sides of the project.

Materials:

- Students will be assessed based upon completed worksheets and/or presentations
- Ask each student to make a 2 minute presentation about his or her card. Hang the cards from strings so both sides are visible.

Assessment:

- 6” x 9” white or pastel paper (2 sheets per student)
- Access to the Internet
- 6” x 9” cardboard or foam board
- Scissors
- Glue
- Pencil
- Coloring materials
Visual Art
Create a Football Card
Goals/Objectives: Students will:
  • Use basic shapes (circles, ovals) along with various lines to create a cartoon-like rendering of a football player. This type of activity encourages students to use observation skills, proportion and sequencing.

National Standards: 1-Understanding and applying media, techniques, and processes

Methods/Procedures:
  • Students follow the sequential steps on the attached instructional sheet, beginning with a circle and two curved lines. In each step, additional shapes and lines are gradually added.
  • Students are encouraged to add their own details and colors, to change the position of the character’s arms and legs, and embellish the background.

Materials:
  • White or manila drawing paper, any size
  • Drawing pencil/eraser
  • Color materials (if desired)

Assessment:
  • As a writing project, have students describe the sequential steps of the drawing using sentences instead of lines and shaped. Challenge students to create a drawing, and then break it down into sequential steps that would be easy for other students to follow.
Visual Art
Drawing a Cartoon Football Player

1. Start with an oval shape for the head.
2. Add a smaller oval inside the head for the face.
4. Draw the shoulders and upper body.
5. Add the arms and hands.
6. Complete the drawing with the football and feet.
Goals/Objectives:
Students will:
- Study biographical data and view assorted works of a contemporary artist whose primary work focuses on sports.

National Standards: 4- Understanding the visual arts in relation to history and cultures

Methods/Procedures:
- The multi-talented Ernie Barnes was born in Durham, North Carolina on July 15, 1938. The Dutch Master Rembrandt was also born on this date. A few notable biographical features include:
  * Ernie Barnes painted a mural on the walls of his high school cafeteria. At the time of his graduation in 1956, he received twenty-six athletic scholarship offers. Ernie was the tenth-round draft choice of the world championship Baltimore Colts. Prior to this selection, the Washington Redskins revoked their eighth-round pick of Ernie Barnes.
  * From 1960-1962, Ernie Barnes played offensive guard for the San Diego Chargers. During the next two years, he played the same position for the Denver Broncos. Never abandoning his passion for painting, Barnes was commissioned by Sonny Weblin, the owner of the New York Jets, to complete a series of paintings. His first exhibition, displayed at the Grant Central Art Galleries in New York City, was titled “Football in Action”. Interestingly, earnings from sale of the paintings exceeded his NFL salary. In 1966, he decided to retire from football in order to pursue a full-time career as an artist. Ernie Barnes was twenty-eight years old at the time. In 1983, Barnes was named to the “All-Time Black College Football Team” by the Sheridan Black Network.
  * From 1968 to the present, Ernie Barnes has enjoyed a variety of solo painting exhibitions in major cities such as New York, Washington, D.C., and Los Angeles. His work has attracted the attention of a variety of notable people, including the actor Charlton Heston, Ethel Kennedy, wife of Senator Robert Kennedy, Los Angeles Mayor Tom Bradley, actor Sylvester Stallone, singer Marvin Gaye, actor Will Smith and R&B star B.B. King. During this period, he broadened his themes to include record album covers and paintings with social issues.
  * Ernie Barnes has received world-wide recognition for his work. In 1966, he was appointed the “Official Artist” of the American Football League. He was designated the official sports artist for the 1984 Olympic Summer Games in Los Angeles. In 2004, the American Sport Art Museum and Archives named Ernie Barnes “America’s Best Painter of Sports.”
  * Also involved in the world of entertainment, Ernie Barnes created the CBS television variety show “Super Comedy Bowl” in the late 60’s. The program featured many well-known football players in addition to notable celebrities such as Lucille Ball, John Wayne and Burt Lancaster. Barnes also pursued a career in acting and was featured in several films, including “Number One” with Charlton Heston, “Doctors’ Wives with Richard Crenna and Gene Hackman, and “Don’t Look Back: The Story of Leroy ‘Satchell’ Paige”. He also co-starred with George Peppard, playing an anesthesiologist on the soap opera “Doctor’s Hospital” in 1981.
Ernie Barnes: Athlete and Sports Artist

* In 1995, Ernie Barnes wrote his autobiography titled “From Pads to Palette”. The work describes his childhood experiences, his college and professional football adventures and his evolution as an artist.

- Ask students to research Ernie Barnes on the internet or in their local library in order to learn more about his life and view an assortment of his paintings. The website www.erniebarnes.net provides excellent images and information.
- For further understanding, divide students into groups, assigning each a particular topic about the life of Ernie Barnes. Have groups make mini presentations to the rest of the class, including PowerPoint programs with visual images.

Materials:
- Access to computers
- Access to the internet

Assessment:
- Students list facts about various aspects of the life and works of Ernie Barnes.
Goals/Objectives:
Students will:
- Design a football field using basic linear perspective drawing skills. This lesson involves concepts related to drawing near and far objects, creating a vanishing point and horizon line, and making vertical and horizontal lines with a straight edge.

National Standards: 1-Understanding and applying media, techniques, and processes; 2-Using knowledge of structures and functions

Methods/Procedures:
- On a sheet of white or manila drawing paper turned horizontally, ask students to lightly draw a horizon line spaced near the top edge. Add a vanishing point to the left or right side of the horizon line. (figure 1)
- Decide on the placement, size, and shape of the near goal post and sketch it. For a polished look, use the straight edge for the lines. Otherwise, sketch shapes (figure 2)
- Use a horizontal line to define the near end zone. Determine the width of the field and connect guidelines from these parameters to the vanishing point. Draw the distant goal post out a bit from the vanishing point, allowing for a far end zone (figure 3).
- After deciding the width of the sidelines, connect them to the vanishing point. Use a straightedge to help connect these points to the vanishing point (figure 4).
- Looking closely at the shape of the field, determine where the fifty-yard line (halfway point) would be. Draw a horizontal line at this position. Remember that the five-yard lines will appear closer together as they approach the vanishing point. With this in mind, draw the remaining five yard lines, being careful that they remain horizontal. Having the correct number (21) is less important than the visual effect (figure 5).
- Add letter, one-yard markers, players, spectators, bleachers, a stadium and other features that will enhance your drawing. Consider benches on the sidelines, a blimp, a TV crew and photographers. Add color or shade with pencil (figure 5).

Materials:
- 12” x 18” drawing paper
- Ruler or straightedge
- Pencil/eraser
- Optional coloring tools (colored pencils, pastels, markers)

Assessment:
- Display finished drawings in a visible area. Ask students to discuss the artworks, using the following guidelines: Which artworks appear to be technically correct (having horizontal and vertical lines and reasonable proportions)? Which artworks have the best visual impact - striking details, effective contrast, etc.? Which artworks are most realistic? Do any appear abstract? Why? What effects are created by perspective drawing? In what other ways could perspective drawing be used in outdoor drawings?
Visual Art

Football Field in
One-Point Perspective

Diagram of a football field in one-point perspective, showing the vanishing point and lines receding into the distance.
**Goals/Objectives:**
Students will:
- Produce a cartoon drawing of a football player, using a symmetrical fold and rub technique. This lesson focuses on the art principal of balance, and also considers proportion in figure drawing.

**National Standards:** 1-Understanding and applying media, techniques, and processes; 2-Using knowledge of structures and functions; 3-Choosing and evaluating a range of subject matter, symbols and ideas

**Methods/Procedures:**
- Fold a 12” x 18” sheet of white or manila drawing paper in half, long sides together. Turn the paper vertically with the folded edge on the left side. Lightly fold the paper from top to bottom, then unfold and turn vertically. (figure 1)
- In the top half of the paper, on the right side only, lightly sketches half a circle or oval head, a wide shoulder (figure is wearing shoulder pads) and an arm. For proper proportion, the waist should be placed on the center horizontal fold line. The arm and hand should extend past the center horizontal line. (figure 2)
- In the lower half of the right side of the paper, draw a leg and foot. The football pants should end lower than halfway between the center and bottom of the paper. Use a black crayon and heavily trace over all pencil line. (figure 3)
- To make the figure symmetrical, fold the paper along the vertical fold line. Make certain that the crayon lines are visible through the folded paper. Hold closed scissors by the cutting blades, and use one of the finger holes to firmly rub over all crayon lines. This will transfer the lines to the opposite half of the paper. Unfold and trace the transferred side. (figure 4)
- Decorate the player – decide on a color theme, number and helmet design. Use your imagination and create your own uniform design, or borrow the colors and number of one of your favorite players. (figure 5) Decorate the background or cut out the figure.

**Materials:**
- 12” x 18” sheet of white or manila drawing paper
- Pencil
- Scissors
- Coloring materials (crayons, colored pencils, markers)

**Assessment:**
- Create a colorful classroom display or bulletin board using the figures. Ask students to discuss why this figure is symmetrical (balanced). How could you make a figure that is not symmetrical? Ask students to discuss the various figures – which color combinations work well, what detail they like, etc.
Visual Art
Football Hero

1. Fold paper in half.
2. Draw a simple outline of a football player.
3. Add details to the outline, such as a helmet and jersey.
4. Cut out the shape of the player.
5. Finish the drawing by adding shadows and other details.
Goals/Objectives:
Students will:
- Experiment with various action poses of football players, coaches, referees or cheerleaders. One pose will be chosen for inclusion in a finished art work.

National Standards: 1- Understanding and applying media, techniques, and processes

Methods/Procedures:
- Students cut out the body segments shown on the attached pattern sheet.
- Matching neck, shoulder, elbow, hip and knee joints, students assemble the figure and secure joint with paper fasteners.
- Have students experiment with the action figure, thinking of football poses such as jumping, catching, kicking and passing. Don't forget other persons who play parts in football games, including coaches, referees and cheerleaders. If time allows, have students volunteer to model the poses while the class matches the pose with their action figures.
- Provide students with a piece of drawing paper. Encourage them to pose their action figure in a favorite position, and then draw it without tracing. Complete the picture by adding a uniform, helmet or other gear, additional figures, a playing field, background, colors, etc.

Materials:
- 9 paper fasteners per student
- Scissors
- Drawing paper
- Crayons or colored pencils
- Action figure pattern sheet

Assessment:
- Display the finished products. Ask students to critique the finished products, asking the following questions: What is the figure doing? How did the artist show this pose? Which joints are bent? Which joints remain straight? How does this figure show action? Ask students to model the poses seen in the finished art works.
Goals/Objectives:
Students will:
- Create a football theme design in which all positive and negative spaces are used, fitting tightly together like pieces in a puzzle. This lesson utilizes art elements of pattern, shape, line and color and space, along with the art principles of rhythm and repetition.

National Standards: 1-Understanding and applying media, techniques, and processes

Methods/Procedures:
- On the index card or 4” x 6” piece of tag board, have students draw a shape or portion of a shape using a line that begins and ends at the top of the card. The card should have long sides turned horizontally. The shape should resemble a portion of a football helmet, football, spiked shoe, jersey or any other relatively simple shape related to the sport.
- Cut out the shape. Without turning it over, slide the shape to the bottom of the card and tape it edge to edge. Use a ruler or straightedge to be certain the taped shape is directly under the cut out shape.
- Turn the white drawing paper horizontally. The index card can be traced three times across the top of the paper. To begin, line up the top left corner of the card, shape on the top edge, with the top corner of the drawing paper. Trace all sides, including the cut out shape.
- Move the card down the side of the paper until the cutout along the top edge is aligned with the shape taped to the above traced shape. Repeat at the bottom. Continue tracing the remaining sides. Move the card to the top and begin tracing the center section of the paper. Repeat for the right side.
- Allow students to decorate the shapes, using color details. The drawings can be detailed, and background shapes can be added. See figure 5. For true repetition, all traced shapes should match in design and color. For more information, research the works of M.C. Escher, the artist and mathematician who perfect this form of art.

Materials:
- One 4”x 6” index card or one piece of tag board cut 4” x 6”, 12’ x 18” white drawing paper
- Pencil
- Scissors
- Masking tape
- Coloring materials such crayons, markers or colored pencils

Assessment:
- Display the works. Allow students to orally critique the designs, using descriptions of colors, shapes, pattern, line, space, rhythm and repetition.
Visual Art

Football Themed Tessellations

Figure 1

Figure 2

Figure 3

Figure 4

Figure 5
Goals/Objectives:
Students will:
- Use a repeating shape to create an overlapping group of people
- Use a variety of shapes and designs

National Standards: 1 -Understanding and applying media, techniques and processes

Methods/Procedures:
- Students cut out the torso shapes shown on the back of this page.
- Turn the background paper horizontally or vertically. Use the pattern shape(s) to create the first row of spectators. Allow small spaces between each figure. (figure 1)
- Create the second row of spectators, overlapping behind the first row. Make sure the figures are placed high enough above the first row to allow space for drawing details on their shirts. (figure 2)
- Continue creating rows until the paper is nearly filled.
- Add faces, hair, hats, arms, hands, football gear, banners, signs and other details that show your figures are loyal fans of their team. (figure 3)
- Continue creating rows until the paper is nearly filled.
- Color with crayons, markers or colored pencils.

Materials:
- 12” x 18” white drawing paper
- Scissors
- Pencil
- Crayons, markers and/or colored pencils

Assessment:
- Display the finished works of art. Ask students to write a short paragraph describing their group of fans and how they created the work of art. Share the writings with the class.
Visual Art

Gear for Spectators
Goals/Objectives:
Students will:
- Use a shape to create an original shoe design
- Use a variety of lines, shapes, colors and images

National Standards: 1 - Understanding and applying media, techniques and processes

Methods/Procedures:
- Footgear styles worn by NFL players vary with the player’s position. High tops, which provide the most support, are usually favored by linemen. Mid-cut styles, which offer moderate support, are chosen by quarterbacks and defensive backs. Low-cut shoes are considered ideal for wide receivers, where speed is essential. In addition to shoe style, there are two types of cleats on the bottoms of the shoes: molded and detachable. Cleats that detach have interchangeable spikes that can be used for a variety of field conditions. Your assignment is to transform a basic shoe pattern into a designer shoe that reflects your favorite team colors, the skills of your favorite player, or simply a colorful and fun football shoe.
- Students trace and cut out one or more of the shoe shapes shown on the back of this page.
- Turn the background paper horizontally or vertically. With pencil, add designs to the shoe uppers. This might include a team logo, a player’s initials or number or a variety of lines and shapes
- Color with crayons, markers or colored pencils.
- Write an advertisement for your shoe, including a description, size range and price.

Materials:
- 12” x 18” white drawing paper
- Scissors
- Pencil
- Crayons, markers and/or colored pencils

Assessment:
- Display the finished works of art. Ask students to orally promote their shoe based on their written advertisement.
Goals/Objectives:
Students will:
- Create an original frontal design for a jersey, employing color choices, fabric/clothing details and lettering design. This lesson focuses on use of contrast, center of interest and balance.

National Standards: 1 -Understanding and applying media, techniques and processes

Methods/Procedures:
- Fold drawing paper in half, short sides together, to create a center line. This line will be used as guide when drawing the neckline and number.
- Using pencil and ruler, divide the paper vertically into fourths, using very light guidelines. These lines represent approximate areas where sleeves are sewn onto the sides of the body.
- Decide on the thickness of sleeves, drawing them to extend to the outside edges of the paper.
- Sketch the neckline – standard jerseys usually have v-necks, but use another shape if you like.
- Add detailing – clothing that must endure the rigors of a contact sport usually has double stitching for strength. This can be shown at the sleeves, bottom and any other area you choose.
- Determine a color pattern – borrow colors from your favorite team or create your own combinations. No more than two or three colors are necessary. Highlights of black and white are often used on jerseys in conjunction with one or two other colors. Use your color pattern to create bands on the sleeves, neckline and other areas as desired. Colors should have good contrast that allows the design to be visible from a distance, especially the number(s).
- Use the fold line to help you center the number you chose. Examples of block letters are shown on the accompanying illustration, but be as creative as you’d like. Jersey numbers are often “shaded” with a second colors. Frequently, smaller numbers are sewn to the shoulders. From this viewpoint, only part of the shoulder numbers would be visible.
- Add a tag inside the neckline to show the size. Jerseys often have outside tags on the lower portion of the body that show the manufacturer’s name. This would be an ideal are to sign your name or create a company with your initials. Add any other detail you would like.
- If desired, cut out your jersey and mount on a contrasting color.

Materials:
- White or manila drawing paper, 12” x 18” or 9” x 12”
- Drawing pencil/eraser
- Ruler or straightedge
- Colored pencils, markers, crayons or other coloring media

Assessment:
- Ask the student to write an advertisement for his/her jersey, describing the type of fabric that would be used, why the color choices are successful, the durability of the shirt, other details that were used, and the approximate price of the shirt.
Visual Art

Jersey Design

ProFootballHOF.com

VA21

Pro Football Hall of Fame Youth/Education
**Goals/Objectives:**
Students will:
- Design and create a life-size Super Bowl ring from construction paper and other available materials. This lesson entails using a logo, choosing shape and other design elements, drawing and arrangement of selected components, and drawing hand details.

**National Standards:** 3-Choosing and evaluating a range of subject matter, symbols and ideas

**Methods/Procedures:**
- Pass out the tracing of a football player’s hand. Ask students to compare the size of this hand with their own. Discuss how the size of hands and fingers would guide a jewelry designer’s product planning. For example, should a ring for a child or small person look the same as one designed for a large individual? Why or why not? How do you think a jewelry designer considers the size of the wearer when creating rings and other jewelry pieces?
- Students cut out the hand pattern and trace it on skin-toned construction paper. Using their own hand as a model, ask students to add fingernails, lines and other hand details to their tracing using crayons, colored pencils or markers.
- Students cut out the ring band pattern and wrap it around the designated finger that will wear the Super Bowl ring. Trim to size and glue ring band into place.
- Each NFL team has its own logo (a symbol that represents the team) – (see NFL.com). Discuss logos of various products or organizations, such as shoes, beverages and football teams.
- Using scraps of construction paper, foil, stickers and other objects, design a Super Bowl ring for your favorite NFL team. Make sure you use the team’s name or logo in some way. Incorporate numbers to show the year the ring was awarded. Use a variety of colors, shapes and symbols. Glue the ring to the band.
- Glue the hand to a colorful 9” x 12” construction paper background, preferably matching one that matches the team’s colors.
- Students can first get ideas for their Super Bowl ring design by studying other Super Bowl rings. These can be viewed online or on display at the Hall of Fame.

**Materials:**
- Hand tracing handout
- 9” x 12” skin-tone construction paper
- Crayons, colored pencils or markers
- Glue
- 9” x 12” construction paper background

**Assessment:**
- Display finished products in a visible area. Have students discuss the art work by asking questions such as: Which art work best show a team’s logo? Which works have simple ring designs? Which ring designs are more complex? Why? Which ring designs are the largest? Which are the smallest? Which ones do you like the best and why? Ask students to use art terms such as line, color, design, pattern, balance and overlapping in their responses.
Visual Art
Jewelry Design:
Create Your Own Super Bowl Ring
LeRoy Neiman, Sports Painter

Goals/Objectives:
Students will:

• Read the biography and view assorted works of a contemporary artist whose primary work focuses on sports.

National Standards: 4- Understanding the visual arts in relation to history and cultures

Methods/Procedures:

• The contemporary artist LeRoy Neiman was born in St. Paul, Minnesota in 1927. A few notable biographical features include:
  * He was always drawing pictures and getting special treatment... showing off, copping out of other things.” At recess, he frequently tattooed designs on his classmates’ arms. In 6th grade, he won a national competition with a fish painting. When he started to work part-time during his teens, local grocers hired him to paint posters of fruit, vegetables and meat. He also did life-like portraits of the owners on the glass windows of their stores. In high school, he did advertising posters featuring school events. His early interest in boxing began in his church basement, where min tournaments were held.
  * During World War II, LeRoy Neiman dropped out of school and joined the United States Army. He served as a cook during his four year stay, but also continued to paint. His work including sets for Red Cross stage shows. “If nothing else, the army completely confirmed me as an artist,” he stated. “During this period I made my crucial discovery of the difference between the lifestyles of the officer and the PFC [private first class]. This was to become the basis of my later mission in art, to investigate life’s social strata from the workingman to the multimillionaire. I discovered that while the poor I knew so well are so often pitiable, the rich can be fools.”
  * LeRoy Neiman has stated that he has been influenced by many great artists including; Leonardo da Vinci, Rubens, Tintoretto, Impressionism, Fauvism, George Bellows and other members of the Ashcan School of art, and especially action painter Jackson Pollock, whose methods of dribbling paint onto a surface were unusual and innovative.
  * Most of Neiman’s paintings are centered on over two dozen kinds of sports, including football, basketball, boxing, billiards, hockey, swimming and cycling. “For an artist, watching a [Joe] Namath throw a football or a Willie Mays hit a baseball is an experience far more overpowering than painting a beautiful woman or leading political figure.”
  * Neiman has become a very influential artist today. Neiman enjoys “the best seat, with the best view, right up front with the owners, the movie stars, the high muckity-mucks. If that’s not good enough, he just wanders down to the dugouts, the benches on the sidelines, the dressing rooms.” He views sporting events as a sociologist as well as that of an artist.
  * Neiman also stated: “I love to study the intimate interaction between black man and white man. The cooperation between a black champion and a white trainer is a strong subject.”
LeRoy Neiman, Sports Painter

- Ask students to research LeRoy Neiman on the internet or in your local library in order to learn more about his life and view an assortment of his paintings. The website www.LeRoyNeiman.com provides excellent resources.
- For further understanding, divide students into groups, assigning each a particular topic about the life of LeRoy Neiman. Have groups make mini presentations to the rest of the class, including PowerPoint programs with visual images.

Materials:
- Access to computers
- Access to the internet

Assessment:
- Students list facts about various aspects of the life and works of LeRoy Neiman.
Pretend you are a professional photographer.

You just donated your favorite photograph to the Pro Football Hall of Fame.

Draw a picture of that photograph along with a title.
Commitment • Integrity • Courage • Respect • Excellence