

# Movement and Motion in the NFL

*Field Trip/Virtual Field Trip Program*



## **“Field Trip/Virtual Field Trip” Experience Outline:**

10 minutes – Welcome/Mission/Vision/Values

30 minutes – Discussion/Videos on Movement, Motion and Force

10 minutes – Question and Answers

## **Instructions:**

Please use the following lesson to help prepare your students for a more meaningful and interactive educational experience.



# **Subject:** Science

## **Lesson Title:** Movement and Motion in the NFL

### **Goals/Objectives:**

- Students will:
  - Study the concepts of Movement, Motion and Force and how they relate to football.
  - Review how objects can be moved in a variety of ways such as *straight, zig-zag, circular* and *back and forth*
  - Review how objects can be affected by pushing or pulling
  - Use technology to research and create

**Next Generation Science Standard:** Motion and Stability: Forces and Interactions

### **Methods/Procedures:**

#### **Prior to Program**

- The teacher can use [NFL.com](http://NFL.com) and/or [ProFootballHOF.com](http://ProFootballHOF.com) to locate examples of movement/motion/force.
- Students can demonstrate movement/motion/force by using a football.
- Students should compile a list of questions to be asked during the program.

#### **During the Program**

- Students will:
  - Learn about the Mission/Vision/Values of the Pro Football Hall of Fame.
  - Learn about movement/motion/force and how it applies to the game of football.
- Schools visiting the Pro Football Hall of Fame will be encouraged to look throughout the museum to find examples of how objects move.

#### **After the Program**

- Students will complete a *My Pro Football Hall of Fame Movement and Motion* booklet.
  - Students will write their own sentences on the bottom of each page.
  - These sentences can give additional details and/or definitions.
- Students can work individually or in teams to create slide shows, books, posters or dioramas.
- If able, the amount of change in the movement of an object depends on the mass of the object and the amount of force exerted.
  - 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:**

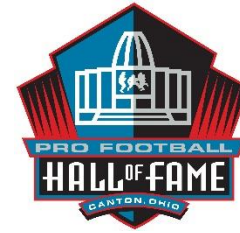
- [ProFootballHOF.com](http://ProFootballHOF.com) and/or [NFL.com](http://NFL.com)
- My Pro Football Hall of Fame Movement and Motion Booklet
- Football/Objects that can be pushed or pulled
- Possible need for electronic devices

**Assessment:**

- Teacher-created rubric



**My  
Pro Football  
Hall of Fame  
Movement and Motion Book**



**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_



**This is an example of straight movement.**

**This is an example of zig-zag movement.**



**This is an example of circular movement.**

**This is an example of back and forth movement.**



**This is an example of an object being pushed.**

**This is an example of an object being pulled.**