Movement and Motion in the NFL

Field Trip/Virtual Field Trip Program

Field Trip/Virtual Field Trip Experience Outline:
10 minutes – Welcome/Mission/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 and/or 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/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 and/or 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.