

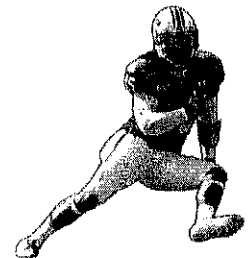
Name: _____

Student #: _____ Period: _____

Science of Football: Newton's First Law

To find the video, do a Google search for 'Science of Football: Newton's First Law'. It should be the first link. It is on the Science 360 Website.

1. Restate Newton's 1st Law:
2. When do you see Newton's 1st Law in football?
3. What is inertia?
4. Give an example of how football players use inertia during the game.
5. Explain why it is beneficial for football players to have more mass.
6. Using Newton's first law explain why a receiver (a player who runs to catch the ball) is typically less massive than the linemen (the players who try to tackle the quarterback).



Name: _____

Student #: _____ Period: _____

Science of Football: Newton's Third Law

To find the video, do a Google search for 'Science of Football: Newton's Third Law'. It should be the first link. It is on the Science 360 Website.

1. Restate Newton's Third Law:
2. When do you see Newton's 3rd Law in football?
3. How does tackling relate to Newton's 3rd Law?
4. What is momentum? What is the Law of Conservation of Momentum?
5. How does a Newton's Cradle work?
6. True or False: When one player tackles (collides with) another player, a different force is applied on both players. _____
7. Using Newton's third law, explain why the player who makes the tackle can be injured just as much as the player who was tackled.

