

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

Period: \_\_\_\_ Subject: \_\_\_\_\_

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

# TV Announcer (Physics of Sports)

## Important Terms

Next to each numbered physics term, write the letter of the correct definition for that term:

- |                                   |  |
|-----------------------------------|--|
| 1. _____ kinetic energy           | a. Downward force exerted by an object due to gravity  |
| 2. _____ force                    | b. An object in motion stays in motion, an object at rest stays at rest stays at rest, unless acted upon by an outside force |
| 3. _____ work                     | c. Rate at which your position changes; how fast you go  |
| 4. _____ friction                 | d. Force applied over a distance; same units as energy   |
| 5. _____ weight                   | e. Amount of matter in something   |
| 6. _____ acceleration             | f. For every applied force there's an equal and opposite force   |
| 7. _____ Newton's Third Law       | g. Energy is neither created nor destroyed, type is just changed   |
| 8. _____ inertia                  | h. Distance above the ground or other reference point  |
| 9. _____ potential energy         | i. Energy related to motion  |
| 10. _____ speed                   | j. Acceleration that attracts two masses to each other   |
| 11. _____ Newton's Second Law     | k. A measure of how long it takes for something to happen  |
| 12. _____ conservation of energy  | l. Change in speed   |
| 13. _____ gravity                 | m. Energy due to height  |
| 14. _____ mass                    | n. Ratio that describes "slip" or "grip" between two surfaces  |
| 15. _____ Newton's First Law      | o. A push or pull that can accelerate an object  |
| 16. _____ distance                | p. negative acceleration; acceleration in the opposite direction   |
| 17. _____ time                    | q. $F = ma$  |
| 18. _____ deceleration            | r. Force that resists motion due to contact between objects  |
| 19. _____ coefficient of friction | s. The difference in position between two objects  |
| 20. _____ height                  | t. Tendency of matter to stay at rest or stay in motion  |