

## Physics Works questionnaire based on 7<sup>th</sup> grade curriculum.

### Fill in the blank:

1. For every action there is an \_\_\_\_\_ and opposite \_\_\_\_\_.
2. An object at rest will \_\_\_\_\_ at rest.
3. The greater the force the greater the change in \_\_\_\_\_.
4. List three basic simple machines \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.
5. Force equals mass times \_\_\_\_\_.

### Question and Answer:

6. A block and tackle is an example of what kind of simple machine?
7. What do you call an influence that tends to push, pull or accelerate an object?
8. What Greek mathematician invented a simple machine that was used to move water?
9. What simple machine is used to reduce the force needed to lift an object by prying?
10. Speed and direction refers to what physics term?

### Multiple Choice:

11. The amount of force times the distance an object is moved is called \_\_\_\_\_.
  - a. Work
  - b. Acceleration
  - c. Energy
  - d. Gravity

12. Which inventor had three important Laws of Motion?
- Archimedes
  - Galileo
  - Newton
  - Foucault
13. In terms of human anatomy, your arm works like what simple machine?
- Pulley
  - Inclined plane
  - Lever
  - Wheel and axle
14. First, Second and Third class levers are determined by the location of the object being moved and the \_\_\_\_\_.
- Mass
  - Fulcrum
  - Angle
  - Distance
15. What has the potential to slow a moving object?
- Friction
  - Gravity
  - Neither a nor b
  - Both a and b

### Physics Formulas:

16. Work = Force X \_\_\_\_\_
17. Force = Mass x \_\_\_\_\_
18. Distance = velocity x \_\_\_\_\_
19. Velocity = acceleration x \_\_\_\_\_
20. Weight = mass x \_\_\_\_\_

## Answers to PhysicsWorks Questionnaire

1. equal, reaction
2. remain
3. motion
4. pulley, inclined plane, lever, wheel and axle, wedge
5. acceleration
6. pulley
7. force
8. Archimedes
9. lever
10. velocity
11. a, work
12. c, Newton
13. c, lever
14. b, fulcrum
15. d, both a and b
16. distance
17. acceleration
18. time
19. time
20. gravity