

Name _____



Date _____

Forces and Motion

Complete.

motion	work	force	gravity
simple machine	friction	mass	speed
volume	weight		

Matching

Match each definition with a word.

- _____ A change in the position or place of something.
- _____ A measure of the amount of force needed to move something a certain distance.
- _____ A tool that helps people do work. This includes the pulley, the wheel and axle, the lever, the inclined plane, the screw, and the wedge.
- _____ A force that pulls objects towards each other.
- _____ The amount of matter that an object has.
- _____ The amount of 3-dimensional space occupied by an object.
- _____ A measure of the force of gravity on an object.
- _____ Energy in the form of a push or a pull.
- _____ A push or a pull.
- _____ A measure of how fast something moves over a distance.

Multiple Choice

Select the definition that most nearly defines the given word.

- _____ **force**
A. A measure of how fast something moves over a distance.
B. A push or a pull.
- _____ **simple machine**
A. A tool that helps people do work. This includes the pulley, the wheel and axle, the lever, the inclined plane, the screw, and the wedge.
B. The amount of matter that an object has.
- _____ **volume**
A. The amount of 3-dimensional space occupied by an object.
B. A force that pulls objects towards each other.
- _____ **speed**
A. Energy in the form of a push or a pull.
B. A measure of how fast something moves over a distance.



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15. _____ **friction**
A. A tool that helps people do work. This includes the pulley, the wheel and axle, the lever, the inclined plane, the screw, and the wedge.
B. Energy in the form of a push or a pull.
16. _____ **gravity**
A. A measure of the force of gravity on an object.
B. A force that pulls objects towards each other.
17. _____ **mass**
A. The amount of matter that an object has.
B. A push or a pull.
18. _____ **motion**
A. A change in the position or place of something.
B. The amount of 3-dimensional space occupied by an object.
19. _____ **weight**
A. A measure of the force of gravity on an object.
B. A measure of the amount of force needed to move something a certain distance.
20. _____ **work**
A. A change in the position or place of something.
B. A measure of the amount of force needed to move something a certain distance.

Review

21. _____ The force of friction increases with the mass of matter.
A. True
B. False
22. _____ You want to go to edHelper Café, but you do not know where it is. Your friend said all of the following. Which statement describes the position of edHelper Café?
A. "edHelper Café is on the corner of N. Washington Street and King Street."
B. "To go to edHelper café from here, you will go two blocks north to N. Washington Street, turn right, and go straight for three or four blocks until you get to King Street."
C. "It is about a 10-minute walk. The Café has a nice outdoor sitting area."
D. "edHelper Café is not too far away from the Museum of Art."
23. _____ Which of the following about force is NOT true?
A. A lever must have a load, a fulcrum, and a force.
B. The size of a force increases when the amount of energy decreases.
C. Putting oil on door hinges to make it squeaky will reduce friction.
D. When an object moves, its position will change.
24. _____ What kind of simple machine is used to raise a flag to the top of the flagpole?
A. A wheel and axle
B. A pulley
C. A lever
D. An inclined plane
25. _____ A fulcrum is the center point of a lever bar.
A. True
B. False



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26. _____ is a kind of force that can slow down a moving object.
- A. Gravity
 - B. Push
 - C. Friction
 - D. Pull
27. _____ A _____ is an example of a simple machine.
- A. Seesaw
 - B. Sled
 - C. Swing
 - D. Scooter
28. _____ Forces can NOT change the direction of a moving object.
- A. False
 - B. True
29. _____ A force can be a push or a pull.
- A. True
 - B. False
30. _____ Which can change the way an object moves?
- A. Throwing a paper plane
 - B. Kicking a moving soccer ball.
 - C. Stopping a running toy train by placing a block in front of it.
 - D. All of the above

Answer Key

1. motion
2. work
3. simple machine
4. gravity
5. mass
6. volume
7. weight
8. friction
9. force
10. speed
11. B
12. A
13. A
14. B
15. B
16. B
17. A
18. A
19. A
20. B
21. (B)
22. (A)
23. (B)
24. (B)
25. (B)
26. (C)
27. (A)
28. (A)
29. (A)
30. (D)