



## Third Quarter Assessment

Encircle the letter of the best answer.

1. Which of these statements is true?
  - a. Friction opposes the motion of objects.
  - b. Friction can occur even between surfaces that are not in contact with each other.
  - c. Friction acts in the same direction as the object's motion.
  - d. Friction speeds up the movement of objects.
  
2. What is the direction of friction between a moving object and a surface?
  - a. toward the direction of the object's motion
  - b. in the same direction as the object's motion
  - c. opposite to the direction of the object's motion
  - d. perpendicular to the direction of the object's motion
  
3. Will it be easier for a person to push a table on a carpeted floor than on a waxed floor?
  - a. Yes, because the carpeted floor is smoother, so the friction is lesser.
  - b. Yes, because the carpeted floor is smoother, so the friction is greater.
  - c. No, because the carpeted floor is rougher, so the friction is lesser.
  - d. No, because the carpeted floor is rougher, so the friction is greater.
  
4. A person is pushing a grocery cart northwards. In what direction is friction acting on the cart?
  - a. north
  - b. south
  - c. east
  - d. west
  
5. Which statement is correct?
  - a. The smaller the surface area of the objects in contact with each other, the greater the friction and the longer the distance travelled.
  - b. The smaller the surface area of the objects in contact with each other, the greater the friction and the shorter the distance travelled.



- c. The bigger the surface area of the objects in contact with each other, the greater the friction and the longer the distance travelled.
  - d. The bigger the surface area of the objects in contact with each other, the greater the friction and the shorter the distance travelled.
6. True or false - Friction can be helpful.
- a. True
  - b. False
7. We get our energy from the food we eat, which stored that energy in what form?
- a. nuclear energy
  - b. thermal energy
  - c. chemical energy
  - d. mechanical energy
8. The type of energy that is found in objects that are moving or have the potential to move is \_\_\_\_\_.
- a. electrical energy
  - b. nuclear energy
  - c. radiant energy
  - d. mechanical energy
9. The form of energy that is generated when an object vibrates is \_\_\_\_\_.
- a. vibrant energy
  - b. radiant energy
  - c. sound
  - d. light
10. The type of energy that is stored in the bonds between the atoms that make up compounds is \_\_\_\_\_.
- a. mechanical energy
  - b. chemical energy
  - c. electrical energy
  - d. nuclear energy



11. True or false - When you are perched on top of a water slide, you have mechanical energy.
  - a. True
  - b. False
  
12. When you light a candle, which energy transformation takes place?
  - a. light → chemical and heat
  - b. light → mechanical and heat
  - c. chemical → light and heat
  - d. chemical → electrical and heat
  
13. What is almost always produced when there is energy transformation?
  - a. heat
  - b. light
  - c. electricity
  - d. chemical energy
  
14. The law of \_\_\_\_\_ of energy states that energy can neither be created nor destroyed. It can be transformed/converted from one form to another but the total amount of energy remains the same.
  - a. transformation
  - b. transition
  - c. conversion
  - d. conservation
  
15. You are one of the students assigned to raise the Philippine flag during your school's flag ceremony. What simple machine are you using to pull it up?
  - a. inclined plane
  - b. lever
  - c. pulley
  - d. wedge
  
16. Simple machines are common in our day-to-day lives. When you chop onions for cooking, you are actually using which simple machine?
  - a. lever
  - b. pulley
  - c. screw
  - d. wedge



17. Chances are, you bring one or more simple machines to school every day. When you open and close the lid of your water bottle, what kind of simple machine are you using?
- inclined plane
  - screw
  - wedge
  - wheel and axle
18. Most buildings have ramps that people on wheelchairs can navigate more easily than stairs. A wheelchair is an example of a device that has a wheel and axle, while the ramp is an example of which simple machine?
- inclined plane
  - lever
  - screw
  - wheel and axle
19. The fixed point of a lever is known as the \_\_\_\_\_.
- load
  - force
  - fulcrum
  - pivot
20. There are three classes of levers, based on the position of their effort, load, and fulcrum. Which of these levers does not belong to the same class as the others?
- scissors
  - seesaw
  - tongs
  - none - all three belong to the same class of lever