Module Test: Energy and Motion

1) Which is kinetic energy?

- ○ the energy of a moving object
- ○ energy that is increasing
- ○ energy that is decreasing
- ○ energy that is stored in the position, or structure, of an object

2) Another name for stored energy is _____ energy.

3) The law of conservation of energy states that energy cannot be _____ or _____.

- ○ gained; released
- ○ used; wasted
- ○ created; destroyed
- ○ heated; frozen

4) Fill in the blanks using the available answer choices.

As the amount of force on an object increases, the acceleration of the object _____ (Blank 1).

Blank 1 options
- increases
- decreases

5) Which best describes the type of energy that a bike has when it travels on a flat sidewalk?

- ○ kinetic energy
- ○ potential energy
- ○ sound energy
- ○ chemical energy

6) The amount of kinetic energy an object has is related to its mass and _____.

7) Fill in the blanks using the available answer choices.

The skateboarder will not stop unless acted upon by _____ (Blank 1).



Blank 1 options
- balanced forces
- unbalanced forces

Module Test: Energy and Motion

8) If two puppies pull on a plastic ring with equal force, the ring does not move. This is an example of _____.

- ○ balanced forces
- ○ unbalanced forces
- ○ acceleration
- ○ friction

9) When an elevator is accelerating upward in a building, there are unbalanced forces acting on it.

- ○ True
- ○ False

10) How does the energy change when work is done on an object?

11) Fill in the blanks using the available answer choices.

Velocity is measured using the _____ (Blank 1) and _____ (Blank 2) of an object.

Blank 1 options
- speed
- inertia

Blank 2 options
- direction
- force

12) A horse that is accelerating is _____.

- ○ standing still
- ○ maintaining its speed
- ○ decreasing in weight
- ○ slowing down

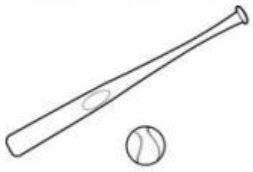
13) Fill in the blanks using the available answer choices.

The more friction between colliding objects, the _____ (Blank 1) heat produced during a collision.

Blank 1 options
- more
- less

LIVEWORKSHEETS

14) Use the example of a baseball and bat to describe the forces acting on the baseball before and at the moment it comes in contact with the bat.

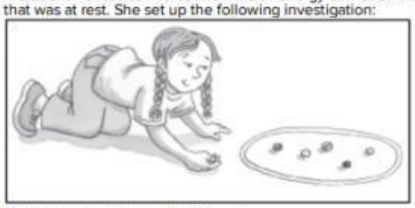


15) Which force will stop a moving truck?

- ○ friction
- ○ inertia
- ○ newtons
- ○ balanced forces

Module Test: Energy and Motion

16) A student wanted to find out how much energy of motion would be needed to move a marble that was at rest. She set up the following investigation:



What data should she gather?

- ○ what the temperature is that day
- ○ how fast the marble travels
- ○ what colors the marbles contain
- ○ how many boys and girls are helping

17) Describe an example when kinetic energy is transferred between objects.

18) Which has the most kinetic energy?

- ○ a wagon moving at 2 meters/second
- ○ a wagon moving at 4 meters/second
- ○ a wagon moving at 6 meters/second
- ○ a wagon moving at 8 meters/second

LIVEWORKSHEETS