

Simple Machines

Read each question and circle the correct answer.

1. What do all simple machines have in common?

- A. They have a mechanical advantage.
- B. They have few or no moving parts.
- C. They can be used to do work.
- D. All of the above

2. When you use a simple machine to do work, _____.

- A. distance increases and force decreases
- B. distance and force both increase
- C. distance and force both decrease
- D. distance decreases and force increases

3. Genesis is moving a box of books into her treehouse. How will the amount of work change if she uses an inclined plane to get to the treehouse?

- A. The amount of work will decrease when she uses the inclined plane.
- B. The amount of work will not change when she uses the inclined plane.
- C. The amount of work will increase when she uses the inclined plane.
- D. The amount of work will decrease at first and then increase.

4. What might an inclined plane be used for?

- A. holding objects together
- B. splitting an object apart
- C. raising and lowering objects
- D. moving an object along the ground

5. Which simple machine would be most helpful for cutting fruit?

- A. an inclined plane
- B. a wedge
- C. a pulley
- D. a wheel and axle

6. A screw could best be used for which of the following tasks?

- A. moving clothes on a clothesline
- B. holding two pieces of wood together
- C. moving rocks from one end of your driveway to another
- D. cutting carrots and celery

7. Which of the following is an example of a lever being used to do work?

- A. A woman uses a crowbar, a stick that can be moved back and forth to raise the lid on a box.
- B. A dog finds a stick on the ground and sniffs at it but doesn't move it.
- C. A woman turns a wheel to steer a car.
- D. A child pulls down on a rope to raise a flag.

8. Which of the following is an example of a wheel and axle being used to do work?

- A. A dog walks on four legs.
- B. A girl skis down a hill.
- C. A boy rolls down the street on roller skates.
- D. A bird flies from one branch to another.

9. Which of the following is an example of a pulley being used to do work?

- A. lowering the blinds of a window by pulling a rope attached to a wheel
- B. raising a person into the air by sitting on one end of a seesaw
- C. using your teeth to bite into an apple
- D. opening a door by turning a knob and pushing forward

10. Which of the following is an example of a compound machine?

- A. a string that can be pulled and tied to tighten shoes
- B. a strap on a suitcase that goes over one shoulder
- C. a pair of sunglasses that has two lenses
- D. a wheel, lever and wedge that, used together, open a can