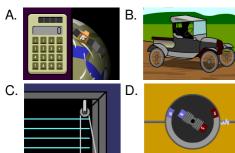


1. Which of the following is a simple machine?



2. What is the benefit of a simple machine?

- A. It allows us to convert motion into electricity
- B. It prevents us from making careless mistakes
- C. It uses magnets to move objects
- D. It allows us to move objects more easily

3. What is an axle?

- A. The tire that fits around a wheel
- B. The rod around which wheels rotate
- C. A type of inclined plane
- D. The rope that is strung through a pulley

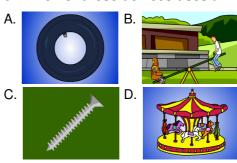
4. What is a fulcrum?

- A. A metal rod that connects two wheels
- B. A fixed point around which a wheel and axle rotate
- C. A very large type of wheel and axle
- D. A device that combines a wheel and axle with an inclined plane

5. Which of the following statements is true?

- A. The wheel and axle multiply the force you apply to them
- B. The wheel and axle lessen the force you apply to them
- C. The wheel and axle make sure the level of force you apply is consistent
- D. The wheel and axle require a tremendous amount of force to operate

6. Which of these devices uses a wheel and axle?



7. Why don't we just remove the wheel and turn the axle?

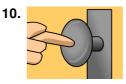
- A. Turning the axle directly requires too much effort
- B. Without the wheel, the axle is useless
- C. The wheel balances out the weight of the axle
- D. An axle cannot turn on its own

8. Which answer correctly describes wheel and axle movement?

- A. The wheel and axle move the same distance and turn with the same amount of force
- B. The wheel moves a lesser distance than the axle but turns with greater force
- C. The wheel moves a greater distance than the axle but turns with less force
- D. The wheel moves, while the axle stays completely still

9. A wheel and axle is basically just a rotating version of what?

- A. A lever
- B. A pulley
- C. An inclined plane
- D. An electromagnet



In a doorknob, what part functions as the wheel?

- A. The knob itself
- B. The metal rod in the middle
- C. The fulcrum
- D. The keyhole