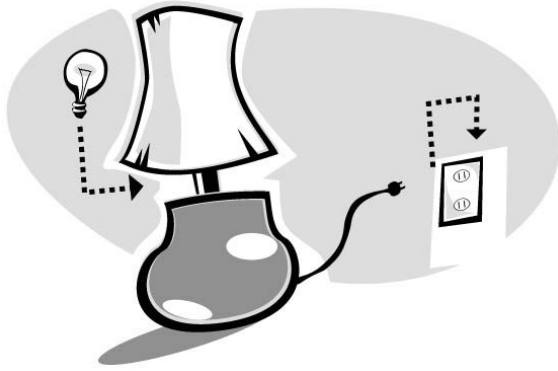


CISD Grade 4 Science Unit 03

Some questions (c) 2012 by CSCOPE.

- 1** Look at the picture below. Which part could be removed and the lamp still work?

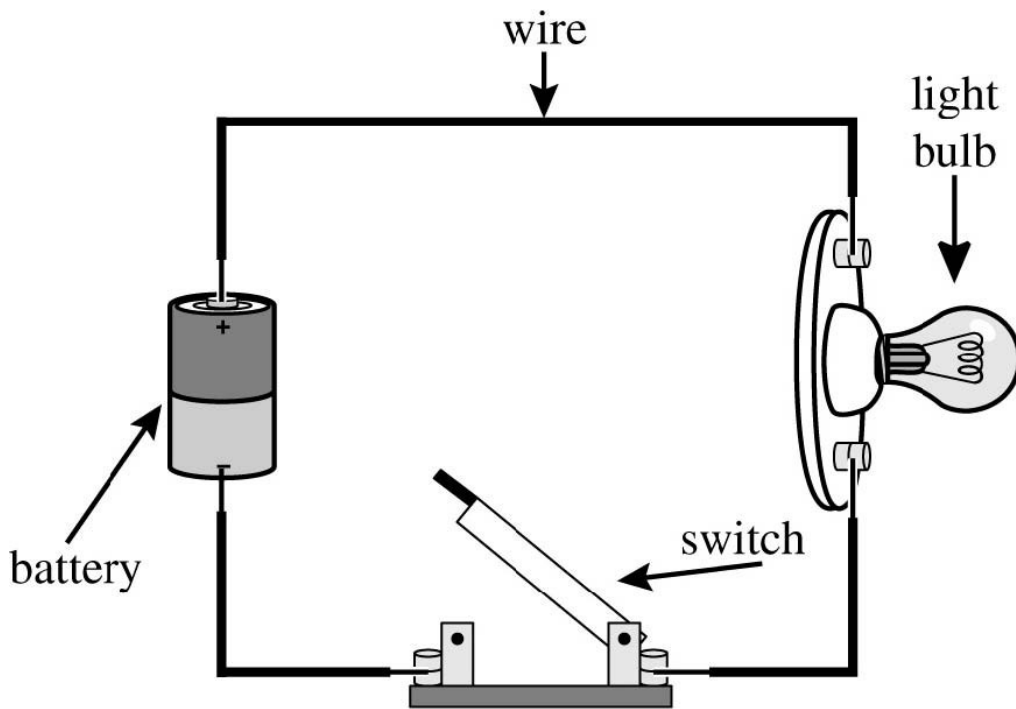


- A** the electrical cord
- B** the bulb
- C** the lamp shade
- D** the wall outlet
- 2** Charlie went camping and packed his flashlight. When it got dark, he tried to turn on the flashlight; however, it didn't work. There are several reasons why it would not work. All of the following could be reasons the flashlight failed to work EXCEPT —
- F** There were no batteries in the flashlight.
- G** He didn't turn the switch from off to on.
- H** The batteries were old.
- J** The clear lens protecting the light bulb had a scratch on it.

- 3** Which object is the best conductor of electricity?
- A** stainless steel spoon
- B** styrofoam cup
- C** plastic fork
- D** wood fan
- 4** What form of energy is being used when a person pushes heavy boxes across the floor?
- F** electrical
- G** magnetic
- H** sound
- J** mechanical
- 5** You have a choice of four containers to carry cold soda in on a field trip. Which container would insulate your cold drink the MOST?
- A** metal
- B** glass
- C** plastic
- D** styrofoam

- 6** Mary turned the light off and went to bed. She accidentally left her glass on the counter. The glass still had ice in it. When she got up the next morning, the ice had melted. What form of energy caused the ice to melt?
- F** heat
 - G** sound
 - H** light
 - J** mechanical

-
- 7** Which form of energy is formed when a guitar string vibrates?
- A** magnetic
 - B** sound
 - C** electrical
 - D** potential



- 8** What happens when the switch is removed or broken?
- F** The light bulb cannot be turned on.
 - G** The wire will break.
 - H** The battery will connect to the light bulb and turn it on.
 - J** It connects the battery to the light bulb.
- 9** What is the role of the battery?
- A** to turn the circuit on and off
 - B** to provide power to the circuit
 - C** to provide light to the circuit
 - D** to connect the switch to the bulb

- 10** Lana was conducting an experiment to see how the amount of force used to pull an object affects how fast it can cover 3 meters. Which of the following would NOT be needed for the experiment?
- F** meter stick
 - G** magnet
 - H** stop watch
 - J** spring scale

- 11** Lana took detailed data for the experiment. She put it in the data table below.

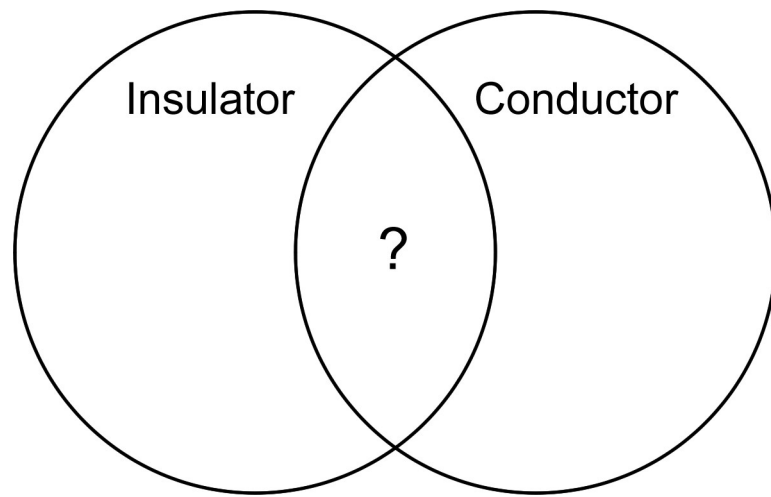
| Force applied | Time to travel 3 m |
|---------------|--------------------|
| 1 N | 3.0 sec |
| 2 N | 2.2 sec |
| 3 N | 1.5 sec |
| 4 N | 1.0 sec |

Create a graph of the data

| | | | | | | | |
|--|--|--|--|--|--|--|--|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

- 12** How does the amount of force applied on an object affect its speed?

13



Which of the following terms belongs in the *Conductor* section of the above Venn diagram?

- A** can be made from wood
- B** stops energy from passing through it
- C** is made from matter
- D** allows energy to pass through it

14 Determine which item below belongs in the section labeled with the "?".

- F** plastic
- G** allows energy to flow through it
- H** is made from matter
- J** magnets