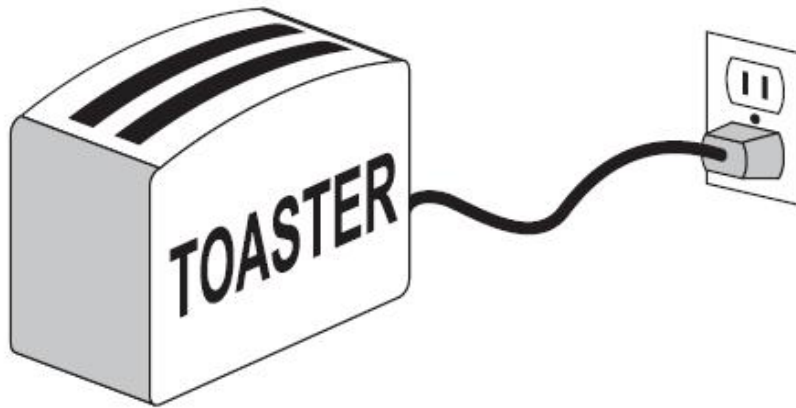


1. Copper wire is often wrapped in plastic. Plastic material is a good —

- a) circuit
- b) current
- c) electromagnet
- d) insulator

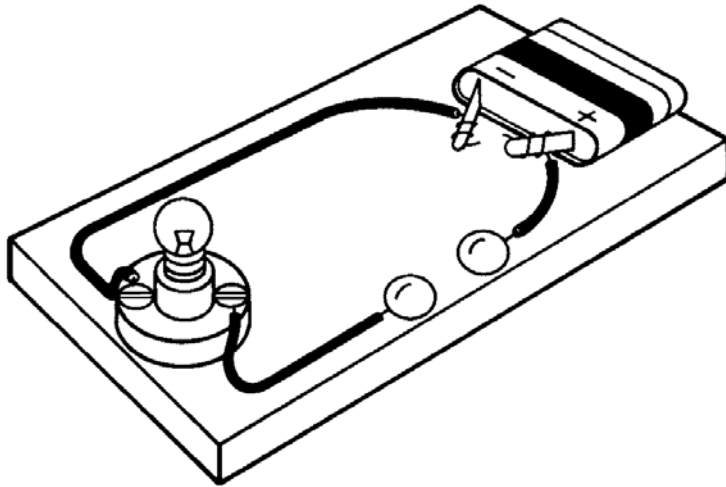
2.



Which form of energy is being used by the toaster?

- a) Solar
- b) Nuclear
- c) Electrical
- d) Chemical

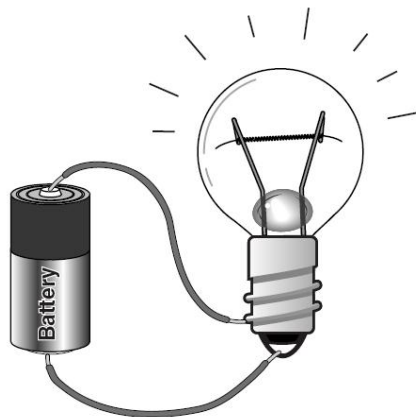
3.



This instrument can be used to see if materials conduct electricity. Which of these groups contains items that could *all* conduct electricity to complete the circuit?

- a) Cork, dollar bill, tweezers
- b) Paper clip, penny, screw
- c) Pencil, eraser, spoon
- d) Rubber ball, plastic comb, nail

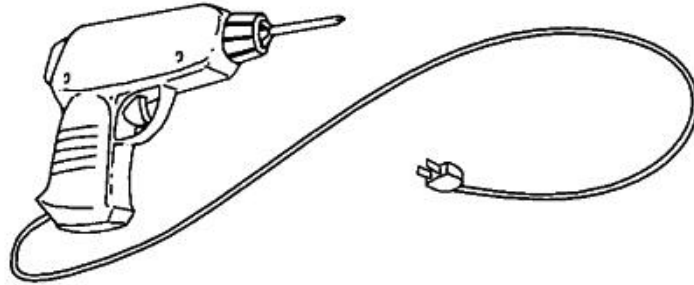
4.



The wires connecting the battery and the light bulb create a closed circuit. What would happen if one of these wires were cut?

- a) The light would go out.
- b) The glass would crack.
- c) The battery would lose its charge.
- d) The wire would become hot.

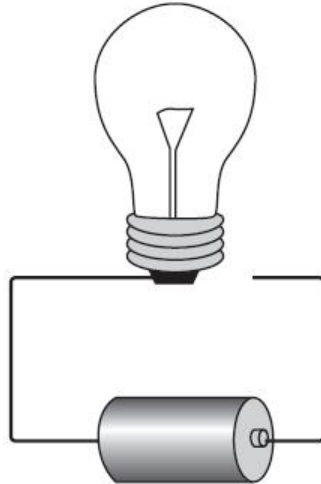
5.



When in operation, this tool transforms electrical energy mostly into —

- a) sound energy
- b) solar energy
- c) mechanical energy
- d) chemical energy

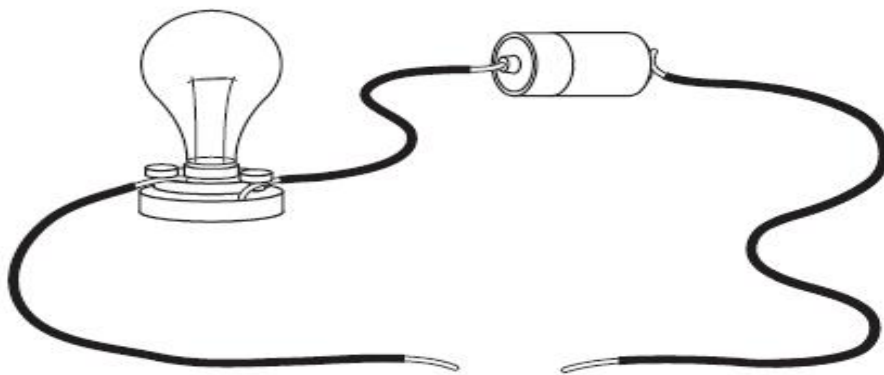
6.



Which of these best completes the circuit?

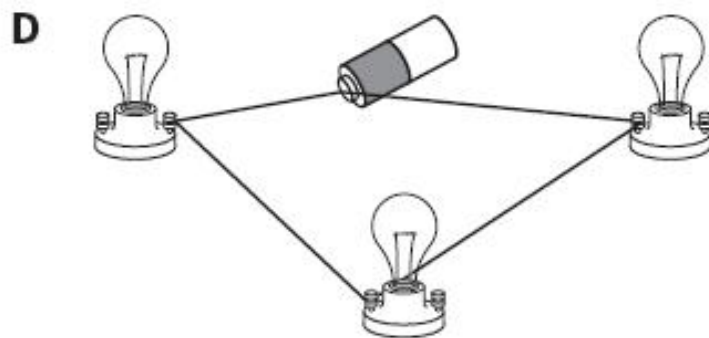
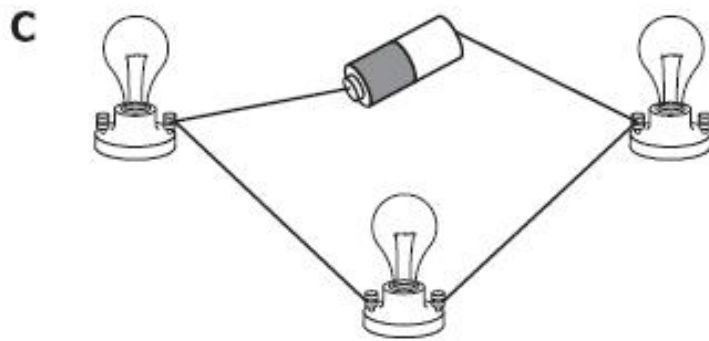
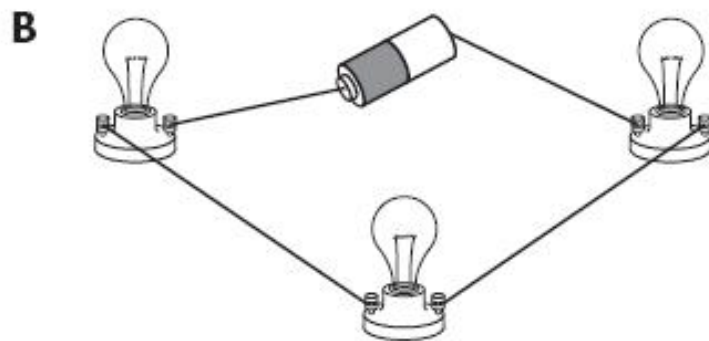
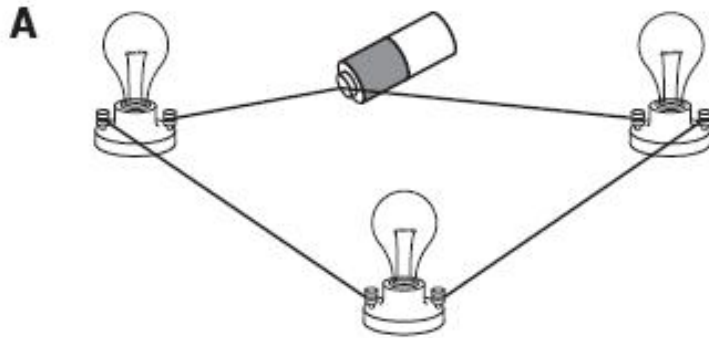
- a) Leather shoelace
- b) Metal nail
- c) Rubber band
- d) Wooden toothpick

7. A student plans to make this light bulb glow. All of the following objects can be used to complete the circuit EXCEPT —

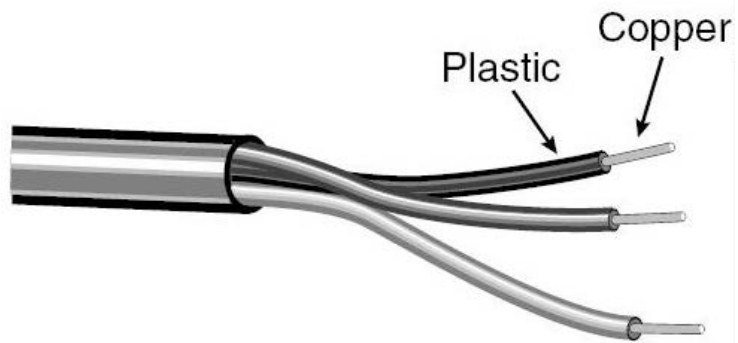


- a) a plastic comb
- b) a metal clip
- c) a copper penny
- d) an iron nail

8. A class prepared some electric circuits using a battery, connecting wires, and three light bulbs. Which of these circuits shows incorrectly wired lights and battery?



9.



Many electrical wires are wrapped with a plastic coating because plastic is —

- a) more dense than copper
- b) less expensive than steel
- c) a good insulator
- d) able to keep its shape

10. Which of these materials is a good conductor of electricity?

- a) Metal
- b) Newspaper
- c) Glass
- d) Rubber