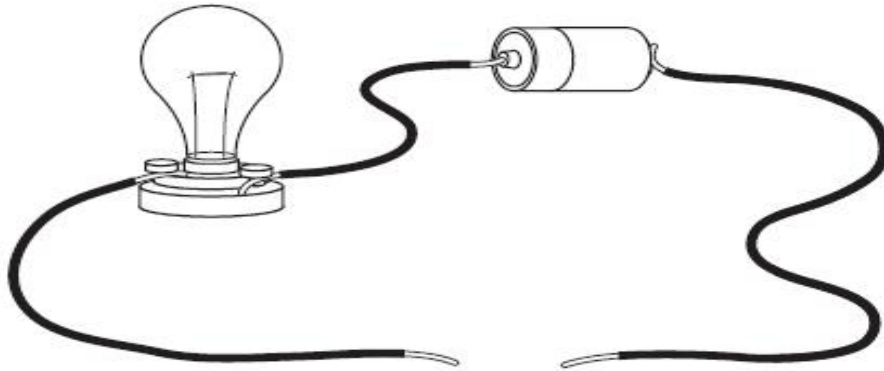


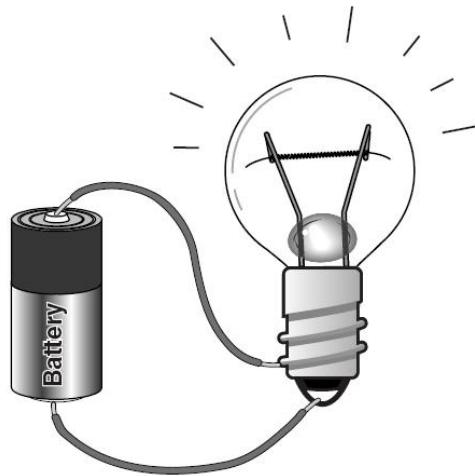
1. A student plans to make this light bulb glow.

All of the following objects can be used to complete the circuit EXCEPT —



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

2.



The wires connecting the battery and the light bulb create a closed circuit.

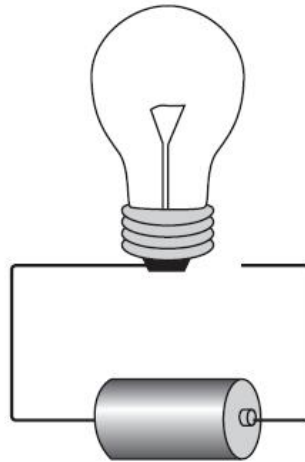
What would happen if one of these wires were cut?

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

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

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

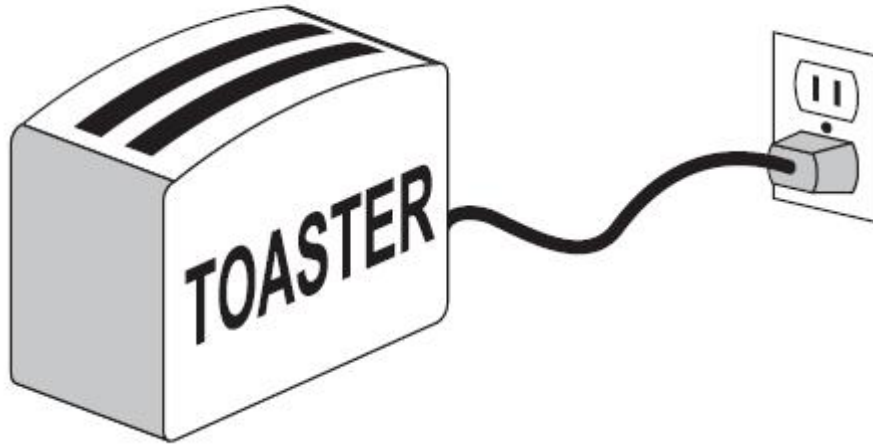
4.



Which of these best completes the circuit?

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

5.

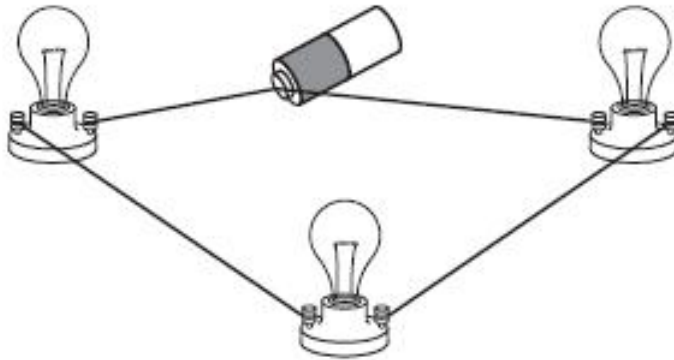


Which form of energy is being used by the toaster?

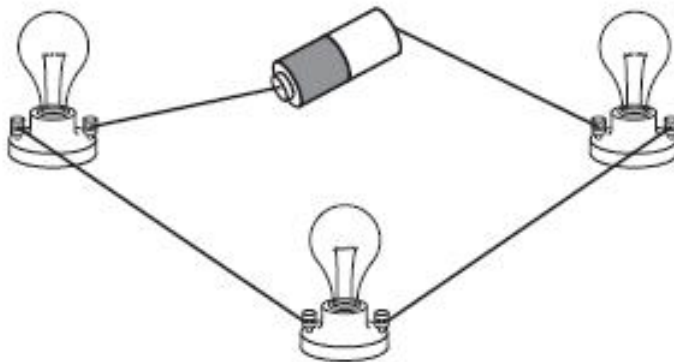
- a) Chemical
- b) Electrical
- c) Solar
- d) Nuclear

6. A class prepared some electric circuits using a battery, connecting wires, and three light bulbs. Which of these circuits can make the three bulbs light?

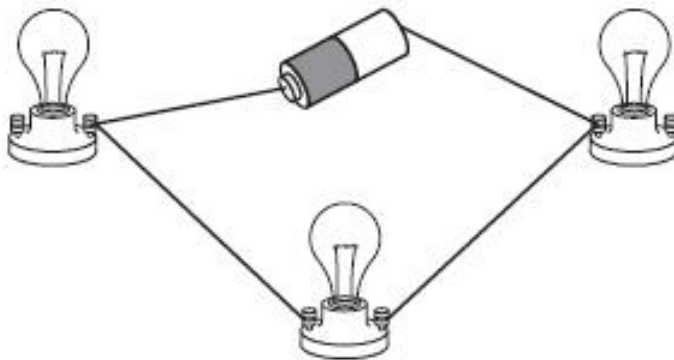
A



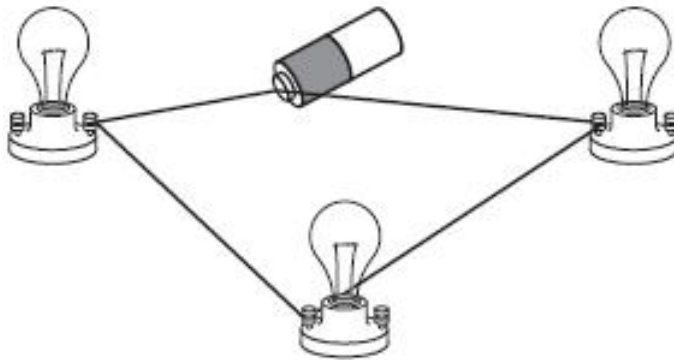
B



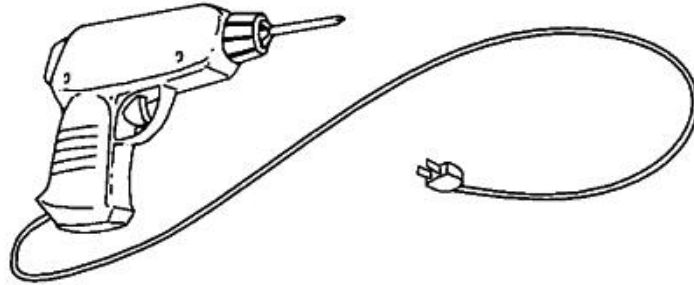
C



D



7.



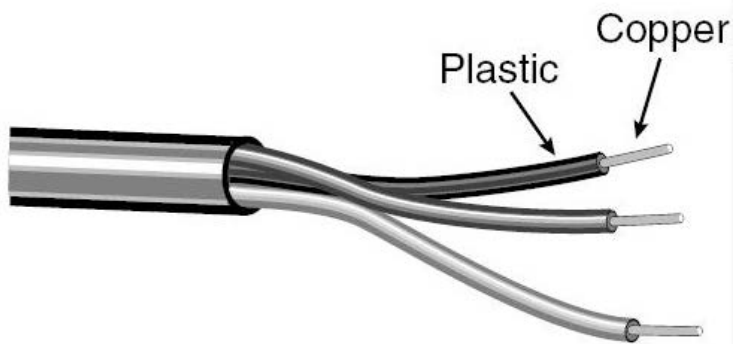
When in operation, this tool transforms electrical energy mostly into —

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

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

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

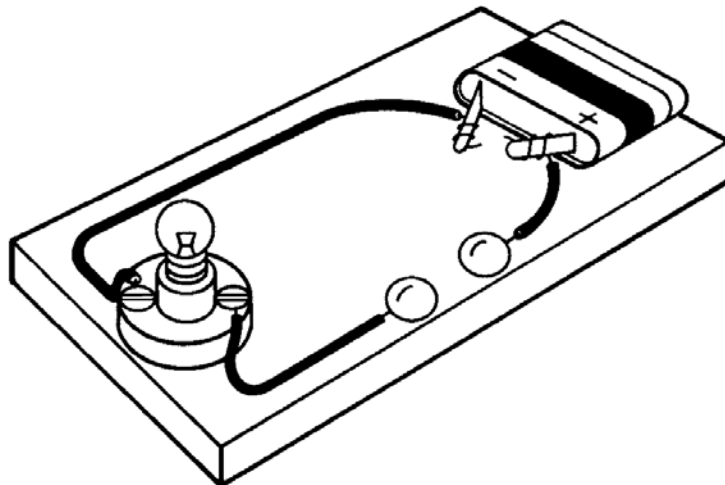
9.



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

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

10.



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