

1. Electricity is the flow of _____ .
2. How is electricity used in bumper cars? Why don't you get a shock when you touch the floor?
3. List a few of the things they tested that let electricity flow through them (conductors) and a few of the things that didn't let electricity flow through them (insulators).

Conductors:

Insulators:

4. What happened when they tested the pencil lead?
5. What is a resistor?
6. Pressure in electrical circuits is called _____ .
7. The higher the voltage the _____ electrons that want to jump.
8. The number of electrons flowing through the wire is called _____ .
9. The combination of volts and amps is called _____ .
10. Turning on a _____ completes the circuit.
11. Why do plugs have 2 prongs?

ANSWER KEY

1. electrons

2. The electricity runs from the rod touching the ceiling through the electric motor in the car, then to the floor. You don't get a shock from the floor unless you could touch the ceiling at the same time (not a complete circuit otherwise).

3. conductors: metal spoon, beaters for electric mixer (anything metal)
insulators: rubber ball, plastic, pencil (wood)

4. The light bulb lit up, but not as brightly.

5. A resistor lets some electrons go through, but not all. It's somewhere between a conductor and an insulator.

6. voltage

7. more

8. amps

9. watts

10. switch

11. To complete the circuit (electricity flows in through one prong, through the appliance, and back out through the other prong).

<https://www.youtube.com/watch?v=rg-XXdtZnQ>