

Electricity and Magnetism Pre Assessment

Concepts Assessed

Magnetism is a force that exerts a push or pull. Like poles of a magnet repel. Opposite poles of a magnet attract. A compass is an instrument that uses a freely moving magnetic needle to indicate direction. Static electricity is a build up of charge that can be released. A closed circuit is needed to light a bulb in a circuit. Switches open and close circuits. Metals conduct electricity. Electricity can be changed into heat, light, sound, or motion.

Time 45 minutes

Materials Individual
Prompt

Advance preparation 1. Duplicate the Pre-Assessment for each student

Procedure:

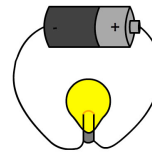
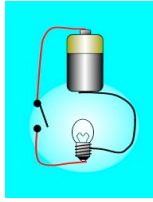
1. Explain that this assessment is to help the teacher and the students tell what they know about magnetism and electricity. Explain that they will probably not be able to answer all the questions, but to try to do their best.
2. Explain that you will use the information from this assessment to help determine how best to help students learn more about magnetism and electricity.

Electricity and Magnetism Pre Assessment

1. Magnetism is a force that _____.
 - a. pushes or pulls
 - b. freezes matter
 - c. expands and contracts
 - d. attracts wood
2. Choose the one that correctly describes magnetism.
 - a. Like poles of a magnet attract, while opposite poles repel.
 - b. Like poles of a magnet expand, while opposite poles contract.
 - c. Like poles of a magnet repel, while opposite poles attract.
 - d. Like poles of a magnet contract, while opposite poles expand.
3. List all the uses of magnets that you know.

4. How does a compass work? A compass
 - a. uses a magnet to help us find which way gravity is pulling.
 - b. uses a freely moving magnetic needle to point out direction.
 - c. tells us something about north, south, east, or west forces.
 - d. tells us what time it is in different parts of the world.
5. What is the name for the type of electricity that happens when you drag your feet on the carpet and shock your friend?
 - a. Current electricity
 - b. Magnetic electricity
 - c. Simple electricity
 - d. Static electricity
6. What is the name for the type of electricity that happens when lightning strikes?
 - a. Simple electricity
 - b. Current electricity
 - c. Static electricity
 - d. Magnetic electricity

7. Circle the picture of the bulb that will light?



8. How does a light switch work? A switch

- a. expands and contracts the circuit.
- b. attracts and repels the circuit.
- c. opens and closes the circuit.
- d. magnetizes the circuit.

9. Which of the following conducts electricity?

- a. Aluminum foil
- b. Wood
- c. Plastic
- d. Rubber band

10. Circle all that are correct. Electricity can be transferred into

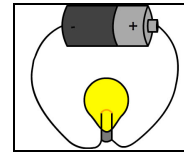
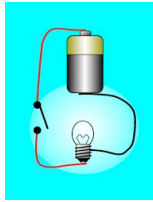
- a. Heat
- b. Light
- c. Sound
- d. Motion

11. List all the uses of electricity that you know.

Electricity and Magnetism Pre Assessment Answer Key

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