

Magnetic Materials and Non-Magnetic Materials

A. Choose the correct answer:

1. Which of the following materials is magnetic?

- a) Copper
- b) Plastic
- c) Iron
- d) Wood

2. What property makes a material magnetic?

- a) Its ability to float in water
- b) Its ability to attract iron, cobalt, or nickel
- c) Its ability to conduct electricity
- d) Its ability to glow in the dark

3. Which of these objects will NOT be attracted to a magnet?

- a) Steel nail
- b) Iron rod
- c) Aluminum foil
- d) Cobalt coin

B. Fill in the Blanks:

1. Materials that are attracted to magnets are called _____ materials.
2. Non-magnetic materials do not get attracted to a _____.
3. Iron, nickel, and _____ are examples of magnetic materials.

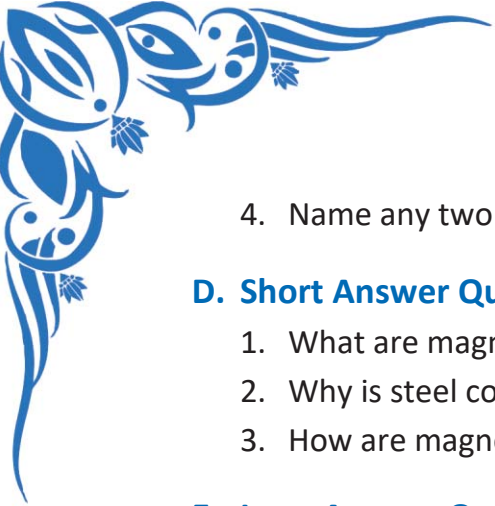
C. Case Study:

A school science club conducted an experiment to test the magnetic properties of different materials. They took objects like an iron nail, a plastic ruler, a steel spoon, and a wooden block and brought a magnet near them:

- The iron nail and the steel spoon were attracted to the magnet.
- The plastic ruler and wooden block showed no attraction.
- The teacher explained that only certain metals are magnetic, while others are not.

Questions & Answers:

1. Which materials in the experiment were magnetic?
2. Why were the plastic ruler and wooden block not attracted to the magnet?
3. What conclusion can be drawn about the materials that a magnet can attract?



4. Name any two real-life applications of magnetic materials.

D. Short Answer Questions:

1. What are magnetic materials? Give two examples.
2. Why is steel considered a magnetic material but aluminum is not?
3. How are magnets used in everyday life?

E. Long Answer Questions:

1. Explain the difference between magnetic and non-magnetic materials with examples.
2. Describe how magnets are used in industries and daily life.
3. Discuss the role of magnetic materials in technological advancements, such as electric motors and data storage devices.