

CHAPTER-4 | Exploring Magnets

QUIZ
PART-05

1. What happens to the compass needle when a wooden piece is placed between a magnet and the compass?
- It stops deflecting
 - It still deflects
 - It points East–West only
 - It spins continuously

Explanation : The needle continues to deflect, showing that magnetic force passes through wood.

2. Which materials allow the magnetic effect to act through them in the compass test?
- Cardboard
 - Thin plastic sheet
 - Thin glass sheet
 - All of the above

Explanation : The needle deflects with cardboard, plastic, and glass placed in between.

3. Which marking may be used to indicate the North pole on a magnet?
- A white dot
 - A blue stripe
 - A black cross
 - A green circle

Explanation : A white dot is used in some magnets to show the North pole.

4. In the color code for poles, which color denotes the North pole?
- Blue
 - Red
 - Yellow
 - Green

Explanation : Red denotes the North pole and blue denotes the South pole.

5. How should two bar magnets be stored safely?
- With like poles touching and no spacer
 - In pairs with opposite poles on the same side, wooden piece between, and soft iron keepers across ends
 - Hanging freely by a thread
 - Wrapped in foil and heated occasionally

Explanation : Proper storage uses opposite poles on the same side, a wooden spacer, and soft iron keepers.

6. Which actions should be avoided to keep magnets safe?
- Heating
 - Dropping or hammering
 - Keeping near mobile phones and remotes
 - All of the above

Explanation : Heat, mechanical shocks, and proximity to electronic devices should be avoided.

7. In the matchbox-magnet cars setup with like poles facing each other, what is observed?
- The cars stick together
 - The cars move apart
 - No movement occurs
 - The cars rotate in place

Explanation : Like poles repel, so the cars move away from each other without contact.

8. Which example demonstrates that magnets can move objects without touching them?
- Wooden blocks on a table
 - Steel balls guided through a maze
 - Plastic spoons floating in water
 - Paper sheets sliding on glass

Explanation : The steel-ball maze (and the steel paperclip in water) shows motion caused by a magnet at a distance.

9. What is the purpose of placing different sheets (wood, cardboard, plastic, glass) between the magnet and compass?
- To block wind around the compass
 - To test whether magnetic force passes through non-magnetic materials
 - To calibrate the compass scale
 - To increase compass weight

Explanation : The activity checks if the magnetic effect persists through various non-magnetic barriers.

10. Which accessory is placed across the ends of stored magnets?
- Copper wire
 - Soft iron keepers
 - Rubber caps
 - Aluminum foil strips

Explanation : Soft iron keepers are used across magnet ends during storage.