

Nova's Magnetic Mystery Quiz

Learning objective: To identify magnetic materials, understand the properties of magnetic poles, and explain how magnets interact with each other.

Join Nova the barn owl in her laboratory! Read each question carefully and circle the correct answer or write your response in the space provided.

Answer Key: 1. B (Iron), 2. False, 3. Repel, 4. A (North and South), 5. True, 6. Magnetic field, 7. C (Non-magnetic), 8. False, 9. Attraction, 10. True. (All questions worth 1 mark each).

Word bank: attract · repel · pole · iron · steel · magnetic field · force

1. Which of these materials is magnetic? A) Plastic, B) Iron*, C) Wood, D) Aluminium (1 mark)

2. True or False: All metals are magnetic. (1 mark)

3. If you try to push two identical North poles of a magnet together, will they attract or repel? (1 mark)

4. What are the two ends of a bar magnet called? A) North and South*, B) Left and Right, C) Top and Bottom, D) East and West (1 mark)

5. True or False: A magnet can pull on a magnetic object without touching it. (1 mark)

6. What is the invisible area of force around a magnet called? (1 mark)

7. Which of these items would NOT be picked up by a magnet? A) A paperclip, B) A steel key, C) A eraser eraser*, D) A sewing needle (1 mark)

8. True or False: If you cut a bar magnet in half, you will have one North pole piece and one South pole piece. (1 mark)

9. When opposite poles of two magnets come together, what is this force called? (1 mark)

10. 10. True or False: A magnet can act through thin materials like paper or card. (1 mark)

Draw: Draw a bar magnet and label the North and South poles. Then, draw invisible 'field lines' showing how the force moves between the poles.



Extension challenge: Nova wants to build a magnetic game! If a small metal toy costs £2.50 and you want to buy three of them, how much will they cost in total? If you pay with a £10 note, how much change will you get?