

Nova's Magnetic Mystery Hunt

Learning objective: To identify magnetic and non-magnetic materials and understand that magnets have two poles that can attract or repel.

Nova the Owl is exploring the forest floor! She has found several objects, but she needs your help to sort them. Read each item below and decide if it is attracted to a magnet or not. Then, answer the questions about how magnets behave.

Word bank: attract · repel · magnetic · non-magnetic · poles · iron · steel

1. Sort these items into 'Magnetic' or 'Non-magnetic': A steel paperclip, a plastic toy, an iron nail, a wooden pencil, a copper coin, and a gold ring. (3 marks)

2. If Nova has two magnets and brings the North pole of one magnet near the North pole of another, what will happen? (2 marks)

3. Explain why a fridge door is usually magnetic. What material must it be made of for a magnet to stick to it? (2 marks)

4. Are all metals magnetic? Use the word 'magnetic' in your answer. (2 marks)

5. If you hold a magnet near an object and nothing happens, what word would you use to describe that object? (1 mark)

Draw: Draw a diagram of two bar magnets. Label the North (N) and South (S) poles and draw arrows to show whether they are attracting or repelling each other.



Extension challenge: Design a simple experiment to test if a magnet can attract an object through a thin piece of paper or a wooden desk. Write down what you think will happen (your prediction) before you try it!