Nova’s Guide to Magnetic Forces

Learning objective: To explain how magnets attract and repel, and identify magnetic materials through scientific writing.

Use this scaffold to structure your report on magnetism. Remember to use scientific vocabulary and clear, logical explanations to help Nova the owl understand your findings.

Magnets are fascinating objects that exert invisible forces on specific materials around them.

Word bank: attraction · repulsion · magnetic field · poles · ferromagnetic · consequently · furthermore · conversely · demonstrates

1. Introduction: What is a magnet and what is the primary difference between a permanent magnet and a magnetic material? Start your paragraph by saying: A magnet is an object that... (2 marks)

2. The Poles: Describe what happens when two magnets are brought close together. Use these sentence starters: When like poles are brought together, they... However, when opposite poles are placed near each other, they... (3 marks)

3. Magnetic Materials: Which common metals are magnetic? Explain how you would test an unknown object to see if it is magnetic. Start by saying: To determine if an object is magnetic, I would... (3 marks)

4. The Magnetic Field: Describe the area around a magnet where the force is present. Start by saying: The magnetic field is an invisible region where... (2 marks)

5. Conclusion: Summarise why magnets are important in everyday life. Start by saying: In conclusion, magnets are essential because... (2 marks)

Extension challenge: Research how a compass works using a magnet. Write a short paragraph explaining how the Earth acts like a giant magnet and how this helps travellers navigate.