

Nova's Guide to Magnetic Forces

Learning objective: To explain the properties of magnets and describe how they interact with materials.

Use the prompts below to write a scientific report about magnets. Remember to use technical vocabulary and clear, factual sentences to explain your findings.

Nova the owl has been observing magnetic forces in her woodland laboratory, discovering that invisible fields surround every magnet.

Word bank: attract · repel · magnetic field · poles · force · iron · nickel · cobalt · consequently · furthermore · investigation

1. Introduction: Define what a magnet is and list the three main metals that are attracted to magnets. Begin with: A magnet is an object that... (2 marks)

2. The Poles: Explain what happens when two magnets are brought together. Use the terms 'attract' and 'repel'. Begin with: Every magnet has two poles, a North pole and a South pole. When... (3 marks)

3. Magnetic Fields: Describe the area around a magnet where the force can be felt. Begin with: The area around a magnet where the magnetic force is active is called... (2 marks)

4. Scientific Testing: If you were testing whether an object was magnetic, how would you conduct your experiment? Begin with: To determine if an object is magnetic, I would... (3 marks)

5. Conclusion: Summarise why magnets are useful in everyday life. Begin with: Magnets are very useful because they can be used to... (2 marks)

Extension challenge: Research and write a paragraph explaining how a compass works using the Earth's magnetic field.