

Nova's Rock Discovery Fact-File

Learning objective: To identify and describe the physical properties of different types of rocks.

Explore your local area or classroom collection to find three different rocks. Use this fact-file to record what you discover. Look closely at the colour, texture, and hardness of each rock to complete your report for Nova the Owl.

Word bank: sedimentary · igneous · metamorphic · texture · permeable · hardness · crystals · grains · smooth · rough

1. Rock Name and Appearance: Give your rock a name or number. Describe its colour and the patterns you can see on its surface. (2 marks)

2. Texture Test: Is the rock smooth, rough, shiny, or dull? Does it have visible grains or tiny crystals? (2 marks)

3. Hardness Investigation: Use a coin or a fingernail to gently scratch the surface. Did it leave a mark? Is the rock hard or does it crumble easily? (2 marks)

4. The Permeability Test: If you were to drop a small amount of water on the rock, do you think it would soak in (permeable) or stay on the surface (impermeable)? Why? (3 marks)

5. Classification Guess: Based on what you have learned, do you think your rock is igneous, sedimentary, or metamorphic? Explain why you think this. (3 marks)

Extension challenge: Nova wants to know how these rocks were formed! Research one of the rocks you examined and write a sentence explaining if it was formed by cooling magma, layers of sediment, or heat and pressure.