

Nova's Guide to the Rock Cycle

Learning objective: To describe the properties of rocks and explain how different types of rocks are formed.

Use this writing frame to report your findings on rocks. Use the word bank to help your writing flow, and remember to use scientific vocabulary to explain the processes of weathering and erosion.

Rocks are all around us, forming the solid ground beneath our feet and the majestic mountains that reach toward the clouds.

Word bank: sedimentary · igneous · metamorphic · permeable · magma · sediment · weathering · consequently · furthermore · in contrast · as a result

1. Introduction: Describe the three main groups of rocks. You could start by saying: 'Scientists classify rocks into three distinct categories, which are...' (2 marks)

2. Igneous Rocks: Explain how igneous rocks are formed. You could start by saying: 'Igneous rocks are created when molten magma or lava cools down and...' (3 marks)

3. Sedimentary Rocks: Describe how layers of sediment turn into rock. You could start by saying: 'Over millions of years, layers of sand and mud are compressed to form...' (3 marks)

4. Metamorphic Rocks: Explain how existing rocks change. You could start by saying: 'When rocks are exposed to intense heat and pressure deep underground, they transform into...' (3 marks)

5. Conclusion: Why are rocks useful to humans? You could start by saying: 'Humans have used rocks throughout history for many purposes, such as...' (2 marks)

Extension challenge: Research the 'Mohs scale of mineral hardness'. Write a short paragraph explaining why some rocks are harder than others and how this affects their use in construction.