

8H Rocks	Knowledge, Skills and Understanding
Higher	<p>Interpret formulae to identify the types of, and ratio of, atoms in a compound</p> <p>Compare the densities of igneous rocks and relate them to the minerals contained in the rocks</p> <p>Describe features in limestone landscapes and relate them to the way they were formed</p> <p>Compare quantitative data about the effect of speed on the size of grain that can be transported</p> <p>Describe how metals are extracted from their ores by heating with carbon or electrolysis</p> <p>Explain why the method used to extract a metal is related to its position in the reactivity series and the cost of the extraction process</p>
Intermediate	<p>Relate features of a landscape to the type of rock and how it has weathered</p> <p>Explain why certain rocks are used for certain applications</p> <p>Use crystal size to classify igneous rocks as intrusive and extrusive</p> <p>Explain the variation in crystal size in an igneous intrusion, in terms of cooling rate</p> <p>Describe how weathering can break up rocks</p> <p>Compare the fragment sizes that can be transported by wind, water and ice</p> <p>Describe how fossils are formed</p> <p>Relate the grain size and roundness to transport history</p> <p>Use the rock cycle model to link the formation of igneous, sedimentary and metamorphic rocks</p> <p>Appreciate the different timescales involved in different rock cycle processes, and give examples of fast and slow processes</p> <p>Recall how metals are extracted from ores taken from the Earth's crust</p> <p>Explain the advantages of recycling metals</p> <p>Evaluate the environmental effects of quarrying and mining</p>
Foundation	<p>Recall what earthquakes and volcanoes are</p> <p>Recall some uses for rocks and some products made from limestone</p> <p>State what rocks are made of</p> <p>Recall why different rocks have different properties</p> <p>Recall some examples of rocks with different textures</p> <p>Explain why certain rocks are porous and/or permeable</p> <p>Recall that the Earth consists of a core, mantle and crust</p> <p>Describe how magma can be erupted to form volcanoes</p> <p>Describe how igneous rocks are formed</p> <p>Recall the names of some igneous and metamorphic rocks</p> <p>Describe the textures and properties of igneous and metamorphic rocks</p> <p>Describe how metamorphic rocks are formed</p> <p>Explain how the size of crystals in igneous rocks is evidence for the speed of cooling and describe some factors that affect this</p> <p>Recall some examples of physical changes and of chemical changes</p> <p>Describe the effect of physical and biological weathering on rocks</p> <p>Explain why rainwater is slightly acidic</p> <p>Describe the effect of chemical weathering on rocks</p> <p>Recall how weathered rocks are eroded and explain how fragments get worn down during transport</p> <p>Describe the link between the size of rock fragments carried and the water speed</p> <p>Recall the names of some sedimentary and metamorphic rocks</p> <p>Describe the textures and properties of sedimentary rocks</p> <p>Describe how sedimentary rocks are formed</p> <p>Describe the link between the size of rock fragments deposited and the water or wind speed</p> <p>Recall that metals can be recycled</p> <p>Recall how some elements are found in their native states</p>