

7



Lesson	Know	Apply		Extend
7.1.1 The structure of the Earth	I can name the layers of the Earth.	I can describe properties of the different layers of the Earth's structure.		I can compare the different layers of the Earth in terms of their properties.
	I can state what a mineral is.	I can explain that most rocks are mixtures of minerals.		I can interpret data about the elements that make up the Earth's crust.
	I can design a simple model of the Earth using information about its structure.	I can describe advantages and disadvantages of a given model of the Earth's structure.		I can explain why models are good or poor representations of the Earth's structure in terms of the materials used.
7.1.2 Sedimentary rocks	I can state a property of sedimentary rocks.	I can explain why a sedimentary rock has a particular property based on how it was formed.		I can predict planetary conditions from descriptions of rocks on other planets.
	I can describe how sedimentary rocks are made.	I can identify the causes of weathering and erosion and describe how they occur.		I can explain detail each stage in the formation of a sedimentary rock.
	I can state the processes shown by different models of the stages in sedimentary rock formation.	I can explain how how a given model represents a particular process in the formation of sedimentary rock.		I can evaluate strengths and weaknesses for models of sedimentary rock formation, giving reasons.
7.1.3 Igneous and metamorphic rocks	I can state one difference between igneous and metamorphic rocks.	I can explain in detail how igneous and metamorphic rocks form.		I can discuss examples of rocks that illustrate the different methods of formation of igneous and metamorphic rocks.
	I can describe how igneous and metamorphic rocks are formed.	I can explain why igneous and metamorphic rocks have particular properties based on he they were formed.) w	I can identify circumstances that indicate fast processes of change on Earth and those that indicate slower processes.



7.1 Checklist



Lesson	Know		Apply	Extend
	I can describe what you see when a substance representing lava is cooled.		I can predict observations when a substance representing lava is cooled at different temperatures.	I can predict observations when a substance representing lava is cooled, using knowledge about igneous rock formation to explain the answer.
7.1.4 The rock cycle	I can give simple facts about how a rock can be changed from one type to another.		I can use the rock cycle to explain how the material in rocks is recycled.	I can give a detailed description and explanation of the journey of material through the rock cycle.
	I can state what happens to wax in a model rock cycle.		I can describe how changes in the wax used to represent a rock represent the real rock cycle.	I can suggest similarities and differences between the rock cycle and everyday physical and chemical properties.
7.1.5 Ceramics	I can list the properties of ceramics.		I can use data on properties to decide which materials might be ceramics.	I can justify decisions made from property data about which materials might be ceramics.
	I can list some uses of ceramics.		I can explain why properties of ceramics make them suitable for their uses.	I can suggest how ceramic materials might be similar to some types of rock.
	I can suggest a simple method for comparing the strength of ceramic materials given a choice apparatus.	of	I can plan a method for comparing the strength of ceramic materials, including devising a fair test question, identifying cont variables, and identifying risks, hazards and control measures.	I can plan a method for comparing the strength of ceramic materials, justifying choices of experimental techniques, apparatus and the measures to control risk.