

Rocks, Fossils and Soils : Science : Year 3

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To be able to identify naturally occurring rocks and explore their uses.	Children will learn where rocks come from, then consider differences between naturally occurring rocks and man-made objects which are similar to rocks. They will then identify, describe and/or sort rocks and man-made objects.	<ul style="list-style-type: none"> Do children know that rocks are used for a variety of purposes? Can children identify some common rocks? Can children identify rocks that are naturally occurring and those that are man-made? 	<ul style="list-style-type: none"> Slides Worksheet 1A/1B/1C/1D Picture Cards A Picture Cards B (plenary) Hoops
Lesson 2	To be able to group rocks according to their characteristics.	Children will consider ways in which rocks can be sorted according to different criteria. They may then either sort given rock samples, or study and sort pictures of rocks according to various criteria.	<ul style="list-style-type: none"> Can children suggest ways of grouping rocks according to their characteristics? Can children observe and compare rocks, and put them into different categories? Can children justify their choices and explain their decisions? 	<ul style="list-style-type: none"> Slides Worksheet 2A/2B/2C Rock samples Picture Cards (FSD? activity only)
Lesson 3	To be able to plan, carry out and evaluate experiments to compare rocks.	Children will start to learn about erosion. They will also consider how different rocks may be tested to determine how quickly they erode and whether they are permeable. Following this, children will conduct practical erosion/permeability investigations.	<ul style="list-style-type: none"> Do children know what the terms 'erosion' and 'permeable' mean? Can children plan and carry out an experiment to compare rocks based on certain characteristics? Can children evaluate their results and draw conclusions? 	<ul style="list-style-type: none"> Slides Worksheet 3A/3B/3C Question Sheet Rock Samples Stopwatches Beakers of water (FSD? activity only) Pipettes (FSD? activity only)
Lesson 4	To identify rocks that are used for particular purposes.	Children will consider what sources may help them find out about a rock's uses, then carry out research to help them describe the characteristics of rocks and their uses.	<ul style="list-style-type: none"> Can children use a variety of sources to find out information about rocks and their uses? Can children organise the information they have found out? Can children present the information they have found out clearly? 	<ul style="list-style-type: none"> Slides Worksheet 4A/4B Information Sheet Books, CD ROMs, access to internet, etc. A3 and A5 paper Rock Cards (FSD? activity only)
Lesson 5	To explore soil and how it is formed.	Children will learn about soil: how it is formed and its uses. They will also study different types of soil. Following this, children will study and describe a variety of soil samples.	<ul style="list-style-type: none"> Do children know that soil is made up of rocks and decaying organic matter? Do children know that there are different types of soil? Do children know that there are different layers of soil? 	<ul style="list-style-type: none"> Slides Worksheet 5A/5B/5C Three different soil samples Graded sieves Trowels and containers (FSD? activity only)
Lesson 6	To explore what fossils are and how they are formed.	Children will learn about how fossils are formed, then either describe this process in their own words or conduct a practical, 'fossil-making' activity.	<ul style="list-style-type: none"> Do children know that rocks move in a continuous cycle? Do children know what a fossil is? Can children explain how fossils are formed? 	<ul style="list-style-type: none"> Slides Worksheet 6A/6B/6C Sentence Cards Help Sheet (FSD? activity only) Plasticine, plaster of Paris, petroleum jelly, card, paint (FSD? activity only)
Lesson 7	To be able to identify fossilised remains.	Children will study images of fossilised remains and discuss what can be learned about the animal by doing this. They may then either conduct research to find out about given images of fossils, or do a practical, 'fossil excavation' activity.	<ul style="list-style-type: none"> Can children describe how fossils are formed? Can children identify a variety of common fossils? Do children know where fossils are more likely to be found and why? 	<ul style="list-style-type: none"> Slides Worksheet 7A/7B/7C Picture Cards Cameras - optional Chocolate chip biscuits (FSD? activity only) Tools e.g. tweezers, cocktail sticks, etc. (FSD? activity only) End of Unit Quiz Sheet