

OBJECTIVE	MILESTONE INDICATORS	BASIC ACTIVITIES	ADVANCED ACTIVITIES	DEEP ACTIVITIES	RESOURCES
<p>Session 1</p> <p>To consider a range of different rocks.</p>	<p>Compare and group together different kinds of rocks on the basis of their simple, physical properties.</p>	<p>To describe and name chalk, granite, limestone, sandstone, marble, slate, metamorphic, igneous, sedimentary rocks.</p>	<p>To make comparisons between the rocks.</p>	<p>To discuss properties in detail making reference to grains, particles, appearance and texture.</p>	<p>Rock sample kits</p> <p>Magnifying glasses</p> <p>Information sheets</p>
		<p>To complete illustrations.</p>	<p>To identify distinguishing features around the illustrations.</p>	<p>To create a table showing shared properties of the rocks.</p>	
		<p>To find out and complete a simple factfile about some of the rocks.</p>	<p>To give detailed explanations about their findings.</p>	<p>To recommend which rocks would be best for specific purposes.</p>	
<p>Session 2</p> <p>To know that rocks can be tested for permeability.</p>	<p>Relate the simple physical properties of some rocks to their formation (igneous or sedimentary).</p>	<p>To describe what happens when water is dropped onto a rock using a pipette.</p>	<p>To make predictions and observations as to how quickly water is absorbed by a rock.</p>	<p>To compose a table showing results.</p>	<p>Rock sample kits</p> <p>Pipettes</p> <p>Water</p> <p>Containers</p>
		<p>To state and write about what happens when a rock is completely covered in water.</p>	<p>To identify comparisons between the rocks.</p>	<p>To recommend rock types for different purposes eg. roof/road.</p>	
<p>Session 3</p> <p>To know what fossils are and to understand how fossils can be used</p>	<p>Recognise that living things have changed over time and that fossils provide information about</p>	<p>To describe what fossils are made from.</p>	<p>To write down observations of fossils.</p>	<p>To assess the impact of fossils of our understanding of the ancient world.</p>	<p>Dinostar workshop</p> <p>Ipad to take photos</p>

to help us learn about the past as well as how they are formed.	living things that inhabited the Earth millions of years ago. Describe in simple terms how fossils are formed when things that have lived are trapped within sedimentary rock.	To complete simple illustrations.	To identify specific patterns and include these on their illustrations.	To create their own fossil using plaster of paris.	
Session 4 To understand the structure of the Earth's crust.	Relate the simple physical properties of some rocks to their formation (igneous or sedimentary).	To follow a set of instructions to create a model of the earth with its different layers.	To identify the different layers of the earth and explain the purposes/defining features of each layer.	To choose a specific layer and conduct further research through secondary sources.	Ping pong balls Yellow, orange, blue, green playdough p171 Y3 worksheet
Session 5 To know that different soils have different sized particles and colours.	Recognise that soils are made from rocks and organic matter.	To describe and write about 4-5 different soil samples in simple terms.	To make detailed comparisons between the soil samples.	To discuss the merits of the soil samples for specific purposes.	Soil samples p172 Y3 worksheet
		To fill soil samples with water and state what happens as the mixture settles.	To compare the contents of the different soil samples.	To discuss the different layers and formulate a way of recording findings.	Transparent beakers Water
Session 6 To understand how igneous and	Relate the simple physical properties of some rocks to	To describe a wafer biscuit and crunchie alongside a pumice	To explain and classify what similarities you can find and compare to	To design a poster to include their findings in detail.	Pink wafer biscuits Crunchies

sedimentary rocks are formed and relate the simple properties of rocks to their formation.	their formation (igneous or sedimentary).	stone and sandstone rock.	sedimentary and igneous rocks.		Pumice stone Sandstone Paper
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Prompts for when planning activities

Basic- Name, describe, follow instructions or methods, complete tasks, recall information, ask basic questions, use, match, report, measure, list, illustrate, label, recognise, tell, repeat, arrange, define, memorise.

Advanced- Apply skills to solve problems, explain methods, classify, infer, categorise, identify patterns, organise, modify, predict, interpret, summarise, make observations, estimate, compare.

Deep- Solve non-routine problems, appraise, explain concepts, hypothesise, investigate, cite evidence, design, create, prove.