



Wider -Curriculum

Spring Unit Plan for Home learning

Subject: Science Unit: Geology: Rocks, Earth and Soil. Year: 3

Week 1 Session 1	<p>What are natural or raw materials? <i>You will need a pen and paper</i></p> <ul style="list-style-type: none"> • Watch this video. What do you already know about rocks? And what do you want to know? Complete the KWL grid in the resources for Lesson 1. • Start a list of questions you would like to ask a geologist (a rock expert!) we have someone visiting in a zoom in a few week's time. • Rocks are part of the natural world and resources. Find out more about what a raw material is here. Follow the lesson and the activities. 	
Week 1 Session 2	<p>What is inside the earth – is it all rock?</p> <ul style="list-style-type: none"> • What do you think is inside the earth? Draw what you think is inside before you start this lesson. • My friend says the earth is like a hard-boiled egg – it has a shell and inside it has different layers. Is this right? Watch this video. <i>(Check with an adult as this is a youtube link)</i> • You can also do your own research using the internet to help you answer the lesson key question. • Create your own labelled drawing, explanation or poster to answer the question: "What is inside the earth – is it all rock?" 	
Week 2 Session 3	<p>What are the types of different rocks and their properties</p> <ul style="list-style-type: none"> • Watch the video about different of types of rock. Write down any new vocabulary. <i>(Check with an adult as this is a youtube link)</i> • Look at the types of rock in the pictures in resource lesson 3. • Watch the video about granite and limestone and how they are used. • Write 3 facts about 3 more types of rock next to the pictures eg pumice, chalk, sandstone. <p>Challenge; The pyramids in Egypt were built with 2 types of rock. Can you find out what they were and why they were used?</p>	
Week 2 Session 4	<p>How is igneous rock formed? <i>You will need a pen and paper</i></p> <ul style="list-style-type: none"> • In this lesson, we will learn about the structure of the Earth, how igneous rock is made and how you can recognise it. We will also learn some of the uses of igneous rock. • Watch the video for Lesson 4. • Complete the activities as you watch. 	
Week 3 Session 5	<p>How is metamorphic rock formed? <i>You will need a pen, a ruler and paper</i></p> <ul style="list-style-type: none"> • In this lesson, we are going to learn about metamorphic rock and how it is made. Then we will look at some different examples of metamorphic rock and discuss how their properties make them fit for their uses. • Watch the video for lesson 5. • Complete the activities as you watch. 	
Week 3 Session 6	<p>How is sedimentary rock formed? <i>You will need a pen and paper</i></p> <ul style="list-style-type: none"> • In this lesson, we will learn about sedimentary rock and how it is formed. • Watch the video for lesson 6 until 19:18 • Complete the activities as you watch. <p>Note: We will come back to fossils next week for a separate lesson.</p>	
Week 4	<p>What are the steps in the rock cycle? <i>You will need a pen, a ruler and paper</i></p>	

Session 7	<ul style="list-style-type: none"> In this lesson, we will learn each of the steps of the rock cycle and how igneous, sedimentary and metamorphic rock are all connected. Watch lesson 7. Complete the activities as you watch
Week 4 Session 8	<p>How are fossils made?</p> <p>You will need a pen and paper</p> <ul style="list-style-type: none"> In this lesson we will learn how fossils are formed in sedimentary rock, what a palaeontologist is and identify some different fossils. What do you know about fossils and how are they formed? Write 3 things you already know or want to know. Watch the BBC video here and make notes. Watch the video for the lesson 8 you need to start from 15:00 <p>Complete the activities as you watch.</p> <p>Answer the question: 'How are fossils made?' using your own diagrams to help.</p>
Week 5 Session 9	<p>Who is Mary Anning?</p> <p>You will need a pen and paper</p> <ul style="list-style-type: none"> In this lesson, we will learn about Mary – Anning, her life, achievements and the difficulties she faced. Watch the video for Lesson 9 Create your own fact file about Mary Anning from the video. You can decide yourself how you want to organise your work. You can also use other internet searches to find out about her.
Week 5 Session 10	<p>How do the rocks on our Earth's surface change?</p> <p>You will need a pen and paper</p> <ul style="list-style-type: none"> In this lesson we will learn how rocks change. We will look at erosion, weathering and the movements of tectonic plates. Watch lesson 10. <p>Complete the activities as you watch.</p>
Week 6 Session 11	<p>What are soils made from?</p> <ul style="list-style-type: none"> In this lesson we will learn about what soil is made from and its different types. Watch these two videos about soil: video 1 and video 2 . Look at the pictures and answer the questions (support resource). What kind of soil do you think gardener/farmer/footballer/runner would like and why? If you are able to, find and test some soil from a garden or park near you. .Is it sandy/loamy/clayey - how can you tell?
Week 6 Session 12	<p>Review</p> <ul style="list-style-type: none"> Look back on your work about rocks and soils and what you first knew at the start. Create a guide to rocks, soils, fossils which would help a Year 3 child next year to understand this topic. Your guide could be a video, a poster, a booklet or presentation of your choice.

Session Resources

Lesson 1

Rocks, the Earth and Soil

Know What I know about this already...	What Wonder What I want to know... What I wonder... How could I find this out?	Learn What I have learned

Questions I would like to ask an expert (Geologist)

1

2

3

4

5

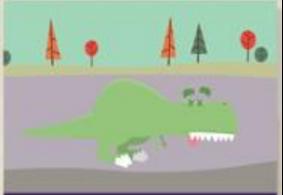
Lesson 3

			
Pumice	Sandstone	Marble	Obsidian
			
Limestone	Gneiss	Basalt	Slate
			
Granite	Chalk	Quartzite	Conglomerate

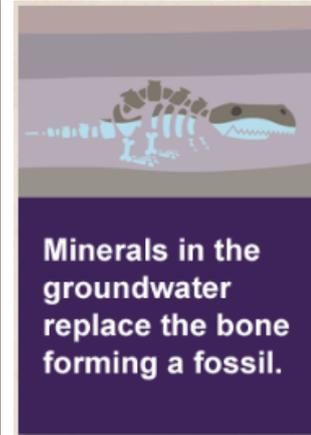
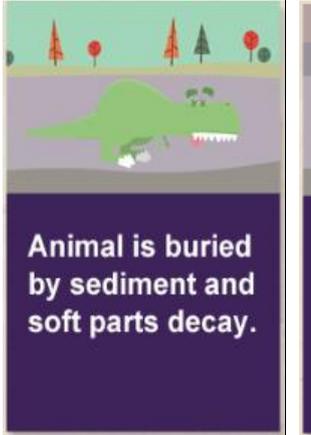
Lesson 8
Fossil process

What is the correct order for these pictures?

1.

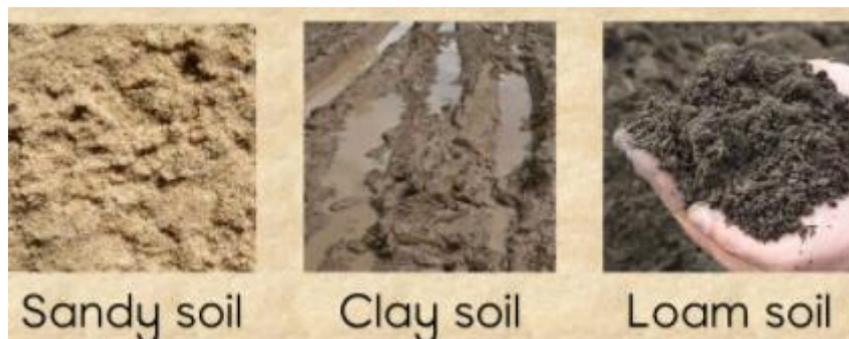
 <p>Minerals in the groundwater replace the bone forming a fossil.</p>	 <p>The rock rises to the surface and is worn away by erosion.</p>	 <p>Animal is buried by sediment and soft parts decay.</p>	 <p>More sediment builds up and is compressed to form rock.</p>

Answers

 <p>Minerals in the groundwater replace the bone forming a fossil.</p>	 <p>The rock rises to the surface and is worn away by erosion.</p>	 <p>Animal is buried by sediment and soft parts decay.</p>	 <p>More sediment builds up and is compressed to form rock.</p>
3	4	1	2

Lesson 11

Questions:



1. What is soil made of?
2. What is the difference between clay and sandy soil?
3. Look at the different types of soil. Can you describe them? (colour, texture)
4. What kind of soil do you think gardener/farmer/footballer/runner would like and why?
5. What kind of soil is in an outdoor space near you? How do you know?