


Lesson	2 of 6	Key Unit Question:	How can we classify rocks?	Key Lesson Question:	Are all rocks the same?
Learning Objective	NC Links		Resources		
I can compare and group together different kinds of rocks on the basis of their physical properties.	<ul style="list-style-type: none">• Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties• Make systematic and careful observations using equipment• Setting up simple practical enquiries, comparative and fair tests• Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables• Reporting on findings from enquiries		<ul style="list-style-type: none">• Differentiated investigation activities• Differentiated challenge and next step activities• Paper to record children’s ideas• Selection of rock samples such as marble, granite, sandstone, basalt, slate, clay, chalk, pumice and limestone. (If your school does not have these, they can usually be requested from secondary schools to borrow)• Rock identification sheet (from lesson 1)• Magnifying glasses• Pins (or something else sharp to scratch the rocks)• Sandpaper• Pipettes• Vinegar• Water		
Teaching Input					
<ul style="list-style-type: none">• Recap last lesson. Can you remember the names of any rocks we learnt about last lesson? Give the Rock Classification sheets out again and ask children if they can think of any adjectives that we used last lesson to describe any of the rocks. Play ‘guess my rock’. Choose a rock and tell children clues to describe the rock you are thinking about.• Thinking time. What do you think of when you hear the word “rock”? Are small stones or pebbles rocks? Are boulders, rocks, stones and pebbles all made of the same things? Allow time to discuss with partners before sharing ideas as a class. Record any of the children’s ideas on paper to display on the science display.• A rock is any naturally occurring solid mineral material so stones, pebble and boulders are all classed as rocks. The next four slides look at different types of rock and discuss some of their uses. Can children think of any other uses for different rocks?• Independent activity. Today you are going to be geologists and carry out investigations to compare and group different rocks. There are four different investigations where you will need to find the best rock for each job described.• Children will be given a selection of investigations that they can do. You may want to complete this as a carousel so each child has the opportunity to complete each investigation, or you may want different groups to do the different investigations and then feedback their findings to the whole class.<ul style="list-style-type: none">- Investigation 1 is to test how hard wearing the rock is. Children to scratch with a pin and give it a rating.- Investigation 2 is to see how durable the rock is. Children to rub the rock gently with sandpaper to see how much ‘dust’ is created.- Investigation 3 is to see how waterproof the rocks are. Children will drip water onto the rocks.- Investigation 4 is to see if the rock will be damaged by acid. Children will drip vinegar on the rocks• Plenary. Talk to your partner about these questions. What did you most enjoy about this lesson? Tell me one thing you have learnt. Did you find anything difficult?					
Differentiated Activities					
★ (working below)		★★★ (working at)			
Children to complete the investigation(s) as a group with adult support.		Children to complete the investigation(s) as a group.			
Challenge activity		Next Step activity			
Thinking about all the properties of rocks we have learnt, write an ‘I spy’ challenge for your partner to solve. Use the example to help you. I spy a rock that is grey, hard and waterproof.Which rock is it? (The answer is... slate)		Easy - We used all of these words in our investigation lesson, but can you remember what they mean? Draw lines to match up the word to its definition. Medium - We used all of these words in our investigation lesson, but can you remember what they mean? Write your own definition for each word.			
Assessment questions	Self assessment		Key vocabulary		
What is a rock? What does this rock look like? How does it feel?	I can name different rocks and describe some of their uses. I can carry out investigations to describe rocks physical properties.		rock, appearance, hard, soft, permeable, impermeable, durable, hard wearing, waterproof, strong, geologist		
<div> www.grammarsaurus.co.uk</div>					