Rocks: Grouping Rocks

Aim:

Group together different kinds of rocks on the basis of their simple physical properties in the context of natural rocks.

I can group rocks based on their properties.

Making systematic and careful observations by examining different types

I can make systematic and careful observations.

Success Criteria:

I can name the different types of rocks. I can identify features of different rocks. I can group rocks by specific criteria.

I can handle and examine rocks carefully. I can use systematic observations to identify the properties of rocks.

Key/New Words:

Igneous, sedimentary, metamorphic, rocks, group, properties, permeable, impermeable, hard, soft, durable, buoyancy, split.

Resources:

Lesson Pack

A selection of igneous, sedimentary and metamorphic rocks A selection of books on rocks

Computers/Laptops/Tablets

Sandpaper

Pipette

A large container or plastic box

Preparation:

Properties of Rocks Activity Sheet - 1 per child **Grouping Rocks Activity Sheet** - 1 per child (A3 copies for HA)

Prior Learning: Children will have learnt the three different types of rocks in lesson 1.

Learning Sequence



Types of Rocks: What are the three types of rocks? Why causes them to be different? Children need to demonstrate they understand the difference occurs in the formation of the rocks. Show the types of rocks on the Lesson Presentation and use this to address any misconceptions or errors.



Describing Rocks: In talk partners, children discuss the adjectives they would use to describe rocks. Children feedback to class and ideas to be written on the IWB. Select one of the properties such as 'hard' - Are all rocks hard? What about clay? Discuss how different rocks have different properties.



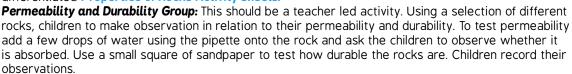


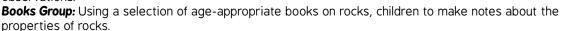
Properties of Rocks: Introduce children to the scientific terms they will be using to describe the properties of rocks.





Carousel of Activities: Children record observations and make notes from each activity on the differentiated Properties of Rocks Activity Sheets.





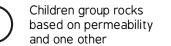
Density Group: Children test the buoyancy of different rocks using a large container full of water to decide which rocks have higher and which have lower density and take notes.

Conduct a mini-plenary to check and assess the children's understanding based on the activities they have completed. Address any misconceptions or errors.





Grouping Rocks: Children use their notes on the differentiated Properties of Rocks Activity Sheets to group rocks based on their properties on the differentiated Grouping Rocks Activity Sheets.



property of their choice.



Children group rocks based on two properties of their choice and then answer questions.



Children group rocks based on all four properties. Children label the rocks by their type and then write a paragraph on the relationship between rock type and the various properties. If children have not already identified the type of rock allow them to do so using books or the Internet while grouping the rocks on their activity sheet.





Taskit

Posterit: Children select a rock and create a poster adding factual information about the type of rock it is, its properties and its

uses

Identifyit: Using the Everyday Uses of Rocks Activity Sheet, children to walk around the school or their local area finding the

different types of rocks used in buildings and outdoors. Children name the rock, its type and the properties that make it suitable for that particular use.

