



Mathematics

**1.** Using stones from the area, can you create a 2D picture of a stone house, a worm, a volcano or an Andy Goldsworthy design?

**2.** Can you hide pebbles with addition / subtraction / multiplication and division sums on for children to find and answer? Can you use pieces of slate and chalk to scribe your answers on?

**3.** Can you play noughts and crosses using 2 different rocks on a board etched in the soil?

**4.** Can you make a tall tower using rocks and pebbles?

**5**. Can you make different shapes using a collection of pebbles that have a straight white line painted on them?

**6.** Can you throw small stones safely into a target on the ground (e.g. make an archery type target with rope – each band worth different points) and add up your score after 5 throws?

English

**1.** Can you write a fact file about the different types of rocks – Igneous, sedimentary and Metamorphic. Can you include their properties in your fact file?

**2.** Can you play Kim’s game or 20 questions with different types of rocks as your answers?

**3.** Can you make up and write stories /poetry using the following rock / soil activities as stimuli

* Clay minibeast (Art/DT)
* Worms in the wormery (Science)
* Model Volcano (Geography)
* Paintings you have done using rocks and soils (Art / DT)
* Story Stones (Art / DT)

**4.** Can you create a stage area outside and use it as a platform to read your stories and poetry to others?

**5.** Can you read, ‘The Rock Factory,’ a story about rocks and stones by Jacqui Bailey individually or as a class?

Science

**1.**Can you find and identify rocks in your local area? Use identification sheets to support learning.

**2.** Can you group the rocks into igneous, sedimentary and metamorphic and determine their properties by testing them for hardness (nail), permeability (water) and whether they contain dead animals (pour vinegar over and they will fizz if dead animals present)

**3.** Can you make a tool from rocks (sharpen slate using granite) as would have been used in the stone age and use it to cut a piece of fruit or veg?

**4.** Can you make a fire using flint and steel?

**5.** Can you make a miniature pond in groups, each using a different type of rock (e.g. sand, granite, slate, clay) and compare and discuss which one is the most effective and why?

**6.** Can you investigate the habitat of a worm? Can you make a wormery and look at it over time? What does the worm do to the soil? Why is this good?

**7.** Can you research the science behind the eruption of volcanoes?

Art / DT

**1.** Can you mix a range of painting pigments from different soils, ground-up leaves and flowers? Use them to paint giant pictures on paper, walls, and trees or to print with?

**2.** Can you make paints from different types and colours of rocks by first bashing them with a hammer and mixing them with water? Natural chalk mixed with dyes from berries etc. can be used for this. Can you use these to make a cave art picture? Can you make natural paint brushes from whittled or bashed sticks, twigs or grass bundles, leaves etc.?

**3.** Can you create natural collages /sculptures in the style of Goldsworthy using rocks and stones, either as a permanent feature for your outdoor area or ‘a moment in time’.

**4**. Can you create clay mini-beasts or imaginary creatures, adding details with twigs, seeds etc? Hide them in trees, on tree trunks, or in a suitable habitat.

5. Can you paint rocks to be used as story stones with words and / or pictures?

Music

**1.** Can you gently bash different types of rocks together to discover the pitch and volume that they make?

**2.** Can you make musical instruments from stones put into an empty food can. Use leaf bashing on calico as the lid and double sided sticky tape on the sides to decorate with natural materials. Can you explore pitch and volume / develop group compositions?

**3.** Can you perform your musical composition on your ‘nature stage’, perhaps accompanying a story or poem?

**Lower KS2**

**Wild Tribe**

**Rocks & Soil**

Geography

**1.** Can you make a model volcano from soil / sand / vinegar and bicarb.

**2.** Can you look at a soil profile and make your own in a plastic pint pot?

**3.** Can you use fire using flint and steel for cooking?

**4.** Can you look at buildings in the local area and decide what materials they are made of? What types of rocks have been used?

**5.** Can you investigate fossils, how they are formed and make one using plaster of Paris?