

Topic Name	Rocks and soils
Big Question	Why did the foolish man build his house on sand?
Scientists to use as examples	Mary Anning, Dr Anjana Khatwa, William Smith, Inge Lehrmasn, Katia Krafft, Zhang Heng
Key Knowledge	compare and group together different kinds of rocks on the basis of their appearance and simple physical properties describe in simple terms how fossils are formed when things that have lived are trapped within rock recognise that soils are made from rocks and organic matter
Key investigational skills	Questions about classifying rocks. Ways of testing rocks – permeability, hardness, weight, flexibility, durability, Group and classify types of rocks Use of microscopes to look at structure Photographs of classifications of rocks. Present different sorts of rocks to the class Pupils might work scientifically by: observing rocks, including those used in buildings and gravestones, and exploring how and why they might have changed over time; using a hand lens or microscope to help them to identify and classify rocks according to whether they have grains or crystals, and whether they have fossils in them. Pupils might research and discuss the different kinds of living things whose fossils are found in sedimentary rock and explore how fossils are formed. Pupils could explore different soils and identify similarities and differences between them and investigate what happens when rocks are rubbed together or what changes occur when they are in water. They can raise and answer questions about the way soils are formed.
Vocabulary	rock, stone, pebble, boulder, grain, crystals, layers, hard, soft, texture, absorb water, fossil, bone, flesh, minerals, marble, chalk, granite, sandstone, slate, soil, types of soil (e.g. peaty, sandy, chalk, clay)
Prior learning – what children should know	Distinguish between an object and the material from which it is made. (Y1 - Everyday materials) • Identify and name a variety of everyday materials, including wood, plastic,

	<p>glass, metal, water, and rock. (Y1 - Everyday materials)</p> <ul style="list-style-type: none"> • Describe the simple physical properties of a variety of everyday materials. <p>(Y1 - Everyday materials)</p> <ul style="list-style-type: none"> • Compare and group together a variety of everyday materials on the basis of their simple physical properties. (Y1 - Everyday materials) • Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. (Y2 - Uses of everyday materials)
Future learning – next time they will be learning	<p>Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. (Y6 - Evolution and inheritance)</p> <ul style="list-style-type: none"> • The composition of the Earth. (KS3) • The structure of the Earth. (KS3) • The rock cycle and the formation of igneous, sedimentary and metamorphic rocks. (KS3)
Visits	Marie H fossils
Book links	<p>Stone girl Bone girl – Laurence Anholt</p> <p>Pebble in my pocket – Meredith Hooper and Chris Cody</p> <p>The street beneath my feet</p>