

PEAK DISTRICT NATIONAL PARK LEARNING & DISCOVERY TEAM TEACHERS NOTES – ROCKS AND SOILS



Age range: Y3 – Y6	Duration: 10.00 – 14.30	Available: Late Feb to November
Locations available: Longdendale, Macclesfield Forest, Moorland Discovery Centre.		

This programme allows learners to experience being geologists for the day, learning about rock and soil formation, and properties of different rocks, through hands-on activities.

Activities provided as part of the day include:

- Discovering the different rock types found in the Peak District, and conducting investigations to categorise them based on various properties.
- A rock drama activity to learn about different methods of rock formation.
- Exploring the outdoor environment to find rocks and soils in the landscape.
- Learning about the components and formation of soil.
- Pupils working in small groups, when we challenge them to ‘make’ their own soil!

Depending on location, you may:

- Visit an old quarry and discover what feature(s) in the local landscape the rock was used to build
- Conduct investigations and soil tests to identify different types of soil

Important Notes for this Programme:

Clothing: Most activities take place outdoors, and at some of our sites the ground conditions can become particularly muddy after periods of high rainfall. We advise pupils to wear wellingtons, and we have a small stock of wellies available to borrow at some centres; please ask for details

We strive to make our visits accessible to all. Days can be tailored to your group’s needs. While many of our sites are accessible to people with limited mobility, we advise you to discuss your particular needs with us before booking.

Main Curriculum Links:

Geography	Human geography; economic activity and natural resources
Science	Rocks (including soils and fossils), practical enquiry, working scientifically, properties of materials
Physical Education	Outdoor activity

Key Learning Objectives	Learning Outcomes
<p>Geography</p> <ul style="list-style-type: none"> Fieldwork skills, including making observations about the landscape (e.g. quarries), economic activity and natural resources Asking and answering geographical questions. <p>Science</p> <ul style="list-style-type: none"> Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties Recognise that soils are made from rocks and organic matter, setting up simple practical enquiries, comparative and fair test. <p>Other skills</p> <ul style="list-style-type: none"> Listening to and following instructions Looking carefully/observational skills Using equipment accurately Working independently and as part of a group. Problem solving 	<p>All children will be able to:</p> <ul style="list-style-type: none"> Notice differences and similarities between different types of rocks List some of the ‘ingredients’ of soil
	<p>Most children will be able to:</p> <ul style="list-style-type: none"> Describe how the three different categories of rock (sedimentary, metamorphic, igneous) are formed Categorise different rocks into groups, based on their physical properties Understand different ways that people use rocks in the landscape (e.g. for buildings, walls, paths, and construction of reservoir dams) Describe some of the processes involved in the formation of soil
	<p>Some children will be able to:</p> <ul style="list-style-type: none"> Successfully identify different types of rocks, based on their combination of properties Understand how the different properties of rocks influence the different ways that people use those rock types in the landscape Name the main rock types in the Peak District Describe different soil horizons

Assessment for Learning

We continually assess learning using a variety of techniques appropriate to the activity such as questioning, games, observations and checking results

Ideas for Extending Learning Before / After the Visit

- Locate the Peak District on a map, discuss what the environment might be like at the site you’re visiting
- Look for places where rocks and soils are used around the school grounds and local area
- (After your visit) examine the rock types around school – are they the same or different from the ones you found on your visit to the Peak District?
- Look at a geological map of the UK, or your local area. Discuss why there are different types of rocks in different places across the country

More ideas and resources available here:

<https://www.peakdistrict.gov.uk/learning-about/peak-curriculum/rocks-and-soils>

Partnerships: The Moorland Discovery Centre on the Longshaw Estate is run in partnership with the National Trust. As such visits may be delivered by staff from the Peak District National Park or the National Trust.