

# A Special Place: What's so special about rocks?

These activities can be carried out with the whole-class or as a 'carousel' of activities during a 'rocks and soils' morning or afternoon session.

**Objectives:** To get the children to think about the uses, types and properties of rocks and soils.

**Resources:** 'What's so special about rocks?' presentation, teachers' notes and glossary cards. These can all be found on the ['Rocks and Soils'](#) page. You will also need post-it notes, 2 x A3 sheet per group for post-it notes, magnifying glasses, rock samples.

**Prior knowledge:** Children should have some basic knowledge of the three types of rock – igneous, sedimentary and metamorphic

Before looking at the presentation, give out the glossary cards to half the class (one between two) and the definitions to the other half. See if they can find the corresponding pair. They may not know many terms at this stage, but they can match them up as the lesson progresses. Glossary words in the presentation are in **bold** so you may want to draw children's attention to this.

Slide 3: Ask children to write their ideas on why rocks are important on post-it notes and put these on one of the A3 sheet. This could be done as a competition between groups.

Slides 4-7: Go through any questions that the children may have. You may want them to suggest other things that are built of rock/stone and examples of metals and their uses e.g. iron + carbon to make steel in manufacturing, copper in wires, aluminium foil, 'rare earth' metals in mobile phones.

Slide 8: Ask children to write their ideas on how rocks are formed on post-it notes.

Slides 9 – 12: If the children have learnt the basic rock types, slide 9 may remind them of what they are. Go through any questions the children may have. You may want to give examples or show samples of each type of rock e.g. granite (igneous), limestone (sedimentary), slate (metamorphic).

Slide 13: If children have studied the water cycle before, ask them why it is called a 'cycle'. Can they suggest what the 'rock cycle' might entail?

Slide 14: Go through the rock cycle. You may want to add some kinaesthetic learning by inventing a 'rock cycle dance'. E.g. imitating an erupting volcano, rain and wind eroding rocks, putting hands one over the other for sedimentary rock, getting squashed into a small space for metamorphic rock.

Slides 15/16: If you have rock samples, get the children to think about how they might be different. Can they design a fair test to investigate their ideas? Can they make a prediction on which rocks are the hardest/most permeable? What visual features can they observe? Can they explain these features?

Slide 17 - 20: These slides summarise how rocks can be different.

Slide 21: Ask children in their group to recap the three different types of rocks. Best definition could win points if it is a competition.

Slide 22: Can children find out what type of rocks they might find when they visit the Peak District? This will depend on the location of their visit (see Teachers' Notes).