



Geography KS3 - Information for Teachers

National Curriculum link:

Human Geography

Understand, through the use of detailed place-based exemplars at a variety of scales, the key processes in:

- Physical geography relating to... rocks, weathering and soils; weather...
- Human geography relating to... the use of natural resources.

Understand how human and physical processes interact to influence, and change landscapes and environments.

Links to Science objectives:

Earth and atmosphere:

- The rock cycle and the formation of igneous, sedimentary and metamorphic rocks...

Energy:

- Fuels and energy resources.

Activities:

1) Trail:

- * Students spot key landmarks in the park such as the stream, weir, viaduct and Petrifying Well.
- * The River Nidd and its course are explained, as well as key terminology such as 'meander', 'tributary' and 'confluence'. Students then draw the river's course, labelling with the information learnt and key terminology.
- * The process of transportation is explained, and students identify the distance of transport of different rocks from their appearance.
- * The process of petrification is explained.
- * The formation of the cave is explained linking to the mineral deposits built up over thousands of years to create an overhang which eventually collapsed to form the cave.
- * Students map the park and the key landmarks for members of the public as they walk through, creating own key.
- * Finally, students write a paragraph explaining what they have learnt using the word bank of key terminology to prompt them.

Mother Shipton's

2) Power point presentation:

The presentation can be used as a follow-on activity back in the classroom as children:

- ✓ Revisit landmarks spotted and processes learnt.
- ✓ Learn about differences in rock grains and the effect on whether or not a rock is porous.
- ✓ Look at porous and non-porous rocks - experiment with water reduction.
- ✓ Study the formation of sedimentary, igneous and metamorphic rocks.
- ✓ Explore BBC Bitesize and the rock landscapes of The Yorkshire Dales:
<https://www.bbc.co.uk/bitesize/guides/z8cwxnb/revision/1>
- ✓ Look at wind, solar and hydro-power (video BBC) linking this to the weir:
<https://www.bbc.co.uk/programmes/p011t2nl>
- ✓ Create their own water wheel using different materials and test.
- ✓ Study flooding in more detail and understand how flash floods are caused.
- ✓ Look at physical and human factors that increase flooding.
- ✓ Case study: Boscastle - understand the effects of the flooding and future flooding prevention methods put into place.
- ✓ Create their own flooding prevention method to prevent flooding of the Petrifying Well platform and houses along the river Nidd.

*possible extension activity ideas included

Resources needed:

- *Pencils*
- *Rubbers*
- *Porous and non-porous rock*
- *Collection of sedimentary, igneous and metamorphic rocks*
- *Measuring jugs*
- *Resources to create water wheels (see power point)*