Geography Year 5 & 6- information for teachers

2014 National Curriculum links:

'Name and locate geographical regions and their identifying human and physical characteristics, key topographical features (including rivers), and understand how some of these aspects have changed over time'.

'Describe and understand key aspects of:

Physical geography, including: rivers...and the water cycle'.

Human geography, including: energy... minerals and water'.

'Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies'.

Science links:

'Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties'.

Objectives covered (linking to the Chris Quigley 'Essentials')

To investigate places:

'Ask and answer geographical questions about the physical and human characteristics of a location'.

'Use fieldwork to observe and record the human and physical features in the local area using a range of methods including sketch maps, plans'.

'Use a range of resources to identify the key physical and human features of a location'.

To communicate geographically:

'Physical geography: including: rivers and the water cycle'.

'*human geography:* including the distribution of natural resources including energy'.

Year 5 & 6:

Activities

1) Trail (to be used as children go through the park):

*Children spot key landmarks in the park relating to rivers such as the stream, weir, viaduct and Petrifying Well.

*Children identify the Petrifying Well platform susceptible to flooding. They then discuss how flooding is caused and what makes flash floods particularly dangerous.

*The process of petrification is explained and children collect some of the water to test its mineral content.

* 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.

*Children finally map the park and the key landmarks for members of the public as they walk through.

2) Powerpoint presentation:

The presentation should be used as a follow-on activity as children:

- ✓ Revisit landmarks spotted
- ✓ Test their water against normal tap water to compare mineral content
- ✓ Look at porous and non-porous rocks- experiment with water reduction
- ✓ Look at wind, solar and hydro-power (video BBC) linking this to the weir
- ✓ Create their own water wheel using different materials and test
- ✓ Study flooding in more detail and understand how flash floods are caused
- ✓ Watch BBC video describing flooding prevention methods
- ✓ 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*
- *Water bottles to collect water from the well*

- *Water testing kit*
- *Porous and non-porous rock*
- *Measuring jugs*
- *Resources to create water wheels (see powerpoint)*

http://www.actionrenewables.co.uk/wp-content/uploads/2010/12/KS2-activity-water-energy.pdf (Waterwheel task sheet)

Testing well water- http://www.wikihow.com/Test-Water-Quality