River Investigation

This investigation uses a small tributary of the River Esk less than a mile from The Moors Centre. Children observe river features and measure and record data including width and depth of the channel, time taken for objects to float a measured distance, and size and shape of material on the river bed. Children also collect and identify freshwater invertebrates using a key and use them to indicate water quality. All equipment provided.

Age Range: Years 4, 5 and 6 (Age 8 to 11)
Duration: 2 ½ hours
Location: The Moors National Park Centre

Main Curriculum Links:
Geography: geographical skills and fieldwork, physical features of rivers, the water cycle
Science: living things and their habitats
Maths: using measuring equipment, recording and interpreting results

Key Learning Objectives
Children should …

| Geography | ● understand how rivers erode, transport and deposit material and form recognised landscape features; ● carry out a fieldwork investigation; |
| Scien e | ● use an identification key; ● see how animals are adapted to a stream habitat |
| Maths | ● use measuring equipment ● record and interpret results |

Other skills involved
● team working ● looking closely / observation skills ● using equipment appropriately and safely

Learning Outcomes

| All children will be able to: | ● explain the terms erosion, transport and deposition ● match animals to pictures on a key ● identify ways in which an animal is adapted to its habitat ● use measuring equipment appropriately |
| Most children will be able to: | ● explain how meanders are formed using geographical vocabulary ● use an identification key ● describe similarities and differences between a range of animals ● measure and record results using decimal notation |
| Some children will be able to: | ● recognise river features in the landscape and describe how they may change over time. ● describe how different animals are adapted to living in different parts of the stream ● check results and modify measuring techniques if necessary |

Assessment for Learning
We assess learning using a variety of techniques appropriate to the activity such as: questioning, questioning games, observing how well children are performing tasks, checking results, quizzes and feedback forms.

Ideas for Extending Learning Before and After this Activity

- For similar data and photographs of other sites along the River Esk see the ‘River Investigation’ pack in our resources section. This data could be used in maths to illustrate and interpret results or in geography to test hypotheses relating to how different aspects of the river change with distance from the source.
- For more information about rivers in the North York Moors go to: [www.northyorkmoors.org.uk/discover/rivers](http://www.northyorkmoors.org.uk/discover/rivers)

*This is an external website for which the National Park Authority has no responsibility