

Forest stream study – half day or full day option

Explore the impressive meanders on Hillwood stream and then using fieldwork equipment, collect measurements from different sections along a stream including height, depth, width and speed to enable them to draw up a cross-sectional drawing and label the different features on a meander.

The full day option would include more thorough measurements and a walk to the source and confluence, linking the geology and geography of the land to the amount of water in the stream. A field sketch of a meander will also be drawn.

Learning objectives

- to understand how features on a meander are formed using geographical vocabulary; erosion, transportation and deposition
- to undertake fieldwork to measure a channel cross section and the speed of the water
- to record findings on a graph
- to recap the water cycle



Some suggestions for visit preparation

1. Use pictures and videos to reinforce any previous work on water, and identify and discuss with the children the components of the water cycle.
2. Introduce pupils to the following vocabulary: *meander, river cliff, river beach, bed, banks*

Follow on suggestions

1. Calculate the mean depth and speed of the water and use the internet to find out how this compares to other rivers around the world. Use this information to answer a geographical question, e.g. why is the River Thames deeper than Hillwood stream?

National curriculum links

Geography

Locational knowledge

- name and locate geographical regions and their identifying human and physical characteristics, key topographical features (including hills and rivers), and land-use patterns; and understand how some of these aspects have changed over time

Physical geography

Describe and understand key aspects of:

- rivers and the water cycle

Geographical skills and fieldwork

- use fieldwork to observe, measure, record and present the physical features in the local area using a range of methods, including sketch maps and graphs

Mathematics

Y5 Number

- round decimals with 2 decimals to the nearest whole number and to 1 decimal place

Y5 Measurement

- convert between different units of metric measure (centimetre and metre)

Y5 Statistics

- complete, read and interpret information in tables
- interpret and construct line graphs
- calculate and interpret the mean as an average



EVENT SPECIFIC RISK ASSESSMENT

Visit details: Measuring a forest stream

Carried out by: Suntrap Centre

Date: Dec 2017

Issue	How to manage it
Understanding/behaviour	Class teacher to advise Suntrap staff of any children who may need extra support out in the forest to help them to follow instructions. School to ensure that there is appropriate adult: children ratios as required.
Medical conditions	Suntrap staff to check that school staff brings medication out into the forest. All adults to be made aware of any medical conditions. Suntrap staff will carry a first aid kit.
Getting lost	Keep within sight of teacher/adult & observe boundaries as directed by the staff.
Choking/Poisoning	No eating outside unless directly instructed by Suntrap staff.
Falling branches	During extreme weather conditions Suntrap staff will make an assessment to ensure it is safe to enter the forest.
Injury from horses/dogs or bikes	Group to be instructed to stand to the side, be quiet and still when horses, dogs or bikes are near.
Accident when crossing the road	Group to be instructed on follow safe procedures for crossing roads (Suntrap Line). No one to walk across the cattle grid.
Injury through falling & throwing	Climbing of trees and throwing sticks/stones prohibited.
Getting wet/cold	Clothing should be appropriate for weather conditions. i.e hat, coat and gloves. Wellies should be worn when walking through stream.
Soil/water borne disease	Children instructed not to put fingers in mouth during/after activities which include handling soil, stream water and sticks. Hands should be washed with warm soapy water before eating lunch/snack.
Slipping on stream banks	Children instructed to take care on wet stream banks, appropriate footwear (wellies) should be worn.