

**TOPIC:** Wild Waters

**Session No:** 6

**TIME:** 2 hours

Lesson Objective		Which skills will children use to demonstrate their understanding?
To be able to investigate and make measurements of a river		Children will carry out field study where they will make measurements of local stream: depth, width, speed of flow.  Measurements taken will be used to create a profile of the cross section explored.  Record a visual representation of the wildlife and habitats observed at the local stream.
Context	Vocabulary	
Field study: Coombe Abbey.	Investigate, Measure, Explore, Width, Depth Speed, Volume Flood, flood plain water speed flow, rate of flow depth, bank human features cross section/ profile/ transect drawing Habitat, wildlife	

**Main Teaching:**

Field Study at Coombe Abbey Park (or local stream, / shallow river). Discuss how we are going to investigate a local environment, and make measurements that will enable us to find out more about the river. Discuss how we are going to investigate:

- **Width of the river**
- **Depth of the river**
- **Speed of the water in the river**

*How are we going to make sure that we are safe in this environment? What are the potential risks? How are we going to prevent these risks causing a problem?* Discuss water safety in line with Risk Assessment.

### Independent /Group Activities:

At identified section of the river carry out 'Stream Study' activities.

### In groups:

At staggered positions along river side. *What are the key features of the river?* Discuss vocabulary associated with rivers (bank, bed, cross-section, velocity etc.)

Explore **width** of section of river. : Measure cross section using tape measure. *How wide is the section?*

Find **depth** of the stream. Take at regular intervals across cross section to produce 'profile' of bed of the stream. *How deep is it? How does the depth change across the cross section?*

Use stopwatch and floating dog biscuit to find the **speed of flow (velocity)**. *How long does it take to float a specific distance? What is the speed of flow?*

Create sketch of cross section of the stream. Annotate with measurements, and labels to explain key information.

**Children record the habitats and signs of wildlife in this location** – it is their choice of recording. They might sketch a part of the stream and label what animals might live/visit different areas. They might write a list of the animals they can hear and see and another list of the animals they think would share this as their habitat.

### Differentiation:

AA: Measure and record measurements as decimals. Add to own cross-section diagram.

BA: Support with use of measuring equipment to encourage accuracy in reading of scale. Provide 'basic' cross section to add annotations and measurements to.

### Recommended Resources:

Meter sticks

Tape measures

Stopwatches

Floating dog biscuits

Data recording sheets

Basic cross-section diagram to annotate (BA)

Clipboards

Pencils

### Use of ICT:

Photos and/or videos on iPad of sections of the river – with different focus, possibly explaining measuring and recording techniques, possibly evidence of wildlife use.

Assessment

Independent

With Help

Couldn't do it