



RIVERS, FLOODING AND THE LANDSCAPE

KS 3 Geography

Learning Objectives During this Day Course students should learn:	
ü	To recognise and identify geographical features relating to rivers.
ü	About how rivers erode, transport and deposit materials and how these processes can change the shape of the landscape.
ü	To use maps, models and fieldwork equipment, including clinometers and flow meters.
ü	To collect, record and analyse data.
ü	To know how human activity can affect and be affected by rivers.
ü	To understand the hazards and risks associated with rivers.
Students will also:	
ü	Learn safely in a new environment;
ü	Gain an appreciation of the environment and understand their role in caring for it.

<p>Adult : Student ratios For this course CEES' recommended ratio for safety is 1: 10</p> <p>For most classes, pre-arranged working groups of approx 6 students each is ideal. Additional adults may be needed with classes where individual students need 1:1 support.</p>
<p>Other information Please see separate guidance notes on safe and effective day courses, including information on clothing and equipment.</p> <p>NB Please arrange for your bus to transport the group between the Centre and the river (2 miles). You will need to make this clear when booking your bus.</p>

Day Course Programme	
Where 2 classes are attending the course the introductory session will be common to both. Classes will then separate and sessions A and B will be interchangeable am and pm.	
Introduction: On arrival a member of CEES staff will welcome your group to the Centre and describe the day's programme and the learning objectives. An illustrated talk will then introduce or recap river and valley features using geographical terminology, which will be re-visited during the day's programme.	
Session A: This session includes: studying a model and map of the local landscape to identify river and valley features using appropriate geographical vocabulary; using two demonstration models to simulate the way in which rivers erode, transport and deposit material along with the hazards associated with flooding; and investigating how flooding may be caused by differing rates of run-off. The group will next travel by bus to the River Nene at Yarwell Mill. Here landscape features associated with those of the main river will be contrasted with those of a small tributary. Students will annotate base maps, identifying physical and human features, and consider the impact of flooding on the area.	
Session B: For this session the group travels to a fieldwork site beside a small tributary of the River Nene. Here there will be an opportunity to measure and record the speed of flow and the depth of the tributary, to complete a landscape sketch and a cross section, and to measure the angle of the valley profile using clinometers and ranging poles.	
Plenary: The group will reflect on their day and consider how well the learning objectives have been met.	
Note: The actual programme may vary depending on number and needs of students, length of visit and weather conditions	

Relevant extracts from CEES risk assessments	
See also separate guidance notes on safe and effective day courses.	
Hazard	Control measures
Deep and moving water	<ul style="list-style-type: none"> • Students and adults are given clear verbal instructions and are made aware of safe standards of behaviour when working beside water. • Students work in small groups that are closely supervised by staff. • CEES staff carry a throw line • CEES staff will assess water levels and speed to make appropriate decisions on safety. If deemed unsafe pupils will not be allowed to enter water
Extreme weather conditions	<ul style="list-style-type: none"> • CEES staff are aware of daily weather forecast. • Alternative venues or activities are substituted if weather conditions are particularly unfavourable. • In extreme cases, where guidance notes on clothing have not been complied with, students may be excluded from activities.
Water pollution	<ul style="list-style-type: none"> • Practical work is not carried out where any kind of pollution is suspected. • Students with minor cuts, abrasions or with skin allergies are given plasters and/or protective gloves. • Students wash hands thoroughly after the activities • No food is consumed while at a study site.
Unfamiliar surroundings	<ul style="list-style-type: none"> • Adults supervise directly, for example walking beside the group and regularly checking that entire group is present. • Pupils are made aware of safe standards of behaviour.
Equipment	<ul style="list-style-type: none"> • Students are given clear verbal instructions on the appropriate use of equipment. • Students are closely supervised when using equipment.