



## Lesson Plan

### River Invertebrate Sampling

<b>Key Stage 3 Science</b>	
<b>Programme of Study</b>	<b>Living Things and Their Habitats</b>
<b>Statutory requirement</b>	<ul style="list-style-type: none"> <li>• Identify that most living things live in habitats to which they are suited and describe how different habitats provide basic needs of different kinds of animals</li> <li>• Use classification keys to help identify and name a variety of living things in their local environment.</li> </ul>
<b>Working scientifically</b>	<ul style="list-style-type: none"> <li>• Gathering, recording and presenting data</li> <li>• Using simple equipment</li> <li>• Recording findings using tables</li> </ul>
<b>Teaching objectives:</b>	<p>By the end of this lesson, the children will be able to:</p> <ul style="list-style-type: none"> <li>• Describe how living things are adapted to their habitat.</li> <li>• Identify at least 3 living things using a classification key.</li> <li>• Use appropriate equipment to safely and ethically collect and study aquatic organisms.</li> </ul>
<b>Key vocabulary: Adaptations, habitat, environment, classification, oxygen, food, predators, prey, shelter, sampling, sorting.</b>	
<b>Resources :</b> <i>sampling trays, buckets, ID keys, nets, paint trays, pencils, worksheets, clipboards</i>	
<b>Activity</b> 45 – 60 mins	
<p><b>Starter</b> 10 mins– take group to sampling site. Put bags in safe area. Leave clipboards with bags. Lay out tray and bucket at each team sampling station. Explain aim of activity 'to find as many different types of river invertebrates as possible and put them in your team tray. Demonstrate kick sample technique in river.</p> <p><b>Safety talk:</b></p> <ol style="list-style-type: none"> <li>1. Do not go in deeper than 2cm below the top of welly</li> <li>2. No splashing/running in river.</li> <li>3. Don't pick up invertebrates with hands – use a spoon.</li> <li>4. Once hands wet, don't put them near face. All cuts to have plaster or glove so water cannot get into cut due to possible risk of contamination with Weil's disease.</li> </ol> <p><b>Sampling</b> 15-25 mins</p> <p><b>Recording</b> 10 mins All back on to bank. Using spoons, collect animals of same sort into areas of paint pallet. Then identify and use tally to count in each team. Each team record results on their worksheet.</p> <p><b>Clear up</b> 5 mins Release animals and collect equipment</p> <p><b>Discussion</b> 2-3 mins See what everyone has got. Anything different? Anything to indicate the river is clean or polluted?</p>	
Differentiation	To stretch and challenge. Option 1. Could draw animals To support additional educational needs. Option 1. Extra TA support
Take away...	Data to use in classroom for follow up

NB: If weather is bad: this can make using worksheets difficult, but recording would be possible if weather proof clipboards are used. We would need 6 for class of 30.