

Activity: Mayfly in the Classroom Project Key Stage: ONE- develop to (KS TWO)

**Aim**: Develop awareness of the similarities and differences between organisms and habitats and how their environment affects what lives there. Discover what living things need to survive. Life cycles.

Curriculum Links: KS1 Sc2 Life processes and living things – 1b,c; 2a,b,e,f,g; 4b; 5a,b,c (VAK column links to whether the teaching / learning approach is visual, aural or kinesthetic in style ensuring)

**Relevant Risk Assessment**: Wild Trout Trust Risk Assessment Checklist and specific RAs of group / school. Sometimes schools / groups will just have invertebrates in trays in the class that are taken in, then set up apparatus. This could depend on weather or availability of transport.

Activity (approx. time )	Equipment	Location	Learning Objectives	VAK
Preparation discussions prior to the field trip (45 mins) with the class  Introduce Mayfly in the Classroom project Possibly show video from website Look at life cycle and use word search Show photos of equipment we are going to make later  State aims – what they are going to achieve	WTT Website Use large mayfly life cycle poster Word search for new terms as in LO (can complete this afternoon if not enough time here) Play game to act out life	School	To introduce terms such as habitat, aquatic habitat, river, mayfly, nymph, sub imago, imago, life cycle  All children will recognise the word habitat Mostwill have some understanding of the term aquatic habitat and life cycle  Somewill be able to describe what an	VAK
State aims – what they are going to achieve	cycle of mayfly		aquatic life cycle is	
Introduction (10 minutes) Health and safety discussion with the children ask them to listen carefully, walk not run and make them aware of river / stream – ask questions about what		At the river / stream	To introduce terms such as river habitat and wildlife habitat (simple level – listen for birds in the trees and look for fish or birds in the river) to	V,A



problems they could have  Have a good look around – ask What is a habitat? What habitats can we see here? What kinds of wildlife live in the habitats?			stimulate children to look at what is around them  All children will have the opportunity to observe habitats and wildlife in their surroundings.  Mostwill understand that a habitat is a place where animals live.  Somewill understand that different animals live in different habitats.	
<ul> <li>The River Habitat (one hour or more to include break)</li> <li>How is the river different from a pond environment? Moving water / stillwater. Where do they think they need to look to find the animals? – sheltering under the stones.</li> <li>Demonstrate how to kick sample safely.</li> <li>Working in pairs everyone will have the opportunity to do a kick sample(based on risk assessment).</li> <li>Discuss that all living things living in the stream need water to survive and the importance of handling them carefully.</li> <li>Towards the end of the session everyone will stop sampling and have a really close look at the animals in the trays.</li> <li>Discuss how they can look more closely at the animals they have caught using the magnifiers etc.</li> </ul>	<ul> <li>Nets</li> <li>White trays</li> <li>White spoons</li> <li>ID charts</li> </ul>	River / Stream	<ul> <li>To experience the river habitat and compare it with a pond</li> <li>Allwill experience standing in a stream and notice that the water is flowing and there are stones on the bottom of the river.</li> <li>Mostwill understand that one of the differences between the river and pond habitat is that the water is flowing.</li> <li>Mostwill be able to recall that the river flows to the sea.</li> <li>All will use a kick sampling technique to search for animals living in the river.</li> <li>To find out about the different animals that live in the river.</li> <li>All will recognize that a wide variety of animals live in the river.</li> <li>Mostwill understand that the animals are hiding under the stones so that they can shelter from the flow.</li> </ul>	V,A,K



- Encourage them to compare what the different animals look like and how they move.
- Use charts to identify the animals they have caught.
- Discuss life cycles whilst looking at the larvae and nymphs on the charts.
- Gather together at the end to discuss the different animals that they found showing pictures or examples.
- Select a few nymphs to take back to class gather river water and substrate.

Some...will be able to talk about adaptations to their environment.

 To introduce the things animals need in their habitat and to treat them with care and sensitivity.

All...will know that the animals in the river need to be in water to survive.

Most...will understand the need to return the animals to the river at the end of the session.

Some...will be able to name 2 or 3 things that the animals need to survive.

• <u>To recognise and compare the main</u> external parts of the animals

All...will observe similarities and differences between the animals that they have caught.

Most...will be able to use the charts to be able to identify some of the more common animals.

Some...will be able to discuss their observations of the animals' behavioural and physical adaptations to the river environment where the water is flowing.

 To understand that animals can produce offspring and that these offspring grow into adults

All...will observe larvae, nymphs and adults.

		Mostwill understand that the larvae and nymphs are babies and will grow into adults.  Some will begin to understand the full life cycle of some of the river animals.  • To understand that animals move, feed, grow, use their senses and reproduce  Allwill observe animals moving and responding to their surroundings.  Allwill see the eyes and antennae on some of the animals.  Mostwill understand that the animals are using their senses to find their way around.  Somewill begin to understand the feeding relationships between animals in a habitat.  Somewill be able to recall the terms herbivore and carnivore and give an example of each.	
Lunch Break / Return to school	Lunch Break / Return to school	Lunch Break / Return to school	
	_	school / Return to	nymphs are babies and will grow into adults.  Some will begin to understand the full life cycle of some of the river animals.  To understand that animals move, feed, grow, use their senses and reproduce  Allwill observe animals moving and responding to their surroundings.  Allwill see the eyes and antennae on some of the animals.  Mostwill understand that the animals are using their senses to find their way around.  Somewill begin to understand the feeding relationships between animals in a habitat.  Somewill be able to recall the terms herbivore and carnivore and give an example of each.  Lunch Break / Return to  Lunch Break / Return to school



In the Class – Whole afternoon session  1.Setting up the aquaria for mayfly nymphs to hatch from: (working in small groups on different tasks)  2.Working on own life cycle diagram  Activities to be run in parallel so all children are engaged				V,A,K
<ol> <li>Setting up</li> <li>Demonstrate how to set up the tanks.         Watch WTT video, discuss equipment</li> <li>Working in small groups on rotation carry out the set up process</li> <li>Encourage children to ask questions and make sure they understand the living requirements of the mayfly</li> <li>Discuss the daily recording and checks that need to be undertaken. Discuss why? Make rota with teacher         <ol> <li>Life cycles</li> </ol> </li> <li>Use information on WTT sheets to draw own life cycle.</li> <li>Revise the names of each stage and the correct spellings</li> <li>Complete wordsearch if not finished this morning</li> </ol>	<ul> <li>Bottles</li> <li>Pump</li> <li>Airline</li> <li>Airstones</li> <li>Recording documents</li> <li>Rota chart</li> <li>Clips and clamps</li> <li>River water</li> <li>Substrate</li> <li>WTT mayfly life cycle sheets</li> <li>Blank paper</li> <li>Pens and colours</li> <li>wordsearch</li> </ul>	Class	• To understand the mayfly habitat and how they will feed and hatch  Allwill understand that mayfly nymphs need river water and food to live.  Allwill understand the mayfly survival is down to them looking after the mayfly.  Most will understand that mayfly need to leave the water to become adult flies.  Most will understand that the water needs to be well oxygenated and cool.  Somewill recall all the sections of the mayfly life cycle and its habitat requirements for each stage.	V,A,K



Review the day activity (20 mins)		To reinforce similarities and	V,A
Recall the term 'habitat' as a home that		differences between the habitats and	
provides food, water, oxygen, shelter		ways in which these affect the	
Ask children to share their favourite part of the		animals that are found there	
day and one thing they have learnt that they			
didn't know before		Allwill be able to recall the term	
<ul> <li>Discuss the different habitats they have</li> </ul>		'habitat'.	
visited and recall the animals they found in		Mostwill understand that a habitat is a	
each		home for animals.	
<ul> <li>Discuss the mayfly life cycle</li> </ul>		Somewill recall all the things provided by	
<ul> <li>Act out the mayfly life cycle again</li> </ul>		a habitat.	
Discuss what they are going to do now with their project (record temperature, sheek)		<ul> <li>To reinforce the Mayfly project objectives</li> </ul>	
their project (record temperature, check		Allwill be able to recall the name of the	
water level, check for hatching mayfly,		invertebrate for their project (mayfly)	
release mayfly)		Most will be able to describe some of its	
End the day by reading "The Mayfly Day book"		life cycle	
End the day by reading The Mayiny Day book	Tony Ross Book – Mayfly	Somewill be able to recall the names of	
	Day (small inaccuracy in the	each life cycle stage	
	book about mayfly tasting	cuentific cycle stuge	
	honey – easy to gloss over	Allwill understand they now have to care	
	though and it is such a	for the mayfly so it can hatch and be	
	lovely book otherwise)	released	
		reseased	



Follow up -Some ideas often shared with	Food Chain activity
teachers:	sheet / colour sheets
Food chain Activity sheets sent back to	and mayfly life cycle
school	sheets
<ul> <li>Information given to teachers about the</li> </ul>	Wild Trout Trust
Wild Trout Trust Website where there are	website
other activities and game ideas. Such as	www.wildtrout.org –
"Trumps"	other links available in
Mayfly life cycle activity sheets and simple	introduction pack
colour sheets to reinforce learning	Leaflets to offer more
<ul> <li>Options to develop learning to trout life</li> </ul>	advanced learning
cycle and the link between mayfly and trout	options
in our rivers	
• Ecosystems	