

Session title	Pond Explorers	
Key Question	Various available (see session description below)	
Session description	With purpose-built raised ponds and specialist equipment, including electronic microscope and screen, WWT Llanelli is one of the very best places in the country to come pond dipping. Sessions can be adapted to suit your needs, with a focus on one or more of the following key questions: ▪ How can we group and classify pond animals? ▪ How are pond animals adapted to their habitat? ▪ How is energy passed down a pond food chain? ▪ How can we describe the life cycles of pond animals?	
Key Stage suitability	KS2	
Duration	1 hour	

Curriculum links	Curriculum for Wales Science and Technology Being curious and searching for answers is essential to understanding and predicting phenomena Progression step 1 ▪ I can explore the environment, make observations and communicate my ideas. Progression step 2 ▪ I can explore the environment, make observations and communicate my ideas. ▪ I can explore relationships between living things, their habitats and their life cycles. ▪ I can identify things in the environment which may be harmful and can act to reduce the risks to myself and others. Progression step 3 ▪ I can understand how my actions and the actions of others impact on the environment and living things. The world around us is full of living things which depend on each other for survival Progression step 1 ▪ I can recognise that plants and animals are living things which grow. ▪ I can identify, follow and begin to create sequences and patterns in everyday activities. Progression step 2 ▪ I can recognise that what I do, and the things I use, can have an impact on my environment and on living things. ▪ I can explore relationships between living things, their habitats and their life cycles. Progression step 3 ▪ I can describe how living things compete for specific resources and depend on each other for survival. ▪ I can describe the features of organisms and recognise how they allow them to live, grow and reproduce for survival in their environment. ▪ I can explain the role of different organs and systems that enable plants and animals to live and grow. ▪ I can identify the threats to the development and health of organisms and recognise some natural defences, preventions and treatments. Humanities Our natural world is diverse and dynamic, influenced by processes and human actions Progression step 1 ▪ I am beginning to recognise the effects that I have on the natural world.
------------------	---

	- I have first-hand experience of the natural world and am beginning to recognise places which are familiar to me. Progression step 2 - I can describe how people and the natural world may impact on each other. - I can recognise the distinct physical features of places, environments and landscapes in my locality and in Wales, as well as in the wider world. - I can recognise the distinctive features of places, environments and landforms, and how these may change. Progression step 3 - I can describe and give simple explanations about the impact of human actions on the natural world in the past and present. - I can give simple descriptions of how places, spaces, environments and landforms have changed over time. Informed, self-aware citizens engage with the challenges and opportunities that face humanity, and are able to take considered and ethical action Progression step 2 - I am beginning to appreciate and care for living things and my own environment. - I can recognise that my actions and those of others impact upon communities and the environment. Progression step 3 - I can understand the consequences of my actions and the actions of others, and how these affect local, national and global issues.		
Learning outcomes	Most learners	More able learners	
	How can we group and classify pond animals? will be able to group creatures into herbivores, omnivores and carnivores. How are pond animals adapted to their habitat? will be able to describe at least three adaptations that help pond creatures to survive. How is energy passed down a pond food chain? will be able to create a simple food chain and describe that the energy is created by plants at the bottom of the chain. How can we describe the life cycles of pond animals? will be able to describe the life cycle of one pond creature.	How can we group and classify pond animals? will be able to group creatures into their 'species'; Crustaceans, molluscs, insects etc. How are pond animals adapted to their habitat? will be able to describe in detail the adaptations of a specific pond creature. How is energy passed down a pond food chain? will be able to describe the organisms in the food chain using terminology such as producers and consumers. How can we describe the life cycles of pond animals? will be able to describe the life cycle of more than one pond creature.	
Key vocabulary	Adaptations Habitat Lifecycle Vertebrate Invertebrate	Camouflage Larva(e) Exoskeleton Species Arachnid	Carnivore Herbivore Omnivore Detritivore Insect

Session Outline	Time
Introduction	5 mins
Learners are introduced to the centre, staff and volunteers running the session and the key question, explaining what we will be focusing on today.	
Activity 1: How do animals live in a pond?	5 mins
Prediction stage – learners make predictions on the creatures they will find and begin to think about their adaptations.	
Activity 2: Pond Dipping	20 mins
Using nets, learners will dip in our purpose-built ponds to discover as many different species as possible.	
Activity 3: Identification & Exploration	10 mins
Learners will identify the creatures using an ID chart and use the facts from the chart to understand how different species are adapted to living in a pond.	
Activity 4: Observation	15 mins
Learners will observe some of the species more closely under a microscope, focusing on your chosen key question(s).	
Plenary	5 mins
Learners will review what they have learnt and ask any further questions.	