


There are four different versions of our Pond Explorers session available depending on your area of focus. Please click on the one you're interested in:

[Identification and classification](#)

[Animal diets and food chains](#)

[How animals are adapted to their habitat](#)

[Life cycles](#)

Session title	Pond Explorers (Classification)	
Key question	How can we group and classify pond animals?	
Session description	With purpose-built raised ponds and specialist equipment, including electronic microscopes and screens, WWT London is one of the very best places in the country to come pond dipping.	
Key Stage suitability	KS2	
Duration	1 hour	

Curriculum links	<p>KS2 Science Year 4</p> <ul style="list-style-type: none"> ▪ Living things and their habitats <ul style="list-style-type: none"> ○ Recognise that living things can be grouped in a variety of ways ○ Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment ▪ Animals, including humans <ul style="list-style-type: none"> ○ Construct and interpret a variety of food chains, identifying producers, predators and prey <p>Year 5</p> <ul style="list-style-type: none"> ▪ Living things and their habitats <ul style="list-style-type: none"> ○ Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird describe the life process of reproduction in some plants and animals <p>Year 6</p> <ul style="list-style-type: none"> ▪ Living things and their habitats <ul style="list-style-type: none"> ○ Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals ○ Give reasons for classifying plants and animals based on specific characteristics. ▪ Evolution and inheritance <ul style="list-style-type: none"> ○ Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents ○ Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. 	
Learning outcomes	All learners	More able learners
	<ul style="list-style-type: none"> ▪ Will be able to use pond dipping equipment safely and effectively to catch animals with minimal disturbance to the habitat 	<ul style="list-style-type: none"> ▪ Will be able to use a branching key to identify common invertebrates ▪ Will be able to describe the features of a taxonomic class (Insects, Molluscs, Crustaceans, Fish, and Amphibians)

	<ul style="list-style-type: none"> ▪ Will be able to describe the observable features of a pond animal ▪ Will be able to group animals based on observable characteristics 	
Key vocabulary	<ul style="list-style-type: none"> ▪ Classification ▪ Invertebrates ▪ Vertebrate ▪ Amphibians 	<ul style="list-style-type: none"> ▪ Arthropods ▪ Crustaceans ▪ Molluscs ▪ Arachnids
		<ul style="list-style-type: none"> ▪ Adaptations ▪ Species

Session Outline	Time
Introduction	10 mins
A quick introduction to the session and what will be covered, explaining that we will be looking at animals in the pond and sorting them into groups.	
Section 1: Demonstration	5 mins
Explanation and demonstration of pond dipping activity, including important health and safety considerations.	
Section 2: Pond dipping	15 mins
Pond dipping activity.	
Section 3: Choosing an animal to study	5 mins
Learners will identify and choose one animal from their pond dipping activity to investigate further.	
Section 4: Investigation and recording in small groups	15 mins
Learners will now use ID keys to identify and classify their animals. Key questions will be posed so learners can explore how animals are classified.	
Plenary	10 mins
Groups will be invited to share information about their animal	

Session title	Pond Explorers (Diet)
Key question	How is energy passed down a pond food chain?
Session description	With purpose-built raised ponds and specialist equipment, including electronic microscopes and screens, WWT London is one of the very best places in the country to come pond dipping.
Key Stage suitability	KS2
Duration	1 hour

Curriculum links	<p>KS2 Science Year 4</p> <ul style="list-style-type: none"> ▪ Living things and their habitats <ul style="list-style-type: none"> ○ Recognise that living things can be grouped in a variety of ways
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	<ul style="list-style-type: none"> ○ Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment ▪ Animals, including humans <ul style="list-style-type: none"> ○ Construct and interpret a variety of food chains, identifying producers, predators and prey <p>Year 5</p> <ul style="list-style-type: none"> ▪ Living things and their habitats <ul style="list-style-type: none"> ○ Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird describe the life process of reproduction in some plants and animals <p>Year 6</p> <ul style="list-style-type: none"> ▪ Living things and their habitats <ul style="list-style-type: none"> ○ Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals ○ Give reasons for classifying plants and animals based on specific characteristics. ▪ Evolution and inheritance <ul style="list-style-type: none"> ○ Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents ○ Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. 		
Learning outcomes	All learners		More able learners
	<ul style="list-style-type: none"> ▪ Will be able to use pond dipping equipment safely and effectively to catch animals with minimal disturbance to the habitat ▪ Will be able to describe the observable features of a pond animal ▪ Will understand that different animals will have different diets 		<ul style="list-style-type: none"> ▪ Will be able to describe different diets of pond animals ▪ Will be able to describe what an animal eats based on observations and information provided
Key vocabulary	<ul style="list-style-type: none"> ▪ Diet ▪ Predator ▪ Prey 	<ul style="list-style-type: none"> ▪ Carnivore ▪ Herbivore ▪ Omnivore 	<ul style="list-style-type: none"> ▪ Scavenger ▪ Detritivore ▪ Adaptations

Session Outline	Time
Introduction	10 mins
A quick introduction to the session and what will be covered, thinking about what different animals eat in the pond.	
Section 1: Demonstration	5 mins
Explanation and demonstration of pond dipping activity, including important health and safety considerations.	
Section 2: Pond dipping	15 mins
Pond dipping activity.	
Section 3: Choosing an animal to study	5 mins
Learners will identify and choose one animal from their pond dipping activity to investigate further.	

Section 4: Investigation and recording in small groups	10 mins
Learners will now spend time observing their animal and recording their observations. Key questions will be posed so learners can explore what their animal eats in the pond.	
Plenary	10 mins
Groups will be invited to share what and how their animals eat in the pond.	

Session title	Pond Explorers (Habitats)
Key question	How are pond animals adapted to their habitat?
Session description	With purpose-built raised ponds and specialist equipment, including electronic microscopes and screens, WWT London is one of the very best places in the country to come pond dipping.
Key Stage suitability	KS2
Duration	1 hour

Learning outcomes	All learners	More able learners	
	<ul style="list-style-type: none"> ▪ Will be able to use pond dipping equipment safely and effectively to catch animals with minimal disturbance to the habitat ▪ Will be able to describe the observable features of a pond animal ▪ Will be able to identify different micro-habitats within a pond 	<ul style="list-style-type: none"> ▪ Will be able to recall a pond animal's adaptations and how these make it suited to its habitat based on observations and information provided ▪ Will be able to describe why it is important to conserve ponds 	
Key vocabulary	<ul style="list-style-type: none"> ▪ Habitat ▪ Micro-habitat ▪ Adaptations 	<ul style="list-style-type: none"> ▪ Herbivore ▪ Carnivore ▪ Scavenger 	<ul style="list-style-type: none"> ▪ Omnivore ▪ Detritivore

Session Outline	Time
Introduction	10 mins
A quick introduction to the session and what will be covered. Thinking about what animals need to survive in the pond.	
Section 1: Demonstration	5 mins
Explanation and demonstration of pond dipping activity, including important health and safety considerations.	
Section 2: Pond dipping	15 mins
Pond dipping activity.	
Section 3: Choosing an animal to study	5 mins

Learners will identify and choose one animal from their pond dipping activity to investigate further.	
Section 4: Investigation and recording in small groups	15 mins
Learners will now spend time observing their animal and recording their observations. Key questions will be posed so learners can explore how their animal survives in their habitat.	
Plenary	10 mins
Groups will be invited to share how their animal lives in a pond.	

Session title	Pond Explorers (Life Cycles)
Key question	How can we describe the life cycles of pond animals?
Session description	With purpose-built raised ponds and specialist equipment, including electronic microscopes and screens, WWT London is one of the very best places in the country to come pond dipping.
Key Stage suitability	KS2
Duration	1 hour

Curriculum links	<p>KS2 Science Year 4</p> <ul style="list-style-type: none"> ▪ Living things and their habitats <ul style="list-style-type: none"> ○ Recognise that living things can be grouped in a variety of ways ○ Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment ▪ Animals, including humans <ul style="list-style-type: none"> ○ Construct and interpret a variety of food chains, identifying producers, predators and prey <p>Year 5</p> <ul style="list-style-type: none"> ▪ Living things and their habitats <ul style="list-style-type: none"> ○ Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird describe the life process of reproduction in some plants and animals <p>Year 6</p> <ul style="list-style-type: none"> ▪ Living things and their habitats <ul style="list-style-type: none"> ○ Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals ○ Give reasons for classifying plants and animals based on specific characteristics. ▪ Evolution and inheritance <ul style="list-style-type: none"> ○ Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents ○ Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. 	
Learning outcomes	All learners	More able learners
	<ul style="list-style-type: none"> ▪ Will be able to use pond dipping equipment safely and effectively to catch animals 	<ul style="list-style-type: none"> ▪ Will be able to describe why it is important to conserve ponds

	<p>with minimal disturbance to the habitat</p> <ul style="list-style-type: none"> Will be able to describe the observable features of a pond animal Will be able to recall a pond animal's life cycle based on observations and information provided 	<ul style="list-style-type: none"> Will understand the concept of metamorphosis and how it applies to some of the animals living in a pond 	
Key vocabulary	<ul style="list-style-type: none"> Breeding Reproduction Development Metamorphosis 	<ul style="list-style-type: none"> Carnivore Herbivore Scavenger Detritivore 	<ul style="list-style-type: none"> Omnivore Larvae Nymph

Session Outline	Time
Introduction	10 mins
A quick introduction to the session and what will be covered, thinking about how different animals grow in the pond.	
Section 1: Demonstration	5 mins
Explanation and demonstration of pond dipping activity, including important health and safety considerations.	
Section 2: Pond dipping	15 mins
Pond dipping activity.	
Section 3: Choosing an animal to study	5 mins
Learners will identify and choose one animal from their pond dipping activity to investigate further.	
Section 4: Investigation and recording in small groups	10 mins
Learners will now spend time observing their animal and recording their observations. Key questions will be posed so learners can explore how their animal grows in the pond.	
Plenary	10 mins
Groups will be invited to share how their animal grows in a pond.	