

THE WINTERTON FEDERATION MEDIUM TERM PLAN SCIENCE Autumn 2 YEAR 1

Plants & Animals Where We Live	Learning Objective	Activity – Switched On Science	STEM Activities	Success Criteria
Session 1	Identify and name a variety of common wild and garden plants, and deciduous and evergreen trees. Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.	Explore school grounds or a local park to look for different plants and animals and see how many can be spotted. If appropriate, pick a leaf or a flower from each different plant and place it in a collecting bag. Use the 'Question wristbands' to ask questions, e.g. What is this?, or How did it get here? Encourage close observation using hand lenses: take photographs of themselves exploring and of the plants and animals found. Sort the items either outdoors using their own or your criteria, e.g. by size, shape, colour, texture, number of petals, flower or no flower. Scaffold language, for example, textures and shape, e.g. rough, smooth, bumpy, velvety, prickly, oval, triangular. Introduce correct names of the plants found, identification naming is a key part of the learning in Year 1. Ask - have you seen or found evidence of animals, e.g. bird feathers, snail or slug trails, spiders and webs. Guide them to search for evidence themselves. Encourage use of correct scientific vocabulary by modelling the use of scientific language, e.g. deciduous and evergreen. Take photographs of children's activities and use sticky notes to record observations.		I can identify plants including trees I can use hand lenses and identification sheets to name plants, making careful observations I can observe similarities and difference between plants including trees
Session 2	Identify and name a variety of common wild and garden plants, and deciduous and evergreen trees. Identify and	Recap on prior learning and revisit the area that they were exploring in Activity 1 to find out more about the plants and trees there and see how many they can identify and name. Tell them they are Botanists and use Activity Resources 4.2 and 4.3. Encourage them to take time to observe carefully. Take		I can identify plants including trees I can use hand lenses and identification sheets to name plants, making careful observations I can observe similarities and difference between plants including trees

	describe the basic structure of a variety of common flowering plants, including trees. Observe changes across the four seasons.	leaves, match them to the ones on the 'Spotter' sheets and help children to learn the names of the trees or flowers. Remind them to use their 'Question wristbands' to help find the name of the tree or flower. Give points for learning the correct names. At this stage, learning names is important since it lays the foundations for the work carried out in later primary years.		
Session 3	Identify and name a variety of common wild and garden plants, and deciduous and evergreen trees. Identify and describe the basic structure of a variety of common flowering plants, including trees.	Challenge the children to find as many leaves on the ground as they can in one minute. They use their 'Question wristbands' (Activity Resource 4.1) to ask and answer questions about the leaves in their collection. Show PowerPoint Slide 7 and discuss the similarities and differences between leaves and whether trees are either deciduous or evergreen. Children collect a range of leaves from trees (and / or other plants) and use them to ask questions using their 'Question wristband'. They could ask questions and suggest ways of answering their questions, such as: What is the name of the tree / plant this leaf came from? (Use Activity Resource 4.2, 'Tree spotter' sheet.) Where was the leaf found? Measure how far from the tree their leaf was found. Which leaf is the biggest? Note the similarities and differences between leaves. Who found the most interesting leaf? Comparing similarities and differences with others. How did the holes in the leaf get there? Why do leaves have veins and are they all the same? Classifying leaves according to pattern of veins. Other ways of sorting leaves, are, e.g. in order of, size, shape, hairy, spikey, one leaf, made up of more than one leaf (leaflets) colour (light green to dark		<p>I can identify leaves using an identification grid</p> <p>I can compare differences and similarities between leaves</p> <p>I can make careful observation</p>

		green). Record work in a class Big Book from Activity 3, or on a large cut-out of one of their leaves.		
Session 4	Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).	This session will be a Bird Watching Session to identify and count the birds in the school grounds. Use the 'Common bird spotter' sheet, Activity Resource 4.4). Use PowerPoint Slides 8 and 9 to introduce birds and practise identification of similarities and differences. Keep a tally of the birds spotted and create a graph. Pose questions about the data.		I can describe features of birds and begin to compare these I can begin to identify names of birds Record using a tally the birds identified
Session 5	Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. Identify and name a variety of common animals that are carnivores, herbivores and omnivores.	Ask how they could encourage more birds to visit the school grounds; hopefully something to feed the birds. Show different bird feeders they can make and use PowerPoint Slide 12 to explain they are going to choose one to make. Create their own set of instructions for making a bird feeder which can be placed on the school website, newsletter, etc. Discuss where the best place would be for the bird feeders to be placed around the school grounds and then, over a couple of days, carry out a new bird count to find out which birds are using the feeders. Use the identification grid and create a new tally. Discuss how the type of bird (e.g. size and shape of beak) means that some birds will find it easier to use the feeders and compare the structure of different birds		I can describe and compare the features of different birds and suggest ways that they could feed other birds, e.g. different sizes and beaks I can identify birds and record observations in a tally chart
Session 6	Identify and name a variety of common animals including	Use PowerPoint Slides 13, to 18 to show animals from different groups, and introduce them to different kinds of animals, birds,		I can ask questions, to identify animals and use a tally charts to record findings.

	<p>fish, amphibians, reptiles, birds and mammals. Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</p>	<p>reptiles, mammals, fish and amphibians. Encourage use of personal knowledge and experience to suggest other examples, e.g. their own pets, animals they have seen. Sort toy animals into groups. Then use 'Animal' cards (Activity Resource 4.5) to sort the animals into groups: birds, reptiles, mammals, fish and amphibians. Play 'Shout the group' where you show children a picture of an animal and the class shouts out birds, reptiles, mammals, fish and amphibians. Use PowerPoint Slide 17 to challenge children to work out the odd one out. Extend to include what each of the animal groups eats and teach children the terms carnivore, herbivore and omnivore. Use PowerPoint Slide 19 and write two sentences about an animal or annotate an image of an animal using specific vocabulary learnt.</p>		<p>I can answer my own new questions I can make careful observations and record these</p>
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