

THE WINTERTON FEDERATION MEDIUM TERM PLAN SCIENCE Spring 1 YEAR 3

Forces/Plants	Learning Objective	Activity – Switched On Science	STEM Activities	Success Criteria
Session 1	<p>To identify and describe the functions of the different parts of flowering plants – roots, stem, leaves and flowers.</p> <p>To investigate how water is transported within plants. To set up simple practical enquiries.</p>	<p>Look at examples of plants in pots. Identify the different parts of the plants that they can remember from Year 1 & discuss what job they think each part of the plant does. Carefully lift one plant out of the pot to show the roots. Label the parts of a plant on 'Plant parts' activity sheet (Activity resource book, page 31).</p> <p>Go outside to examine a tree. How is it the same as the plants they were looking at in the classroom? How is it different? Can they identify the leaves, roots and stem? Can they see any flowers?</p> <p>Get into groups: Grow some broad beans or sugar snap peas on damp cotton wool or kitchen roll. Observe how the roots and shoots appear and how the leaves are produced. Take photographs regularly to help the children remember everything they observe.</p> <p>On a large sheet of paper, make a collage of a plant from different materials such as silver paper, scrunched-up crepe paper, string and sequins. Add labels for each part. Then add an explanation of what each part does.</p>		<p>I can identify the different parts of a plant and their functions.</p> <p>I can set up simple, practical enquiries.</p> <p>I can describe how water is transported in plants.</p>
Session 2	<p>To identify and describe the functions of the different parts of flowering plants – roots, stem, leaves and flowers.</p> <p>To investigate how water is</p>	<p>As a class: Set up 'The very thirsty cactus' experiment (see 'The very thirsty cactus', page 56). Observe and measure the diameter and height of a shrivelled cactus plant. Water it well and leave it for 24 hours. Check it every day and re-measure its height and diameter. Set up experiment with white carnations. Leave them for a few hours in coloured water and see what happens to the colour of the flowers. Take photographs before and after to help the children see just how much the</p>		<p>I can identify the different parts of a plant and their functions.</p> <p>I can set up simple, practical enquiries.</p> <p>I can describe how water is transported in plants.</p>

	transported within plants. To set up simple practical enquiries.	carnations have changed. Use drinking straws to model how water is transported through the stem.		
Session 3	To explore exactly what plants need to live and grow, and how these requirements vary from plant to plant. To ask relevant questions and use different types of scientific enquiry to answer them.	Set up investigations – Do plants need to water to survive and Do plants need soil to survive and Do plants need light to survive. Divide class into 3 groups and set up the investigations using Cress seeds or Broad Bean seeds. Get the children to predict what they think will happen? With the light investigation consider too much and too little light.		I can describe what plants need to grow and stay healthy. I can compare the effects of different conditions on plant growth. I can ask relevant questions and use different types of scientific enquiry to answer them.
Session 4	To explore the important role that flowers play in the life cycles of plants, from pollination to seed spreading. To record the findings using drawings and labelled diagrams.	Take a close look at a lily or a tulip. Identify the different parts of the flower. Point out where the pollen is made. Gently remove the petals and sepals, placing them on a large sheet of paper. Then carefully remove the stamen and carpels. Stick all the parts down onto a big sheet of paper using a large strip of sticky tape and label each part. Count the number of sepals, petals, stamens and carpels in the flower. Be careful: pollen can stain clothes. Children can use the activity sheet, 'Flower power' to label the parts of a flower (Activity resource book, page 32). Get interactive: Children can label the parts of a flower on the interactive activity, 'Flower power' (My Rising Stars).		I can name the different parts of a flower and explain what they do. I can explain what pollination is. I can describe some of the different ways plants spread their seeds. I can record my findings using drawings and labelled diagrams.
Session 5	To explore the important role that flowers play in the life cycles of plants, from pollination to seed spreading.	Show real examples of seeds from packets. Also show images taken from the Internet of conkers, acorns, etc. Discuss what seeds are and why plants might make them. (Take care: wash hands after handling packet seeds.) Record observations on the 'Type of seed'		I can name the different parts of a flower and explain what they do. I can explain what pollination is. I can describe some of the different ways plants spread their

	<p>To record the findings using drawings and labelled diagrams.</p>	<p>sheet (Activity resource book, page 33). Pair up: Discuss what fruit is, looking at some real examples. Start by cutting a sweet pepper in half. Ask the children to draw what they see inside and label the seeds. Repeat the process with other fruit such as a tomato and an apple. Discuss why plants make fruit like this for the seeds. And how does it help the seeds spread?</p> <p>Get into groups: Ask the children to harvest some of the seeds from the fruits they are looking at. Dry these out for a few days and then plant them in small pots of compost. See 'It's harvest time!' practical, page 67.</p> <p>Get interactive: Discuss the different ways a seed can be dispersed. For example, how does a sycamore seed or dandelion seed travel to somewhere else?</p>		<p>seeds.</p> <p>I can record my findings using drawings and labelled diagrams.</p>
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