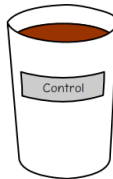

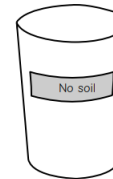
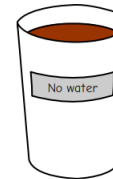




Summer 1 Year 2 Plants and Animals

Year 2 Summer 1		Subject Skill (Learning Objective)	Subject Knowledge	Pedagogical Content (how you will teach)								
Week 1 6.5 hours	Plants and animals, including humans. Science Week	<p><u>Lesson 1</u> I am learning to describe what plants need in order to grow and stay healthy (water, light & suitable temperature).</p> <p>I am learning to use simple data to answer questions</p> <p>I am learning to carry out simple tests and consider what the outcome might be.</p> <p><u>Lesson 2</u> I am learning to explain the basic stages in a life cycle for animals, including humans.</p> <p><u>Lesson 3</u> I am learning to describe what animals and humans need to survive.</p> <p><u>Lesson 4:</u> I am learning to describe how seeds and bulbs grow into plants.</p> <p>I am learning to ask simple scientific questions.</p>	<p>I know that a seed and a bulb can grow into a plant</p> <p>I know plants need water, light & suitable temperature to grow</p> <p>I know a human grows from a baby, to a child , to an adult.</p> <p>I know a chick hatches out of an egg to become a bird</p> <p>I know animals and humans need food, water and shelter to survive</p> <p>I know how to can carry out simple tests.</p> <p>I know how to simple data to answer questions</p>	<p>Lesson 1- What do plants need to grow/germinate?</p> <p>Explain that Germination is when a seed begins to grow into a plant. We can see when a seed is germinating because roots and shoots begin to appear. Seeds don't start to germinate as soon as they are made by the plant. They can remain as seeds for a long time before they germinate. In fact, scientists recently found some seeds which were over 1000 years old and managed to get them to germinate!</p> <p><i>What do you think plants need to grow? Why do you think this?</i> List some of their ideas on the board. Explain that I have some seeds. <i>How could I test what they do need to grow?</i> Explain that we could be Super Scientists and investigate. Follow the following:</p> <div><p>Scientific question What causes seeds to germinate?</p><p>You will need:</p><ul style="list-style-type: none">• 12 seeds (broad beans are ideal)• 6 pots• 6 labels• Water• Cling film• Soil</div> <p>Set up the experiment as per the following:</p> <div><div><p>Label: Control Contains soil, water, warmth, air and light. Place this pot on a sunny windowsill.</p></div><div><p>Label: No Air Contains soil, water, warmth, and light. Place cling film over the top of this pot. Place it on a sunny windowsill.</p></div><div><p>Label: No Soil Contains water, warmth, air and light. Place this pot on a sunny windowsill.</p></div><div><p>Label: No Water Contains soil, warmth, air and light. Place this pot on a sunny windowsill.</p></div><div><p>Label: No Light Contains soil, water, air and light. Place this pot in the fridge.</p></div><div><p>Label: No Warmth Contains soil, water, air and light. Place this pot in the fridge.</p></div></div> <p>Explain that : We are only changing one thing: the one thing that each pot is missing. We are trying to keep everything else the same. This makes our test more fair. Set up your pots, make your predictions, and at the end of the week, see if you can answer the question: What do seeds need to germinate?</p> <p>For each pot, get the children to make a prediction like below. Or you could stick in a photo and the children explain underneath. They could do this in groups to support LAPS.</p> <table><tr><th>Control</th><th>Results</th><th>No Air</th><th>Results</th></tr><tr><td><p>Prediction What does this pot contain?</p><p>What is missing?</p><p>Do you think that the seeds in this pot will germinate?</p><p>Why?</p></td><td><p>Sketch of pot after 1 week:</p><p>Did the seeds germinate?</p><p>Why do you think this happened?</p></td><td><p>Prediction What does this pot contain?</p><p>What is missing?</p><p>Do you think that the seeds in this pot will germinate?</p><p>Why?</p></td><td><p>Sketch of pot after 1 week:</p><p>Did the seeds germinate?</p><p>Why do you think this happened?</p></td></tr></table> <p>Take a photo each day to support Lesson 5.</p> <p>Lesson 2 – KQ: What is a life cycle? Why is it called a cycle?</p>	Control	Results	No Air	Results	<p>Prediction What does this pot contain?</p> <p>What is missing?</p> <p>Do you think that the seeds in this pot will germinate?</p> <p>Why?</p>	<p>Sketch of pot after 1 week:</p> <p>Did the seeds germinate?</p> <p>Why do you think this happened?</p>	<p>Prediction What does this pot contain?</p> <p>What is missing?</p> <p>Do you think that the seeds in this pot will germinate?</p> <p>Why?</p>	<p>Sketch of pot after 1 week:</p> <p>Did the seeds germinate?</p> <p>Why do you think this happened?</p>
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<p>Prediction What does this pot contain?</p> <p>What is missing?</p> <p>Do you think that the seeds in this pot will germinate?</p> <p>Why?</p>	<p>Sketch of pot after 1 week:</p> <p>Did the seeds germinate?</p> <p>Why do you think this happened?</p>	<p>Prediction What does this pot contain?</p> <p>What is missing?</p> <p>Do you think that the seeds in this pot will germinate?</p> <p>Why?</p>	<p>Sketch of pot after 1 week:</p> <p>Did the seeds germinate?</p> <p>Why do you think this happened?</p>									

Summer 1 Year 2 Plants and Animals

			<p>Start lesson by show chn video of a chick hatching – You could use the video on the chick hatching powerpoint. <i>What is happening in this video? What will happen to the chick next? In a year?</i> Explain that this is part of a chick's life cycle. Explain that a life cycle is named as such because it goes around and around. The chick is hatched, it will become an adult and then it will lay its own egg and that chick will hatch. Link the idea of life cycles to the pupil's life cycles – What stages have they had? What stage is next?– Once the animal reaches adulthood, they help to start the cycle again by producing a young version.</p> <p>Chn to be given images which indicate life cycle stages of chicks and humans. They need to put these in the correct order and create a life cycle diagram. (see Life cycles document)</p> <p>Lesson 23 KQ – Desert Island survival – What will you ask for?</p> <p>Show chn video of a deserted island – Explain that they are stranded there. They have 1 piece of paper and 1 pencil. They need to send a letter in a bottle to ask for someone to send them things they want to help them survive. Ask chn what they think animals need to survive – Let chn discuss and come back as a class to share thoughts. You could use the human survival photos to help with this (children to decide which are essential for survival and which are not). Go through basic needs for survival – Water, food and air. Ask chn why each of these things are essential, what do they provide us with? Chn to write a letter which will ask for someone to send a survival pack. The chn need to write an explanation of what they need and why they need each provision: For example: To whoever receives this letter, I am stuck on a desert Island. I need some clean water sending because without it I will become dehydrated.</p> <p>Lesson 4 KQ: Does it matter which order the parts of a plant grows in?</p> <p>This is the lesson where you will need pictures of the plants on different days. – These pictures should show the different stages of the seed's development over the week. Show chn the pictures without the day numbers on them. CHn to work in groups to discuss which order they think the pictures go in. Bring groups back as a whole class and share thoughts and reasoning on the order they have chosen. Go through the stages with chn. You could use a time lapse video or a powerpoint: https://www.twinkl.co.uk/resource/t-t-5231-bean-life-cycle-powerpoint . Chn to stick the pictures you took throughout the week in their books. Next to each picture, they need to write an explanation of what is happening during this stage. They should then write what will happen next in order to make this a whole life cycle of a plant.</p>
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Vocabulary

Question, answer, equipment, observe, observing, record, diagram, egg, hatch, chick, feathers, chicken, baby, child, adult, older person, grow, change, Food, water, healthy, balanced diet, exercise, heart, personal hygiene, washing hands, bath, shower.

Resources.

You will need:

- 12 seeds (broad beans are ideal)
- 6 pots
- 6 labels
- Water
- Cling film
- Soil

Resources saved in resource folder.