

Plants: What Do Plants Need?

<p>Aim: To find out and describe how plants need water, light and a suitable temperature to grow and stay healthy by comparing the growth of seedlings under different conditions.</p> <p>I can use my observations to explain what plants need.</p> <p>To gather and record data to help in answering questions by measuring the results of a comparative test.</p> <p>I can record the results of a comparative test.</p>	<p>Success Criteria: I can explain what plants need to grow well. I can give reasons for my answers.</p> <p>I can measure the growth of plants with a ruler.</p> <p>I can record the growth of plants by drawing or writing.</p>	<p>Resources: Lesson Pack Rulers Magnifying glasses Shallow plastic trays - 1 per child Cotton wool or kitchen roll Cling film Cress seeds</p>
	<p>Key/New Words: Comparative test, compare, prediction, germinate, grow.</p>	<p>Preparation: Differentiated Plant Test Results Activity Sheet - 1 per child Differentiated Comparing Seeds and Bulbs Activity Sheet - 1 per child Seeds and Bulbs Word Mat - as required</p>

Prior Learning: Children will have set up the comparative test in lesson 2. They will have planted seeds and bulbs in lesson 2 and measured their growth in lesson 3.

Learning Sequence

	<p>Plant Growth Comparative Test: Remind children of the comparative test and the different conditions given to each of the plants. In pairs, children discuss their prediction for how each plant will have grown.</p>	
	<p>Comparative Test Results: Seat children in their groups from lesson 2, with access to their four test seedlings. Children fill in the differentiated Plant Test Results Activity Sheet by drawing the test plants, writing a sentence to describe them and measuring them with a cm (or mm) ruler, before concluding what plants need to grow well.</p> <p>★ Children record plant growth by drawing. ★★ Children record the measurements of the test plants in mm.</p>	
	<p>Conclusions: As a class, discuss the results and address any misconceptions. Read through the slides to give more information on the water and sunlight requirements of plants. Discuss the children's predictions and decide if the conditions that they chose for the sunflower seeds and narcissus bulbs were correct.</p>	
	<p>Comparing Seeds and Bulbs: Children measure their sunflower and narcissus plants with a ruler and record the result in the Plant Growth Table Activity Sheet that they began last week. Children fill in the differentiated Comparing Seeds and Bulbs Activity Sheet to record the growth of their plants by drawing them, and writing descriptions using the Seeds and Bulbs Word Mat for support.</p> <p>★ Children write a sentence to describe their plants using the Seeds and Bulbs Word Mat for support. ★★ Children write their sentences without the support of the Seeds and Bulbs Word Mat.</p>	
	<p>Cress! Explain that the children are going to compare the effect of different temperatures on the germination of cress. In pairs, children sow two trays of cress; one to grow inside in a warm place, and one to grow outside where it is cool. Place the trays in suitable locations. (You will need to make sure that the cress seeds remain moist until the next lesson.)</p>	

Taskit

Researchit: There are some fascinating plants in the world, like the Selaginella Lepidophylla, or Resurrection Plant, that can survive almost complete desiccation and still spring back to life when put in water. Have a class competition to see who can find out about the weirdest and most wonderful plant.

Makeit: Make unusual planters out of recycled materials, for example old boots and shoes.

Watchit: Watch the video [BBC clip](#) at to find out more about the different water requirements of plants.