

Key Stage **KS1**

Topic

**Plants**

Class **2**

Range

**1 - 2 (3)**

**End of Unit Goals**

**Pupils will be able to:**

- Observe and compare how seeds and bulbs grow into mature plants
- Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy

**Designing Experiments**

- Suggest what might happen
- Suggest an idea to test from observations
- Follow short spoken & written instructions

**Analysis & Evaluation**

- Describe simple patterns in data, charts
- Describe changes that have happened
- Suggest a different way to do things

**Key Terminology:**

Grow, seed, bulb, (tuber), leaf, root, stem, flower, fruit, germination, seedling, water, light, temperature, reproduction

Lesson	Content Objective	Skill Objective	Possible Activities
1	How do plants grow?	Follow instructions	<ul style="list-style-type: none"> <li>• Examine different types of seed</li> <li>• Show time-lapse DVD clips showing plants growing from a seed. Show living plants (grass, cress, crocus, potato, etc) growing at different stages. Discuss similarities &amp; differences.</li> <li>• Set up bean seeds in clear jars (vertical; paper substrate). Provide written instructions / demo.</li> </ul>
2	What conditions do plants need to grow?	Suggest an idea to test from observations	<ul style="list-style-type: none"> <li>• Observe plants growing in different conditions (provide a range of limiting conditions - can be made subtle differences for most able). Suggest ideas to test. Emphasise cause and effect. Teach principles of a fair test?</li> <li>• Fair test - effect of light on germination/growth of cress (categoric or continuous using light sensor). Set up. Determine range? Discuss effect of controlled variables &amp; why keep them same?</li> <li>• Observe bean seeds. Photo/draw/written record. Diary booklet.</li> </ul>
3	What conditions do plants need to grow?	Follow instructions	<ul style="list-style-type: none"> <li>• Observe results. Count seeds germinated. Record. Plot as bar chart / graph. Discuss etiolation (not green) - light is needed for growth, not germination. Write a diary as a seed growing in the dark.</li> <li>• Fair test - effect of water/temperature on germination/growth of cress (categoric or continuous). Set up. Determine range?</li> <li>• Observe bean seeds. Photo/draw/written record</li> </ul>
4 & 5	What conditions do plants need to grow?	Describe patterns in data	<ul style="list-style-type: none"> <li>• Observe / count results. Record. Plot as block/bar chart Discuss effect of variables on germination/growth.</li> <li>• Compare provided chart/graphical data on plant growth (e.g. effect of nutrients)</li> <li>• Observe bean seeds. Photo/draw/written record. Cross-curricular writing.</li> </ul>