



Grow your own grub.



Science Objective

To understand what plants need in order to grow

Resources

- 3 courgette seeds
- Pots and soil for each plant
- Measuring jug
- Ruler
- Water
- Digital camera

Teaching activity

Introduction

Ask the class to...

- Watch the GROW courgette animation at bbc.co.uk/digin.
- Discuss with the class what a plant needs to grow successfully. Record all answers to refer back to at the end of the lesson.
- In pairs, discuss: "Does the amount of water affect how well the plant grows?"
- Create a two-point prediction and hypothesis based on the above question. Write a fair test thinking about one thing that will change in the experiment, and the number of things which will stay the same in order for the test to be fair.

Activity

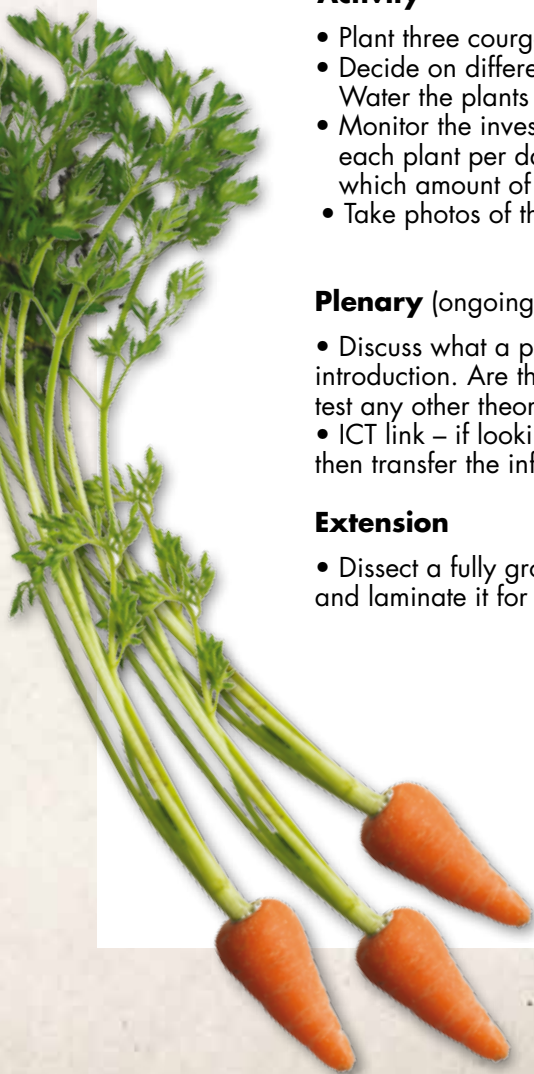
- Plant three courgette seeds into separate containers.
- Decide on different amounts of water each plant will be given. (Try: 10ml, 30ml and 50ml). Water the plants with each amount of water each day.
- Monitor the investigation over a couple of weeks by using a results table to record the height of each plant per day or week. At the end of the investigation agree a two point conclusion stating which amount of water helped the plant grow bigger.
- Take photos of the plant at its different stages.

Plenary (ongoing through the lesson and the next few weeks)

- Discuss what a plant needs to grow successfully. Refer back to the notes made in the introduction. Are there any other factors which may affect its growth? Plan a similar experiment to test any other theories.
- ICT link – if looking at light or temperature, use data loggers to record the different conditions, then transfer the information into a graph for analysis.

Extension

- Dissect a fully grown plant to reveal its component parts. Label the parts of the plant and laminate it for evidence.





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National Curriculum

Sc1.2

- a. Ask questions and decide how to find answers to them.
- b. Use simple information sources to answer questions.
- c. Think about what might happen before deciding what to do.
- d. Recognise when a test or comparison is unfair.
- e. Follow simple instructions to control the risks.
- f. Use ICT to communicate what happened.

Sc2.3

- a. Use senses to recognise similarities and differences between materials.
- b. Recognise and name the common types of materials.

Scottish Curriculum for Excellence

I can identify and classify examples of living things, past and present, to help me appreciate their diversity.
I can relate physical and behavioural characteristics to their survival or extinction. SCN 2-01a

I can use my knowledge of the interactions and energy flow between plants and animals in ecosystems, food chains and webs. I have contributed to the design or conservation of a wildlife area. SCN 2-02a

Through carrying out practical activities and investigations, I can show how plants have benefited society. SCN 2-02b

I have collaborated in the design of an investigation into the effects of fertilisers on the growth of plants. I can express an informed view of the risks and benefits of their use. SCN 2-03a

NI Curriculum

Lang+Lit: Talking and listening, reading, writing, presentation skills, ICT

World Around Us: Main stages in lifecycles, plants and plant growth, how change occurs in the natural world (Science and Technology, ICT), How living things interact within the environment, how living things survive (Geography)

Mathematics and Numeracy: place events in order of 'likelihood', estimation, collecting, representing and interpreting data (Handling Data, ICT)

