

# Lesson 1: HOW DOES YOUR GARDEN GROW?



L.O: To find out what a plant needs in order to grow and to understand the jobs of each part of a plant

Activity/ Task	Teacher Notes	Learning Type	Location	Resources
Introduce the veg garden project	Discuss with children that you will be growing a vegetable garden this term and learning about how plants grow and what they need.  Explain that in a few weeks, your school will receive a box full of baby vegetable plants. You will need to plant them soon after they arrive and look after them throughout the summer term. If you look after them well you'll be able to harvest loads of veg, and some strawberries, towards the end of term. You could even hold a little farmer's market.	Teacher Input/ Class Discussion	Classroom	
Ask children what they think a plant needs in order to grow.	Use the powerpoint presentation to guide children through the things that a plant needs to grow (you could prompt them by asking them what things a human needs to survive) 1) Sunlight – if a plant is kept in the dark it won't grow strong, instead it will be weak and soon die. 2) Heat – They need warmth to be able to grow into a healthy plant. If it's too cold, growth is stunted. 3) Air – carbon dioxide from the air is needed to help produce food for the plant (part of photosynthesis.) 4) Water – without water, the stem and leaves will dry up and eventually die 5) Nutrients – taken from the soil, these act as food for the plant. (Eg. nitrogen, magnesium, potassium)	Teacher Input/ Class Discussion	Classroom	Powerpoint Slides
Identify the different parts of a plant.	Continuing through the powerpoint presentation, introduce the class to the 3 different parts of a plant: 1) Roots keep the plant steady in the ground so that they can grow big and strong. They also take nutrients and water from the soil and carry these up to the stem. 2) Stem – this carries water and nutrients to the leaves of the plant 3) Leaves – these absorb sunlight and carbon dioxide from the air to make food for the plant (part of a process called photosynthesis) Most plants will also have flowers - these attract pollinating insects to help the plant reproduce through pollination. You'll cover this in another lesson.	Teacher Input/ Class Discussion	Classroom	Powerpoint Slides
How to tell if a plant is healthy.	Using the final slide of the powerpoint presentation, ask the children to suggest ways in which you can tell if a plant is healthy or unhealthy. They could discuss this in groups or raise hands to answer. A healthy plant: stem is upright and strong, leaves are green and alive. An unhealthy plant: stem is droopy and weak, leaves are yellow/brown, leaves are wilting	Teacher Input/ Class Discussion	Classroom	Powerpoint Slides
Label the different parts of a plant and identify the jobs they do.	Children should complete the worksheet provided. Differentiation: For less able children, print the labels for them to cut and stick into the boxes. Extension task: Imagine you are a gardener who is teaching children to plant up their school garden. What would you tell the children to do so make sure their plants will grow? Write a list of instructions for school children to grow a healthy plant.	Independent Work	Classroom	Worksheet
Decide how the class will grow the veg garden	Take the children outside and ask them where they think they should grow their plants based on the previous work. Ask them what you will need to do to prepare for planting your vegetable plants. 1) Find an area which has plenty of sunlight 2) You will need to plant in a raised bed or designated patch of soil, or use some plant pots and/or growbags 3) Before the plants arrive you will need to prepare the soil by digging it over.	Group Discussion	Garden	

National Curriculum Checklist ( Lower Key Stage 2 Programme of Study)

- Pollination, seed formation and seed dispersal
- Looking for patterns in the structure of fruit

Source: National Curriculum in England: science programmes of study. 6th May 2015.

<https://www.gov.uk/government/publications/national-curriculum-in-england-science-programmes-of-study/national-curriculum-in-england-science-programmes-of-study#lower-key-stage-2-years-3-and-4>