

How Plants Grow : Science : Year 3

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To identify and describe the functions of the roots of flowering plants.	Children will recap the main features of flowering plants, then learn about how roots grow, and what their functions are. They will then plan an experiment where they will grow beans, measuring root growth.	<ul style="list-style-type: none"> • Can children name the main parts of flowering plants? • Can children explain the function of roots? • Can children record findings and draw conclusions? 	<ul style="list-style-type: none"> • Slides • Worksheets 1A/1B/1C • Growing Beans worksheet • Dried bean seeds (butter beans, kidney beans or similar) • Cotton wool • Clear pots or jars • Water
Lesson 2	To investigate the way in which water is transported within plants.	Children will learn how water, absorbed by the roots is distributed around the plant via the stem. They will then conduct experiments where the capillary action in plant stems can be observed.	<ul style="list-style-type: none"> • Can children explain where plants get their water from? • Can children name the parts of the plant that transport water? • Can children plan and carry out simple investigations? • Can children draw simple conclusions? 	<ul style="list-style-type: none"> • Slides • Worksheets 2A/2B/2C • Celery, food dye, water, plastic containers • Plastic cups, kitchen roll (FSD? activity only)
Lesson 3	To identify and describe the functions of leaves in flowering plants.	Children will start to learn how plants make their own food using air and sunlight. They will then either describe parts of this process in their own words, or plan and conduct an experiment to show the importance of light for plant growth.	<ul style="list-style-type: none"> • Can children say what plants need to produce their own food? • Can children explain the function of leaves in flowering plants? • Can children start to explain some stages in the life cycle of flowering plants? 	<ul style="list-style-type: none"> • Slides • Worksheets 3A/3B/3C • Life Cycle Flowchart • Equipment as listed below (FSD? activity only)
Lesson 4	To explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.	Children will start to identify the parts of a flower, and how pollination occurs. They will then continue to identify and label the parts of a flower by drawing diagrams or dissecting flowers.	<ul style="list-style-type: none"> • Can children name the main parts of flowers? • Can children describe the functions of the main parts of flowers? • Are children able to describe one of the ways in which flowering plants reproduce? • Do children know how and where seeds are formed in flowering plants? 	<ul style="list-style-type: none"> • Slides • Worksheets 4A/4B/4C • Dissecting Flowers worksheet (FSD? activity only) • Double-sided sticky tape (FSD? activity only) • Sticky tape or sticky-backed plastic (FSD? activity only) • Tweezers (FSD? activity only) • Flowers (FSD? activity only)
Lesson 5	To explore some of the ways in which flowering plants disperse their seeds.	Children will learn how the ovaries of flowering plants grow to form seeds, and how they may be dispersed in a variety of ways. They will then either continue to study in-depth some ways in which seeds are dispersed, or identify seeds found outside.	<ul style="list-style-type: none"> • Can children explain why flowering plants need to disperse their seeds? • Can children describe some ways in which seeds are dispersed? • Can children identify how seeds are dispersed based on their appearance? 	<ul style="list-style-type: none"> • Slides • Worksheets 5A/5B/5C • Fruits and Seeds sheet • Seed Dispersal Fact File (FSD? activity only)
Lesson 6	To understand the structure of seeds and their importance as a food source.	Children will learn about the structure of seeds and how plants grow from them. They will then either taste and compare seeds, or make seed cake bird feeders.	<ul style="list-style-type: none"> • Can children name the parts of a seed and describe their functions? • Can children identify the parts of a seed? • Do children know why seeds are an important food source for animals? 	<ul style="list-style-type: none"> • Slides • End of Unit Quiz • Worksheets 6A/6B/6C • A variety of different edible beans and seeds • Bird Seed Cakes sheet (FSD? activity only) • Bird seed mix (FSD? only) • Lard or equivalent (FSD? only) • Bread crumbs, cheese, oats, dried fruit {optional} (FSD? only) • Yogurt pots (FSD? only) • String (FSD? only)