



Young Gardeners



About this topic

Curriculum links:

Year 1 Topic 4 Plants and animals where we live

Year 3 Topic 4 How does your garden grow

Year 5 Topic 3 Circle of Life

Year 6 Topic 1 Classifying Living Things

SUMMARY:

This topic brings together study of living things and habitats and is strongly focussed on outdoor learning and investigations.

UNITS

5.1 Young Gardeners

ACTIVITY RESOURCES:

5.1: Our Seeds 5.2: Plant Pots

5.3: Quirky Containers

ONLINE RESOURCES:

Teaching slides (Powerpoint): Young Gardeners

Interactive activity: Young Gardeners

CPD video: Young Gardeners

Pupil video: Young Gardeners

Word mat: Young Gardeners

Editable Planning: Young Gardeners

Topic Test: Young Gardeners

Learning objectives

This topic covers the following learning objectives:

- Observe and describe 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.

Working scientifically skills

This topic develops the following working scientifically skills:

- Ask simple questions and recognise that they can be answered in different ways.
- Observe closely, using simple equipment.
- Perform simple tests.
- Identify and classify.
- Use observations and ideas to suggest answers to questions.
- Gather and record data to help in answering questions.



CROSS CURRICULAR LINKS

Numeracy and Mathematics

- Choose and use appropriate standard units to estimate and measure height of plants.
- Compare plant heights, using standard measures
- Create block graphs to show plant growth.
- Use graphs to compare data and answer questions.
- Look at patterns in plants.
- Classify plants and seeds.
- Handle money and give change when selling plants.

English

- Learn plant names.
- Compose instructions for growing plants – orally and then write sentences.
- Use non-fiction books to find information on plants and gardening.
- Favourite words, e.g. flowers such as geraniums, chocolate cosmos.
- Change nursery rhymes, e.g. make them about their own garden – *Mary Mary Quite Contrary*.
- Ask and find the answers to their own questions about gardening.
- Consider the opinions of others – e.g. best way to get rid of snails and slugs.

- Write poems about flowers.
- Create plant labels for the garden.

Read

- Oliver's Vegetables – Vivian French & Alison Bartlett.
- Plant (Eye Know) – Penelope Arlon.
- Eddie's Garden and How to Make Things Grow – Sarah Garland.
- Ten Seeds – Ruth Brown.

Geography

- Identify seasonal and daily weather patterns to inform planting and growing.
- Know key physical features around school grounds and decide if they are suitable for growing plants, e.g. steep, shady, damp, sunny.
- Know what the school soil is like.
- Know where some plants come from, e.g. cacti.
- Fruit and vegetables from around the world.

D & T

- Grow plants for a healthy diet.
- Know where plants come from.
- Cook garden produce.
- Think about making salads visually appealing.
- Design, make and test a cloche.
- Design, make and test bird scarers.

ART

- Look at paintings of flowers from different artists, e.g. Japanese, van Gogh's flowers, Georgia O'Keeffe, Monet. Consider similarities and differences.
- Create clay flowers.
- Flower collages using different materials for texture and colour.
- Using plants to dye cloth, e.g. onions, beetroot, carrots.

Music

- Compose their own gardening songs.
- Change the words to *Mary Mary Quite Contrary* and sing to audience.
- Use plants as musical instruments, e.g. wood, ornamental gourds, make seed shakers.

- Choose music to help plants grow. Pop or classical?
- Compose music to help plants grow.

Role Play Areas

- Science laboratory / botanical garden.
- Wide range of plants.
- Labelled plants.
- Botanist badges.
- Visitor guides.
- Information about plants.
- Plant books.
- Activities where plants are grown in different conditions.
- Conserving plants. Looking after plants in need of care.
- Plants for different senses.

Computing / ICT

- Use time-lapse camera to record plant growth.
- Create a flower calendar using photographs of plants grown.
- Design and make seed packets using Draw, Paint programs and add text.

Drama

- Role play discovering a new plant.
 - Role play plant life cycle 'seed to seed'.
 - Create a gardening play.
 - Create a play from Ruth Brown's book Ten Seeds.
- Health and safety – these activities include children:
- Tasting different foods – check for food allergies amongst children.
 - Handling seeds – check they are not coated with fungicide.
 - Handling plants – make sure plants are safe to use with children, some are irritants, others poisonous.

Make sure that children understand that they:

- Wash hands after handling seeds, plants and soil.
- Never eat plants unless told by an adult that they are safe.
- Know how to use garden tools correctly.



STEAM (SCIENCE TECHNOLOGY ENGINEERING ART AND MATHS) OPPORTUNITIES

Invite into class

- Local gardener to give a masterclass session on planting and caring for seeds and plants
- Artist to create clay models, vegetable printing, tie dyeing
- Work with school cook or a chef to use school produce

Visit

- Local park or botanic gardens
- Local greengrocer
- A garden centre – children could be taught how to plant seeds etc.
- An allotment to interview and get advice from people who grow flowers and vegetables.



PREPARE THE CLASSROOM

Botanist role play area

- Activities where plants are grown in different conditions
- Mini gardens botanist badges
- Conserving plants – looking after plants in need of care
- Information about plants
- labelling plants
- plant books
- plants for different senses
- visitor guides
- microscope to look at flowers, leaves etc.
- *The Great Plant Hunt* box from the Wellcome Trust given to every maintained school in England.



SCIENTIFIC LANGUAGE

It is assumed that most children know, from their EYFS Stage experience, words such as, plant, soil, vegetables, although they might not know how to write and spell them. You can download a Word Mat of essential vocabulary for this topic from *My Rising Stars*.

Bulb: The round underground part of a plant that contains food for the plant, for example, an onion bulb, daffodil bulb, a tulip bulb.

Corms: Corms are not made up of scales, they do not have the fleshy leaves you would find on a bulb and the bud is on top of the corm. Examples of plants grown from corms are gladiolus and crocus.

Germinate: This is when a seed begins to grow, using its stored food, and put out roots and shoots.

Properties: A special quality or characteristic of something that makes it different from another material, e.g. transparent, flexible.

Root: The part of a plant that grows downwards, it gets water from the ground, and holds the plant in place.

Stem: The stem is usually the upper part of the plant and it can have branches, leaves and flowers.

Tuber: Tubers, such as potatoes, are thickened underground stems, unlike bulbs they don't have a covering of layers.

Key words: annual / compost / flower / fruit / germinate / germination / fruit / health / healthy / leaf / plant / root / seed / seedling / soil / stem / vegetable / properties / materials / bulb / leavest