

TOPIC 4

Our Local Environment



About this topic

Curriculum link: Year 2, Living Things and their Habitats, Plants

SUMMARY:

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

UNITS

4.1: Living things

4.2: Habitats 4.3: Food chains

ONLINE RESOURCES:

Teaching Slides (PowerPoint): Our Local Environment

Interactive activity: Our Local Environment

CPD video: Our Local Environment

Pupil video: Our Local Environment

Word mat: Our Local Environment

Editable Planning: Our Local Environment

Topic Test: Our Local Environment

Learning objectives:

This topic covers the following learning objectives:

- Explore and compare the differences between things that are living, dead, and things that have never been alive
- Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other
- Identify and name a variety of plants and animals in their habitats, including micro-habitats
- Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food

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

This topic offers the following cross-curricular opportunities

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.

English

- Learn plant names.
- Compose instructions for growing plants – orally and then write sentences.
- Find information on plants and gardening.
- Favourite words, e.g. flowers such as geraniums, chocolate cosmos.
- Personalise nursery rhymes, e.g. make them about their own garden –

- 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* by Vivian French and Alison Bartlett
 - *Plant (Eye Know)* by Penelope Arlon
 - *Eddie’s Garden and How to Make Things Grow* by Sarah Garland
 - *Ten Seeds* by 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.

D & T

- Grow plants for a healthy diet.
- Know where plants come from.
- Cook garden produce.
- Think about making salads visually appealing.

Art

- Look at paintings of flowers from different artists,
- Create clay flowers and Flower collages using different materials for texture and colour.
- Use plants to dye cloth, e.g. onions, beetroot.

Music

- Compose gardening songs.
- Change the words to ‘Mary Mary Quite Contrary’.
- Use plants as musical instruments, e.g. wood, ornamental gourds, make seed shakers.
- Discuss what kind of music might make plants grow, e.g. pop or classical?
- Choose and compose music to help plants grow.

Role play

- Science laboratory / botanical garden.
- Information about plants.
- Activities where plants are grown in different conditions.
- Conserving plants. Looking after plants.
- Plants for different senses.

Computing / ICT

- Use a time-lapse camera to record plant growth.
- Create a flower calendar using photographs of plants grown.
- Design and make seed packets using graphics 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*.



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,
- Work with school cook to use school produce

Visit

- Local park or botanic gardens
- Local greengrocer
- A garden centre –
- An allotment to interview and get advice from people who grow flowers and vegetables.



HEALTH AND SAFETY

These activities include children:

- Tasting different foods – check for food allergies.
- Handling seeds – check there is no 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 they are safe.
- Know how to use garden tools correctly.



SCIENTIFIC VOCABULARY: Environment

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*.

Alive: something move, grows, breathes, reacts and reproduces

Dead: was once alive

Food chain: a food chain is a way of recording who eats what. It begins with plants (they make their own food), plants are eaten by animals and these animals are the food for other animals

Habitat: where an animal or plant lives

Micro-habitat: where very small animals live

Predator: an animal that preys on other animals

Prey: an animal that is eaten by another animal

key words: live/ carnivore, dead/ food chain/ habitat/ herbivore/ micro-habitat/ never alive/ omnivore/ predator/ prey



PREPARE THE CLASSROOM

I am a botanist

- 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.



SUBJECT KNOWLEDGE: LIVING THINGS

Our environments are full of things that are living, dead and things that have never been alive. In order for something to be classified as alive, there are certain things that it needs to do. At Year 2 this must be communicated in simple terms, as it can be a difficult concept to grasp. Basically, living things are able to move, breathe, grow, reproduce (in humans, babies), get rid of waste (in humans, 'wee' and 'poo') and eat. They also need to be able to know when something changes, e.g. gets colder, warmer (sensitivity). These ideas are more difficult to understand with plants, because we cannot see them move, breathe, get rid of waste or make their own food. It is much easier for children to recognise these things in themselves, their pets and animals in the locality.



SUBJECT KNOWLEDGE: Food Chains

Simple rules for food chains are:

- A food chain tells us who eats who.
- Food chains do this by using arrows.
- The arrows means 'is eaten by', so (below) the plant is eaten by an animal, which is eaten by another animal.

