



**EYFS—KS1 Science**  
Progression Maps

# ELG

- **Explore the natural world around them, making observations and drawing pictures of animals and plants**
- **Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class**
- **Understand some important processes and changes in the natural world around them, including the seasons**
- **Explore the natural world around them, making observations and drawing pictures of animals and plants**
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# SCIENCE LEARNING MAP



## Vocabulary

Bulb, Seed, Water

Light

Grow

Leaves

Shoots

Petals

Roots

Trunk

Branch

Stem

Life cycle

Survive

Blossom

Buds

Seasons—Autumn, Winter, Summer, Spring

## NURSERY

- Most plants start growing from a seed or bulb
- **Plant seeds and care for growing plants (UW)**
- All plants need water & light to grow & survive
- Observe plants closely through a variety of means e.g. magnifiers & photographs
- Extend vocabulary: leaves, petals, roots, bulb, trunk, branches, stem, garden plants, wild plants, seeds
- Use all the senses in hands-on exploration of plants
- **Understand the key features of the life cycle of a plant (UW)**
- **Begin to understand the need to respect and care for the natural environment and all living things (UW)**

## RECEPTION

- All plants need water, light and warmth to grow and survive
- A seed produces roots to allow water to get into the plant and shoots to produce leaves to collect the sunlight
- Extend vocabulary: blossom, buds, bulb, evergreen,
- Describe what they see, hear & feel whilst outside
- **Understand the effect of changing seasons on the natural world around them (UW)**

## Plants Progression Map

## YEAR 1

- Identify and name a variety of common wild and garden plants.
- Identify and describe the basic structure of a variety of common flowering plants, including trees.
- Know and use key vocabulary.

# SCIENCE LEARNING MAP



## Vocabulary

Animal, human, baby, toddler, child, teenager, adult, older adult, body, head, ears, mouth, nose, eyes, neck, arms, legs, chest, back, elbows, knees, animal, duckling, egg. Duck, exercise, eating, drinking, water, sleeping, hygiene, hear, feel,

Animals, carnivores, herbivores, omnivores, human, body parts, senses, taste, touch, hearing, smell, sight

### RECEPTION

- Shows some understanding that good practices with regard to exercise, eating, drinking water, sleeping & hygiene can contribute to good health
- To understand the importance of oral hygiene and personal hygiene
  - Describe what they see, hear & feel
  - Identify different parts of their body & animals
  - Be able to show care and concern for living things
  - Know the effects exercise has on their bodies
  - Have some understanding of growth and change
  - Talk about things they have observed including animals

### YEAR 1

- Identify and name a variety of common animals.
- Identify and name a variety of common animals that are carnivores, herbivores and omnivores.
- Describe and compare the structure of a variety of common animals.
- Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

## Animals including humans

Progression Map

### NURSERY

- Observe animals closely through a variety of means e.g. magnifiers & photographs
- Look at key stages of development from birth to adult
- Name & identify body parts
- Observe & describe in words or actions the effects of physical activity on body
- Understand the key features of the life cycle of an animal—key focus on a duck when the duck eggs arrive
- To understand the importance of oral hygiene and personal hygiene

# SCIENCE LEARNING MAP



## Vocabulary

Habitats

Outside

Flowers

Respect

Care

Animals

Nature

See

Hear

Feel

Change

Chrysalis/pupa

Life cycle

Food chain

Seasons

Weather

## RECEPTION

- **Explore the natural world around them**  
**Describe what they see, hear & feel whilst outside**
- Observational drawings of the natural world
- Discuss how to care for the living things & their habitats
- observe how flora & fauna behave differently as the seasons change
- Examine change over time
- Use correct terms e.g. chrysalis, pupa when observing life cycle of butterfly & ladybirds
- Express opinions on natural & built environments & opportunities to hear different points of view on the quality of the environment. Use words such as busy, quiet, pollution

## NURSERY

- Explore different habitats outdoors, e.g. scent, colour & shape of flowers attracting bees
- Observe growth & decay over time
- **Begin to understand the need to respect & care for the natural environment & all living things**
- **Talk about what they see, using a wide vocabulary (C&L)**

## Living things and their habitats

Progression Map

## YEAR 1

- Describe how habitats provide for the basic needs of different animals and plants and how they depend on each other
- Know that living things reproduce
- Identify and name a variety of plants and animals, including microhabitats
- Use a simple food chain
- Observe changes across the 4 seasons
- Observe and describe weather associated with the seasons and how day length varies

# SCIENCE LEARNING MAP



## Vocabulary

### Seasonal Change Season

spring, summer, autumn, winter, weather, hot, warm, cool, cold, sun, sunny, cloud, cloudy, wind, windy, rain, rainy, snow, snowing, hail, hailing, sleet, frost, fog, mist, ice, icy, rainbow, thunder, lightning, storm, light, dark, day, night.

## Seasonal change Progression Map

### RECEPTION

- Explore the natural world around them
- Describe what they see, feel and hear whilst outside
- Understand the effect of changing seasons on the world around them and the natural world around them.

### YEAR 1

#### Seasonal Change

- Observe changes across the four seasons.
- Observe and describe weather associated with the seasons and how day length varies.

### NURSERY

- Use all their senses in hands-on exploration of natural materials.
- Talk about what they see, using a wide vocabulary

# SCIENCE LEARNING MAP



## Vocabulary

Material, wood, plastic, glass, metal, water, rock, properties, hard, soft, stretch, stiff, shiny, dull, rough, smooth, bendy, waterproof, absorbent, brick, paper, fabrics, elastic, cardboard, squashing, bending, twisting, stretching, hardness, solubility, transparency, conductive, response to magnets, dissolve, liquid, solution, separate, filtering, sieving, evaporating, melting, insulation, condensing, melting point, molten, boil.

### RECEPTION

- Observe & interact with natural processes, such as ice melting, a sound causing a vibration, light travelling through transparent material, an object casting a shadow, a magnet attracting an object & a boat floating on water
- Use vocabulary to name specific features of the natural world, both natural & man-made
- Notice & discuss patterns around them e.g. the effect of seasons on flora & fauna

## Materials

### Progression Map

### NURSERY

- Use all their senses in hands-on exploration of natural materials
- Explore collections of materials with similar and/or different properties
- Talk about what they see, using a wide vocabulary
- Explore how things work e.g. pulleys
- Explore & talk about different forces they can feel e.g. stretch, snap, rigid, magnetic repulsion, water pushing up when pushing a boat under it
- Talk about the differences between materials and changes they notice e.g. cooking, melting, shadows, floating & sinking
- Characteristics of liquids & solids e.g. cooking eggs, melting

### YEAR 1

- Distinguish between an object and the material from which it is made
- Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock
- Describe the simple physical properties of a variety of everyday materials
- Compare and group together a variety of every day materials by their simple physical properties.



# SCIENCE LEARNING MAP

## YEARS 1-2

- During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:
- asking simple questions and recognising that they can be answered in different ways
- observing closely, using simple equipment
- performing simple tests
- identifying and classifying
- using their observations and ideas to suggest answers to questions
- gathering and recording data to help in answering questions

## EYFS

- Ask questions about the natural world, what they observe and the changes they notice.
- Ask questions about the ways in which things work and seek to find the answers.
- Observing using a variety of simple equipment e.g. magnifying glasses, watching animals/minibeasts grow in their containers.
- Observing and taking part in simple experiments.
- Testing out ideas during play.
- Sorting items into groups.
- Recording findings through mark making and drawings.

## Working Scientifically

Progression Map

## Vocabulary

Test, question, questioning, observe, work, questions, experiment, sort, record, draw, identify and classify, data,

Healthy eating –where does our food come from?

Investigating and exploring natural materials in their environment.

Ask questions and give explanations

Oral hygiene

Daily weather discussions and comparisons with countries around the world

Understanding how living things grow

Recognise environments that are different from their own

Use new vocabulary to predict, discuss ideas and their findings

Understand the key features of the life-cycle of a plant/animal

Sing songs and rhymes about the natural environment

Exploration

Explain how we care for our environment and all living things

Explore and talk about the forces that they feel/experience when exploring push, pull, magnets, attract and repel

Investigate shadows and light and dark

Explore sinking and floating—which materials sink and float. Talk about and explain why

Talk about how animals behave during different seasons/ times of day e.g. hibernation, nocturnal, adaptation

## What does Science look like in Early Years?

Explore changes in materials and differences between them. Experiment with changes in materials e.g. cooling, heating, melting, freezing, ice cubes, snow, cooking

Explore the natural world with hands on experiences using the 5 senses

Name familiar animals and plants in their environment, Compare habitats of living things

Explore different sounds and vibrations in the environment

Make observations drawings of the natural world including animals and plants

Healthy eating –where does our food come from?

Discuss and compare seasons as children experience them throughout the year