



Markland Hill Science Curriculum – Key Stage 1 Sequence of Learning - YEAR B

 biology  chemistry

Seasonal Change

- observe changes across the 4 seasons
- observe and describe weather associated with the seasons and how day length varies

Everyday materials (Y1)

Uses of Everyday materials (Y2)

Scientist: John McAdam

Substantive Knowledge (NC objectives):

- identify and name a variety of everyday materials, including: **wood, plastic, glass, paper, water**
- distinguish between an object and the material from which it is made
- describe the simple physical properties of a variety of **wood, plastic, glass, paper, water**
- compare and group together **wood, plastic, glass, paper, water** on the basis of their simple physical properties
- Identify and compare the suitability of a variety of everyday materials, **wood, plastic, glass, paper, water** for particular uses.
- Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching

Disciplinary Knowledge (NC objectives):

- Perform simple tests to explore questions, eg: 'What is the best material for wiping spilled liquid?'
- Compare uses of everyday materials in and around school

Living Things and their habitats (Y2)

Scientist: Rachel Carson

Substantive Knowledge:

- 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 microhabitats
- 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

Disciplinary Knowledge

- Sort and classify things according to whether they are living, dead or were never alive, and recording their findings using charts; describing how they decided where to place things, exploring questions like: 'Is a flame alive? Is a deciduous tree dead in winter?'

Plants (Y1)

Plants (Y2)

Scientist: Alan Titchmarsh

Substantive Knowledge:

- Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees
- Identify and describe the basic structure of a variety of common flowering plants, including trees
- Observe and describe how seeds and bulbs grow into mature plants (plant sunflowers)
- Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy

Disciplinary Knowledge

- Observing closely, using magnifying glasses, and comparing and contrasting familiar plants; describing how they were able to identify and group them, and drawing diagrams showing the parts of different plants including trees.
- Keep records of how plants have changed over time by completing a Sunflower Diary

End point

- I can observe closely

- observe closely, identify and classify uses of different materials, and record observations.

End Points

- I can identify and name everyday materials
- I can tell the difference between an object and the materials it is made from
- I can observe closely to find objects made from different materials.
- I can describe the properties of **wood, plastic, glass, paper, water**
- I can compare and group together materials according to their properties
- I can identify uses of everyday materials
- I can compare the suitability of **wood, plastic, glass, paper, water**
- I can explain how the shapes of objects made from some materials can be changed.

Key Vocabulary: Object, material, **wood, plastic, glass, paper, water**, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, rough, smooth, shiny, dull, transparent, opaque

- Construct a simple food chain that includes humans (eg, grass, cow, human).

End point

- I can sort and classify things according to whether they are living, dead or were never alive
- I can identify and name plants and animals in a habitat
- I can identify and label a variety of plants and animals in a microhabitat
- I can identify plants and animals in an ocean habitat
- I can explain how some animals are suited to an ocean habitat.
- I can identify, sort and classify living things in a woodland habitat
- I can explain why some animals are suited to a woodland habitat
- I can identify and group living things in a coastal habitat
- I can construct a simple food chain

Key Vocabulary:

Living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed, woodland, coastal, urban, micro habitats

- I can identify and name some common garden and wild plants.
- I can identify, name and compare some common trees.
- I can name the parts of plant.

- I can name, sort and compare some common fruit and vegetable plants.
- I can design and set up a test to find out what plants need to stay healthy.
- I can look closely at the parts of a seed that will grow into a plant and explain how it will germinate.
- I can describe the life cycle of a plant.
- I can explain what plants need to grow and stay healthy.
- I can describe what happens if plants don't get all the things they need.
- I can explain how plants are suited to their habitats.

Key Vocabulary:

Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud. Names of trees in the local area Names of garden and wild flowering plants in the local area. light, shade, sun, warm, cool, water, grow, healthy