

YEAR 2

Science Curriculum Rationale

CURRICULUM INTENT

Year 2 deepens the observational science of Year 1 and takes the first steps into investigation. Pupils study how plants and animals grow and stay healthy, sort living and non-living things, explore local habitats and food chains, and test the uses of everyday materials. Throughout, they build scientific vocabulary and the habit of explaining their thinking in full sentences.

WHY THIS SEQUENCE

The order builds from the single organism to the whole system. Growing plants and materials come first, then living and non-living things, local habitats and food chains, so pupils see how living things connect, before finishing with how animals and humans grow and stay healthy.

THE SIX UNITS

AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Growing Plants	Uses of Everyday Materials	Living and Non-Living Things	Local Habitats	Food Chains	Growing Up, Keeping Healthy



Key Stage 1 pupils working scientifically

YEAR 2 • AUTUMN 1

Growing Plants

NC • Plants

 Biology

- Children investigate how seeds and bulbs grow into healthy plants, and what plants need to thrive: water, light and a suitable temperature.
- Practical planting and observation over time build the understanding that living things have needs, and the first habits of recording what they see.

NATIONAL CURRICULUM

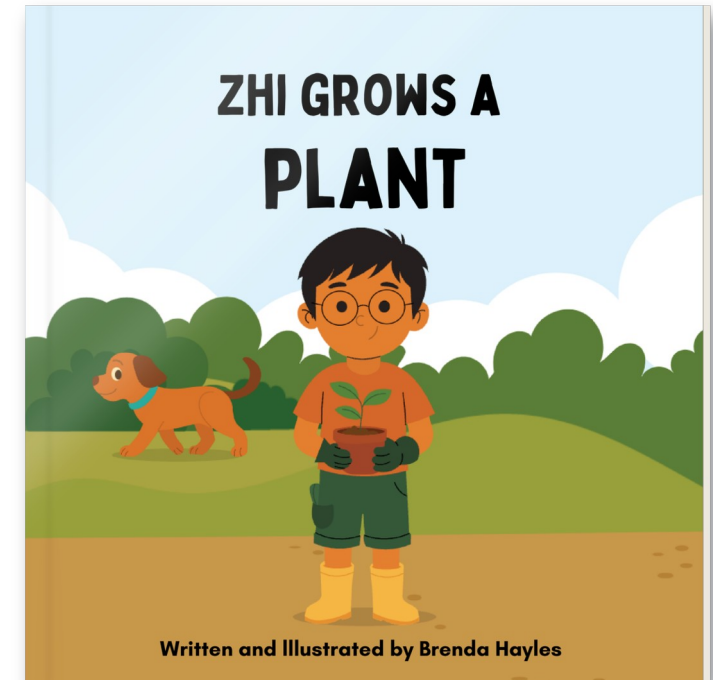
Plants

ENQUIRY FOCUS

Observing changes over time

KEY VOCABULARY

seed, bulb, grow, germinate, water, light, temperature, healthy



Pupil booklet for this unit

YEAR 2 · AUTUMN 2

Uses of Everyday Materials

NC · Uses of everyday materials

 Chemistry

- Building on Year 1, pupils explore how the same object can be made from different materials and why a material is chosen for a particular purpose.
- They find out how the shapes of solid objects can be changed by squashing, bending, twisting and stretching.

NATIONAL CURRICULUM

Uses of everyday materials

ENQUIRY FOCUS

Comparative testing

KEY VOCABULARY

material, suitable, wood, metal, plastic, squash, bend, twist, stretch



Pupil booklet for this unit

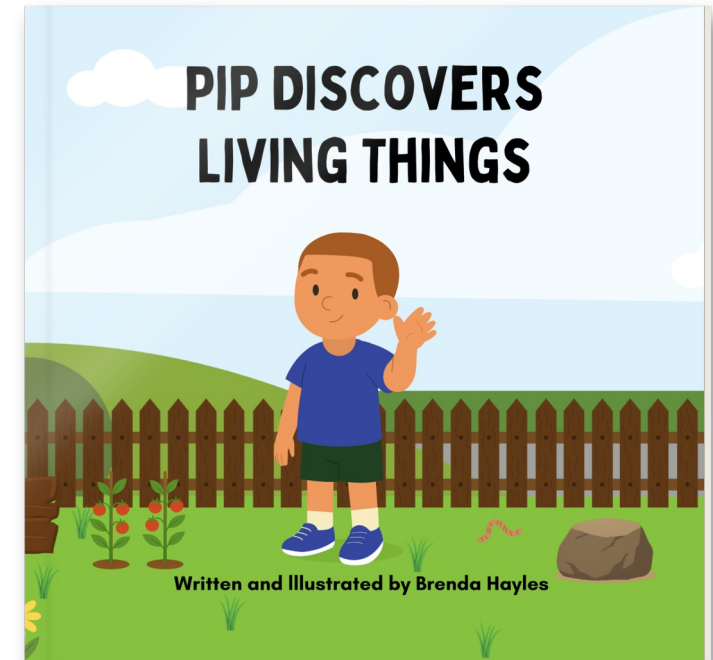
YEAR 2 • SPRING 1

Living and Non-Living Things

NC • Living things and their habitats

 Biology

- Pupils learn to tell apart things that are living, dead, or have never been alive, and explore what all living things do.
- Recognising the life processes lays the foundation for studying habitats and the things that live in them.

NATIONAL CURRICULUM Living things and their habitats**ENQUIRY FOCUS** Identifying and classifying**KEY VOCABULARY** living, dead, never alive, grow, move, feed, breathe

Pupil booklet for this unit

YEAR 2 · SPRING 2

Local Habitats

NC · Living things and their habitats

 Biology

- Children explore the habitats and microhabitats around them, and how a habitat provides for the basic needs of the animals and plants that live there.
- They begin to see how living things are suited to the place they live.

NATIONAL CURRICULUM

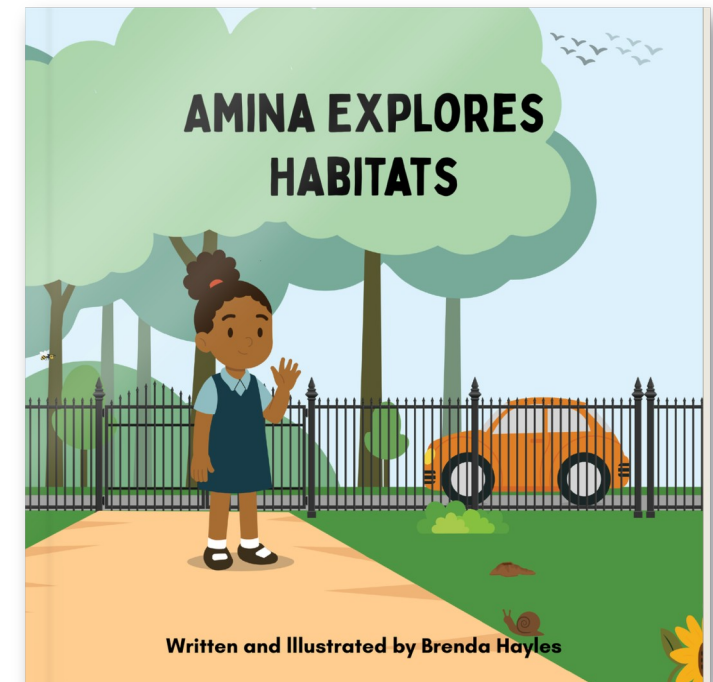
Living things and their habitats

ENQUIRY FOCUS

Identifying, classifying and grouping

KEY VOCABULARY

habitat, microhabitat, shelter, suited, depend, food, needs



Pupil booklet for this unit

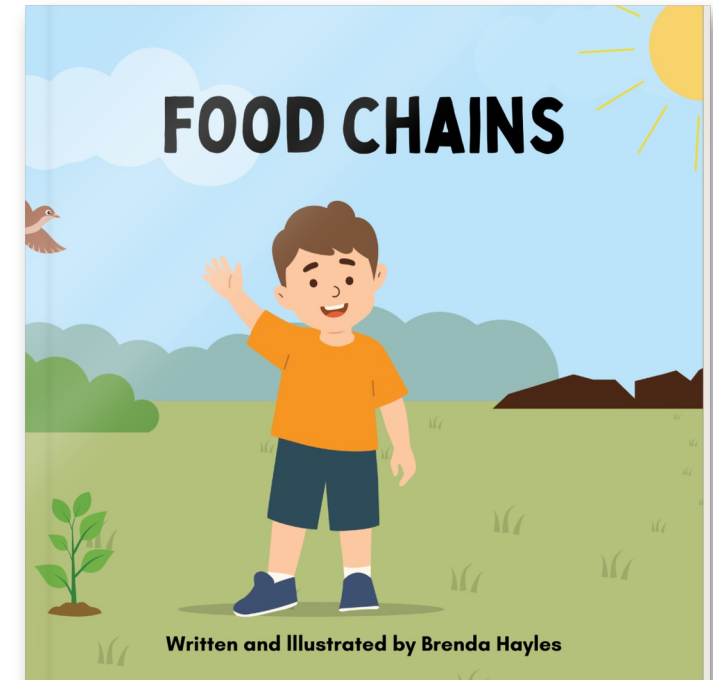
YEAR 2 · SUMMER 1

Food Chains

NC · Living things and their habitats

 Biology

- Pupils describe how animals get their food from plants and other animals, using the idea of a simple food chain.
- They identify and name different sources of food and begin to see how living things depend on one another.

NATIONAL CURRICULUM Living things and their habitats**ENQUIRY FOCUS** Identifying and classifying**KEY VOCABULARY** food chain, source, producer, predator, prey, energy

Pupil booklet for this unit

YEAR 2 • SUMMER 2

Growing Up, Keeping Healthy

NC • Animals, including humans

 Biology

- The year closes with how animals, including humans, grow and stay healthy: their basic needs for survival, and the importance of exercise, hygiene and a balanced diet.
- Pupils also explore how offspring grow into adults.

NATIONAL CURRICULUM

Animals, including humans

ENQUIRY FOCUS

Observing over time; researching

KEY VOCABULARY

survival, water, food, air, exercise, hygiene, offspring, adult



Pupil booklet for this unit