Bounds Green School Science Unit

Living Things & their Habitats (local habitats) – Autumn 1 – YEAR 2

Year 1

- Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. (Plants)
- Identify and describe the basic structure of a variety of common flowering plants, including trees. (Plants)
- Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. (Animals including humans)
- Identify and name a variety of common animals that are carnivores, herbivores and omnivores. (Animals including humans)
- Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). (Animals, including humans)
- Observe changes across the four seasons. (Seasonal change)

Living Things and Habitats is not a unit in Y1, however the above objectives from other units relate.

Year 2

- **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.**

Year 4/5/6

Y4

- Recognise that living things can be grouped in a variety of ways.
- Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.
- Recognise that environments can change and that this can sometimes pose dangers to living things.
- Construct and interpret a variety of food chains, identifying producers, predators and prey. (Y4 - Animals, including humans)

Y5

- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.
- Describe the life process of reproduction in some plants and animals.

Y6

- Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals.
- Give reasons for classifying plants and animals based on specific characteristics.

classification keys
environment
fish
amphibians
reptiles
birds
mammals
vertebrates
invertebrates

organism
micro-organisms
fungus
mushrooms
arachnid
mollusc
insect
crustacean

Bounds Green School Science Unit

MATERIALS (choosing materials) – Autumn 2 YEAR 2

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 everyday materials on the basis of their simple physical properties.

Year 2

- **Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.**

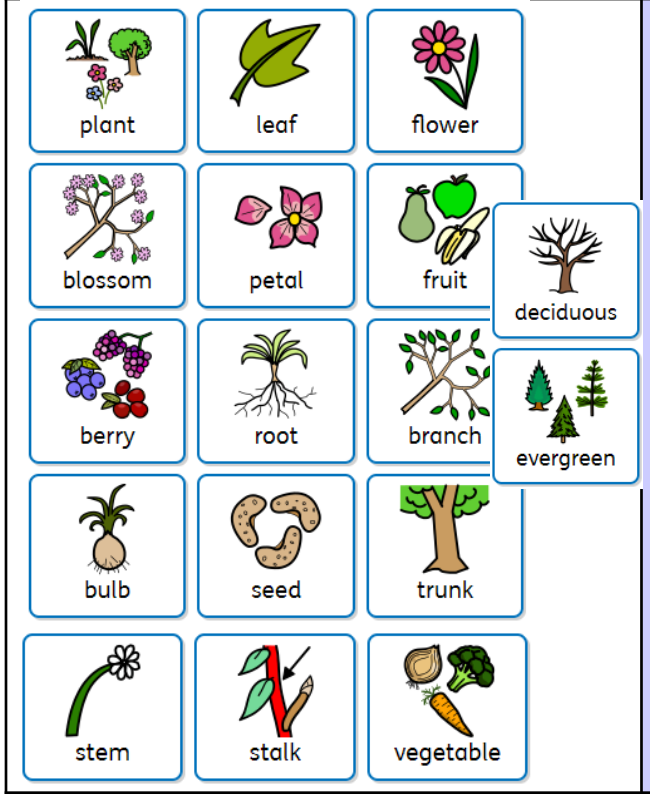
Year 3

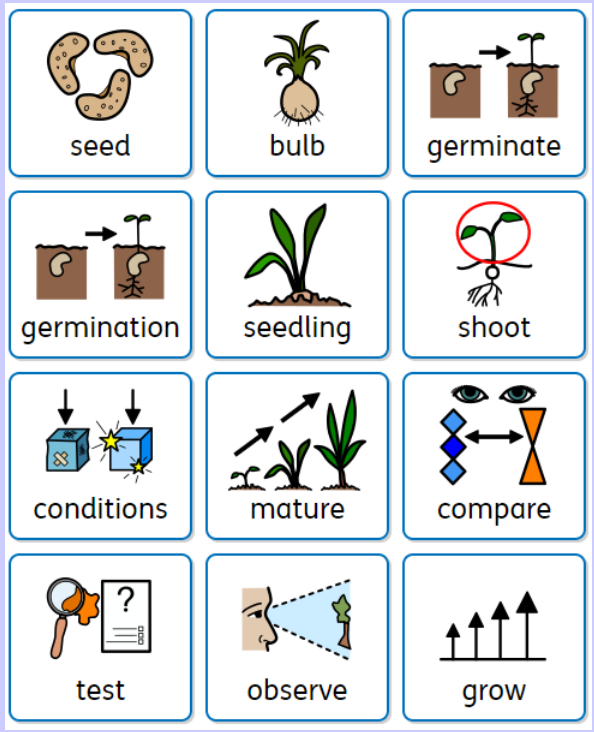
- Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties
- Describe in simple terms how fossils are formed when things that have lived are trapped within rock.
- Notice that some forces need contact between two objects, but magnetic forces can act at a distance.

rock
stone
pebble
boulder
soil
fossils
grains
crystals
hard/soft
texture
absorb water
let water through
marble
chalk
granite
sandstone
slate
sandy soil
clay soil
chalky soil
peat

Plants (growing seeds & bulbs) – Spring 1 YEAR 2

Year 1	Year 2	Year 3
• identify and name a variety of common plants, including garden plants, wild plants and trees, and those classified as deciduous and evergreen • identify and describe the basic structure of a variety of common flowering plants, including roots, stem/trunk, leaves and flowers.	• observe and describe how seeds and bulbs grow into mature plants	• identify and describe the functions of different parts of flowering plants: roots, stem, leaves and flowers • explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant • investigate the way in which water is transported within plants • explore the role of flowers in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.





part
role
leaf/leaves
flower
blossom
petal
fruit
berry
root
bulb
seed
trunk
branch
stem
bark
stalk
water
light
air
nutrients
soil
fertiliser

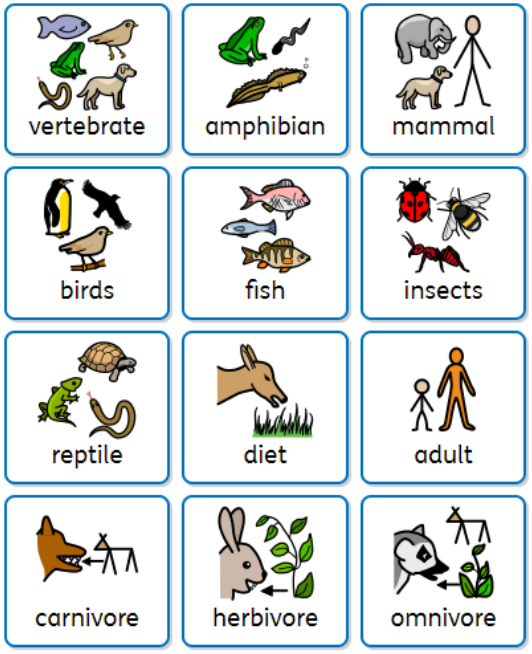
damp/wet/dry
dark/light
hot/warm/cool/cold
use comparatives e.g. hotter
grow/growth
healthy
transported
life cycle
pollination
seed formation
seed dispersal

Bounds Green School Science Unit

YEAR 2, ANIMALS INCLUDING HUMANS (growing up) – Spring 2

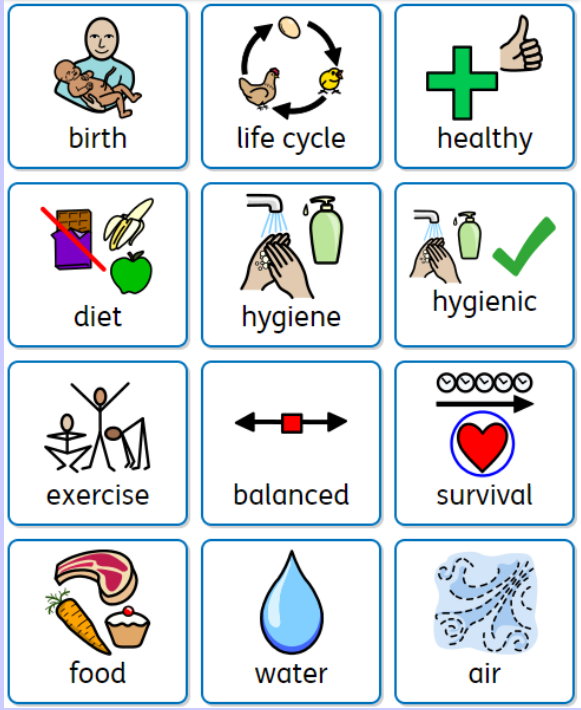
Year 1

• Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.
• 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 (fish, amphibians, reptiles, birds and mammals, including pets).
• Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.



Year 2

• Notice that animals, including humans, have offspring which grow into adults.
• Find out about and describe the basic needs of animals, including humans, for survival (water, food and air).
• Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.



Year 3

- Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat.
- Identify that humans and some other animals have skeletons and muscles for support, protection and movement.

nutrition
nutrients
food types
fruit and vegetable
bread, rice, potato, pasta
milk and dairy foods
foods high in fat or sugar
meat, fish, egg, beans
carbodrates
protein
vitamins and mineral
fat
dietry fibre
water
balanced diet

skeleton
muscles
support
protection
movement
skull
ribs
spine/vertebra
joints
sockets
bones
tendons
vertebrate/invertebrate

Year 4/5/6

Y4
Describe the simple functions of the basic parts of the digestive system in humans.
• Identify the different types of teeth in humans and their simple functions. • Construct and interpret a variety of food chains, identifying producers, predators and prey.

Y5
• Describe the changes as humans develop to old age. • Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. (Y5 - Living things and their habitats)
• Describe the life process of reproduction in some plants and animals. (Y5 - Living things and their habitats)

Y6
• Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. • Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. • Describe the ways in which nutrients and water are transported within animals, including humans. • Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals. (Y6 - Living things and their habitats) • Give reasons for classifying plants and animals based on specific characteristics. (Y6 - Living things and their habitats)

Bounds Green School Science Unit

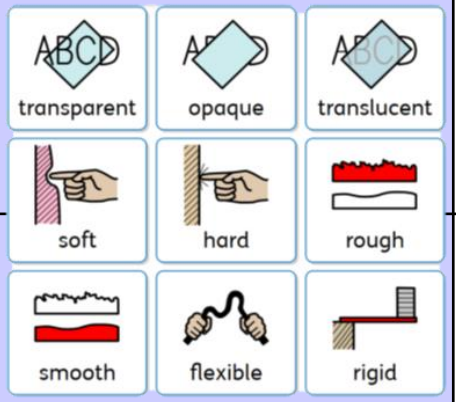
MATERIALS (changing materials) – Summer 1 YEAR 2

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 everyday materials on the basis of their simple physical properties.

Year 2

- Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.



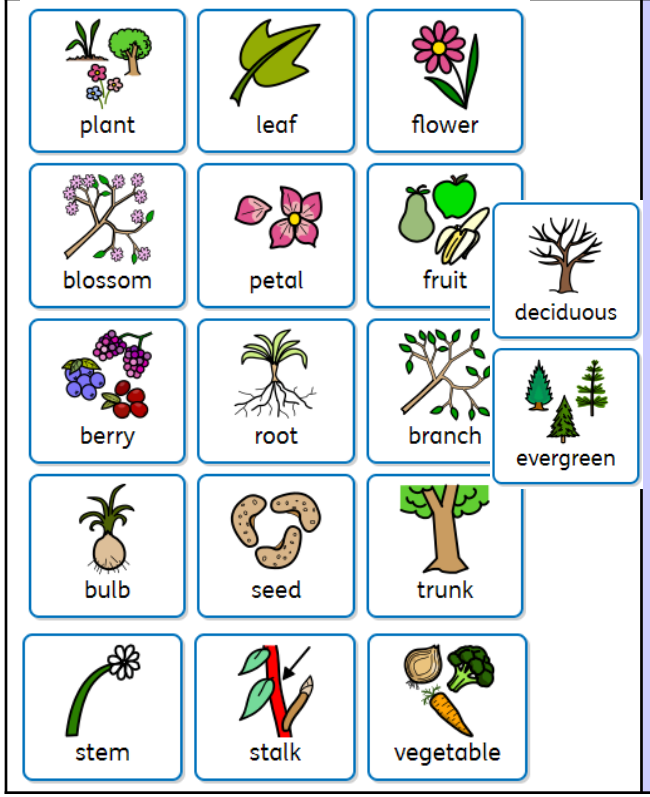
Year 3

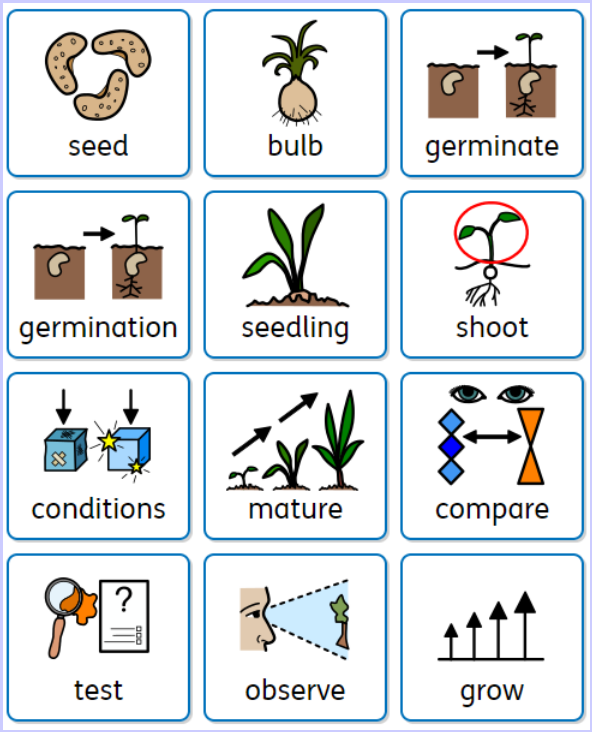
- Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties
- Describe in simple terms how fossils are formed when things that have lived are trapped within rock.
- Notice that some forces need contact between two objects, but magnetic forces can act at a distance.

rock
stone
pebble
boulder
soil
fossils
grains
crystals
hard/soft
texture
absorb water
let water through
marble
chalk
granite
sandstone
slate
sandy soil
clay soil
chalky soil
peat

Plants (growing healthy plants) – Summer 2- YEAR 2

Year 1	Year 2	Year 3
• identify and name a variety of common plants, including garden plants, wild plants and trees, and those classified as deciduous and evergreen • identify and describe the basic structure of a variety of common flowering plants, including roots, stem/trunk, leaves and flowers.	• find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	• identify and describe the functions of different parts of flowering plants: roots, stem, leaves and flowers • explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant • investigate the way in which water is transported within plants • explore the role of flowers in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.





part
role
leaf/leaves
flower
blossom
petal
fruit
berry
root
bulb
seed
trunk
branch
stem
bark
stalk
water
light
air
nutrients
soil
fertiliser

damp/wet/dry
dark/light
hot/warm/cool/cold
use comparatives e.g. hotter
grow/growth
healthy
transported
life cycle
pollination
seed formation
seed dispersal