

Science Knowledge Organiser – Year 1

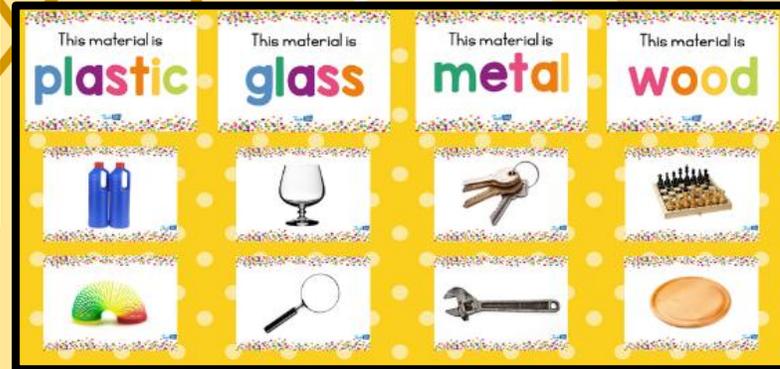
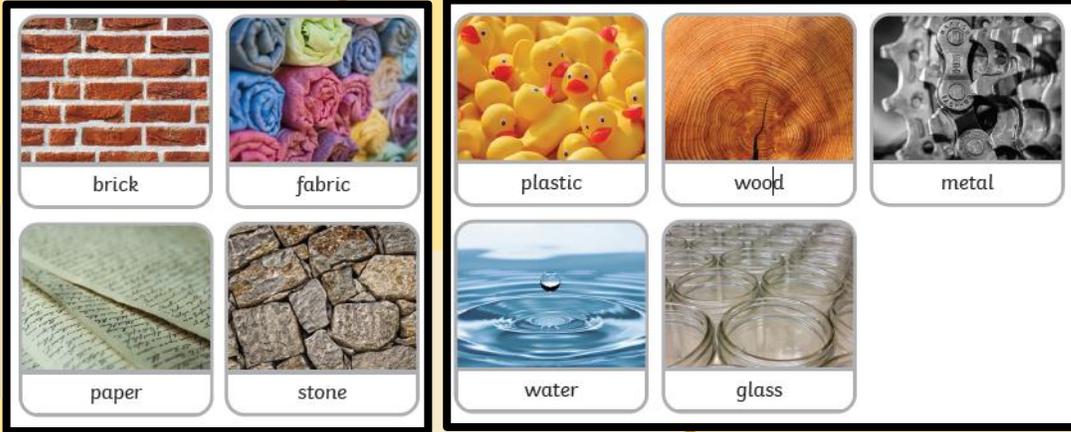
Chemistry: Everyday materials

Previous knowledge.

- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form, and function; - Share their creations, explaining the process they have used; - Make use of props and materials when role playing characters in narratives and stories.

What I will learn in this unit.

- To know the difference between an object and the material from which it is made
- To be able to name a variety of everyday materials
- To know the simple physical properties of a variety of everyday materials
- To be able to compare and group together a variety of everyday materials



Word	Definition
sink and float	
Smooth and bumpy	
stretch	
Shiny and dull	
waterproof	
absorbent	
Opaque and transparent	

Scientist study: Chester Greenwood (1858 - America)

Chester Greenwood was an American engineer and inventor, known for inventing the earmuffs in 1873. He reportedly came up with the idea while ice skating and he asked his grandmother to sew tufts of fur between loops of wire.



Science Knowledge Organiser – Year 1 Physics: Seasonal changes

Previous knowledge.

- Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.

What I will learn in this unit.

- To be able to observe changes across the four seasons
- To be able to make links and describe weather associated with the seasons and how day length varies

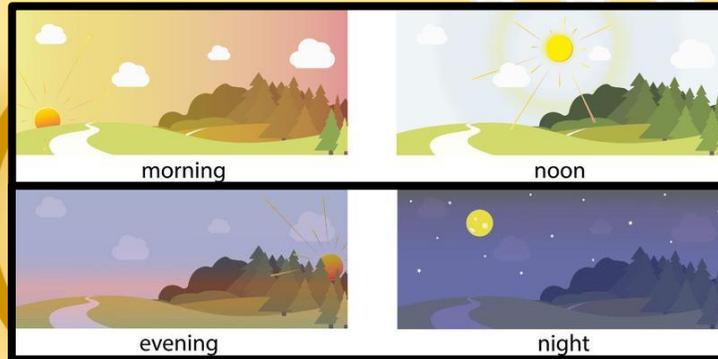
Month	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug
Hours of Daylight	13	11	9	8	8	10	12	14	15	16	16	14



The Four Seasons	
autumn September October November	winter December January February
spring March April May	summer June July August

Scientist study: Holly Green (1979 - England)

Holly Green is a meteorologist who presents the weather on BBC.



Previous knowledge.

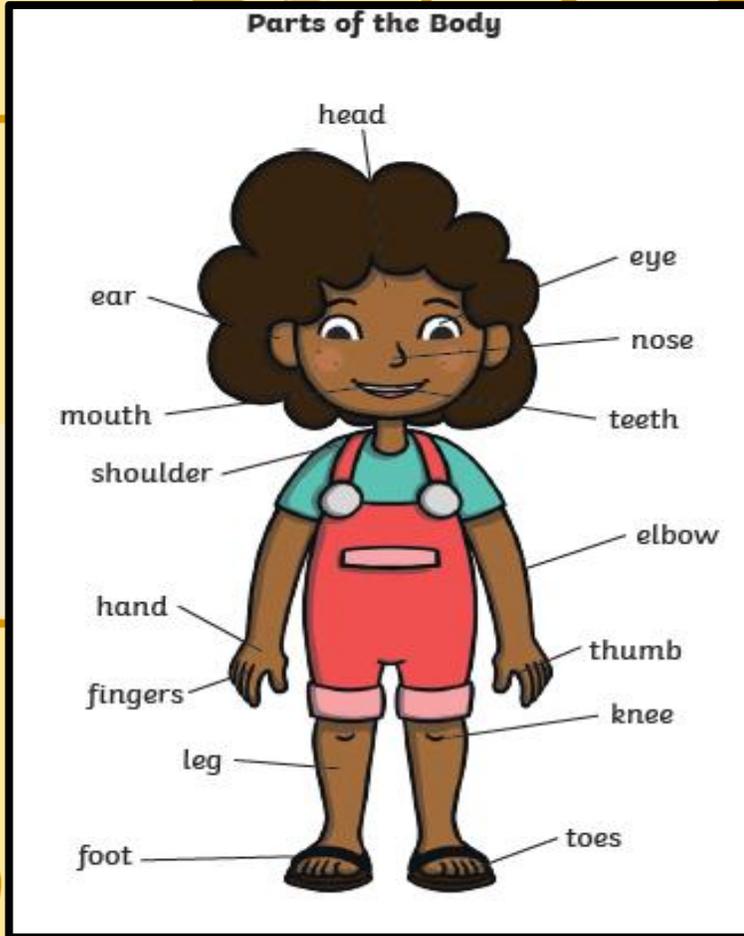
- Explore the natural world around them, making observations and drawing pictures of animals and plants

Science Knowledge Organiser – Year 1 Biology: Animals including humans



Scientist study: Chris Packham (1961 - England)

Chris Packham is a wildlife expert who presents the BBC Springwatch and Autumnwatch. He's keen for everyone to get involved and enjoy their local wildlife.



What I will learn in this unit.

- To be able to identify parts of the human body and make links to senses.
- To be able to identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals
- To be able to understand the language of carnivores, herbivores and omnivores
- To be able to describe and compare the structure of a variety of common animals.

Senses



sight
hearing
touch
taste
smell

Mammals



human mouse dog cow

Birds



penguin chicken flamingo robin

Fish



goldfish tuna shark eel

Reptiles



snake tortoise lizard alligator

Amphibians



frog toad newt salamander

Word	Definition
carnivore	Animals that mostly eat other animals (meat) are carnivores
herbivore	Animals that only eat plants are herbivores
omnivore	Animals that eat both plants and other animals are omnivores

Previous knowledge.

- 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

What I will learn in this unit.

- ⇒ I can identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.
- ⇒ I can identify and describe the basic structure of a variety of common flowering plants, including trees.

wild plants

A **wild plant seed** grows where it falls. It doesn't need to be planted or cared for as it grows.

garden plants

Garden plants are plants that people choose to grow in their gardens.

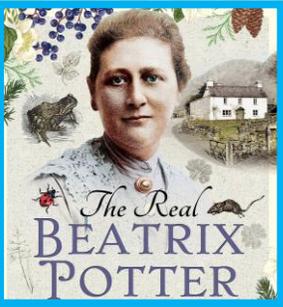


- **Deciduous trees** lose their leaves in the autumn every year. Their **leaves** are generally broad, flat and have veins running through them.
- **Evergreen trees** have green **leaves** all year round. Their **leaves** are generally thick, waxy and narrow like needles.




deciduous

evergreen



Scientist study: Beatrix Potter (1866 – England)

Beatrix would study and inspect plants, insects and animals, and she would draw each of them in great detail.

She was eager to learn more about botany (study of plant life), What fascinated Beatrix the most were fungi (mushrooms).

Wild Plants

 dandelion	 daisy	 buttercup	 nettles
 ivy	 dog rose	 clover	 brambles

Garden Plants

 fuchsia	 pansy	 sweet pea	 sunflower
 rose	 lavender	 iris	

