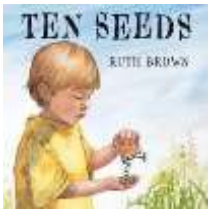
Aldborough Primary School			
Topic: Plants	Year: 1	Strand: Science	

Key Ideas

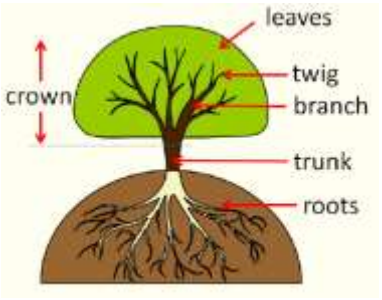


- identify and name a variety of common wild and garden plants, including deciduous and evergreen trees
- identify and describe the basic structure of a variety of common flowering plants, including trees

Important things to know/find out

- Plants need warmth, light, and water to grow.
- Plants grow from seeds.
- If plants do not have warmth, light and water they may not grow into healthy plants.
- **Roots** act as anchors fixing the plants into the ground. They also absorb minerals to help the plant grow.
- **Stem:** the stem grows above the ground; the leaves and flowers grow from it. The stem is also used to transport water and minerals around the plant.
- **Leaves:** a plant's leaves absorb sunlight and turn it into energy that the plant uses to grow.
- **Flowers:** the flower part is the part where seeds are made.
- Evergreen trees keep their leaves all year round.
- Deciduous trees drop their leaves during autumn time and grow fresh leaves in spring- time.
- Some food comes from plants as crops.
- Farmers must take care of their crops and protect them from pests and weeds.
- Crops are harvested, packaged and transported for people to buy and eat.
- We eat different parts of plants including roots, stem, leaves and sometimes the flowers.
- Some plants are dangerous to eat and would make us ill.
- We need a variety of fruit and vegetables in our diet.
- They may grow **flowering plants** which are beautiful to look at or beans and **seeds** to grow plants for food.
- When plants are grown for food, this may be called a **herb garden** or **vegetable patch**.
- A **wild plant** will grow by itself.
- Wild plants do not need to be cared for.
- If it grows somewhere unwanted, it may be a **weed.**
- Five common trees to know: Ash, Beech, Birch, Maple, Oak

- Main Parts of a tree:



- Five common plants to know: Tulips, Daffodils, Roses, Bluebells and Foxgloves

Vocabulary

Warmth, light, grow, germinate, seeds, healthy, roots, anchor, absorb, minerals, stem, leaves, flower, energy, transport, evergreen, deciduous, poisonous, variety, diet.

Questions to consider/Activities

- Do trees with bigger leaves lose their leaves first in autumn?
- Is there a pattern in where we find moss growing in the school grounds?
- How can we sort leaves that we collect on our walk?
- What are the most common British plants and where can we find them?
- How does a daffodil bulb change over the year?
- How does my sunflower change each week?
- How does an oak tree change over a year?
- Where do plants make their seeds?

- **Plant** a bean or a **seed** and watch it grow. Record your observations in a diary.
- Go on a **wild plant** hunt! Create a **tally chart** to show how many of each **plant** you have found and then use the information to answer questions.
- Plant some **garden plants,** care for them and watch them grow.
- Go on a **tree** hunt around the Country Park - what types of **trees** can you see? Collect fallen **leaves** and identify which **tree** they came from using pictures to help you. Sort the **leaves** between **deciduous** and **evergreen trees.**
- Label the parts of a plant showing where the **leaves**, **flowers** (blossom), **petals**, **fruit**, **roots**, **bulb**, **seed**, **trunk**, **branches** and **stems** are.

Aldborough Primary School			
Topic: Animals including Humans	Year: 1	Strand: Science	

Key Ideas

- 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.

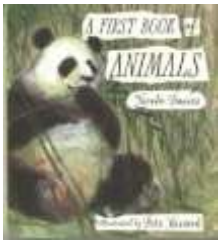
Important things to know/find out

- There are many different types of animals.
- Some animals live in water, land and some fly in the sky.
- Animals have special features which help them to survive.
- Animals can be grouped according to their features.
- Amphibians are coldblooded animals that live in water and also on land. They lay their eggs underwater.
- Mammals are warm blooded and give birth to live young.
- Animals that eat other animals are called carnivores.
- Animals that eat plants are called herbivores.
- Animals that eat both plants and other animals are called omnivores.
- To describe the needs of a pet. Pets need food, water, shelter and medicine.
- Animals that are not pets are known as wild animals.
- Fish have gills to help them breathe, fins to help them swim and scales to protect their bodies.

- Birds have beaks to help them eat, wings to help them fly and feet to help them grip and feathers to keep them warm.
- To know that we have five senses: sight, hearing, touch, taste and smell
- To know our body parts are associated with our senses.
- To understand we can take care of our bodies by maintaining a balanced diet and exercising regularly.
- Our eyes use light to help us see, to know different parts of the eye, eyelashes, eyelid, cornea)
- Senses warn us of danger by sending messages to our brain.

Vocabulary

Birds, fish, reptiles, mammals, amphibians, invertebrates, sorting, grouping, features, legs, tail, wings, fur, air, underwater, teeth (incisor, molar, canine), beaks, wings, claws, feathers, gills, fins, scales, ears, eyes, nose, mouth, hands, eye, iris, eyelid, vision, glasses, blindness.



Questions to consider

- How can we organise all the zoo animals?
- What are the names for all the parts of our bodies?
- How are the animals in Australia different to the ones that we find in Britain?
- Do all animals have senses as humans?
- How does my height change over the year?
- What happens when people's senses are damaged or are not working?

Aldborough Primary School			
Topic: Everyday materials	Year: 1	Strand: Science	

Key Ideas

- 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.

Important things to know/find out

- Know that materials can be grouped by their properties.
- Be able to group materials according to their shared properties.
- Know that the properties of a material help determine how that material is used.
- Some things are made of natural materials e.g oil, rock, precious metals and stones, slate, metals, clay.
- Some natural materials come from living things e.g. wood, cotton, silk, and wool.
- Some things are made of synthetic (man-made) materials eg. Nylon/polyester, plastic, fleece fabric, and fibreglass.

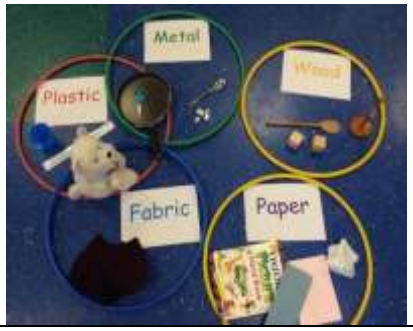
- Materials have certain properties which make them useful. They can be strong, hard, flexible, rigid, transparent, absorbent, stretchy, compressible.
- Some natural materials come from underground.
- All objects have a name like ‘a door’.
- Material is the ‘stuff’ an object is made from.

Vocabulary

Materials, synthetic, natural, man-made, manufactured, object, bend, twist, stretch, squash, wood, plastic, paper, water, metal, rock, hard, soft, smooth.

Questions to consider

- Is there a pattern in the types of materials that are used to make objects in a school?
- We need to choose materials to make an umbrella. Which materials are waterproof?
- Which materials will float and which will sink?
- How are bricks made?
- Which materials can be recycled?
- What happens to materials over time if we bury them in the ground?
- What happens to shaving foam over time?
- Use ‘feely bags’ to describe the properties through touch alone.
- Can we find an example of rough plastic, smooth plastic, transparent plastic, opaque plastic...



Aldborough Primary School			
Topic: Seasonal change	Year: 1	Strand: Science	

Key Ideas

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

Important things to know/find out

- To name and describe the four seasons. Cold weather comes in autumn and winter and warmer weather comes in spring and summer.
- Our days of sunlight are longest in summer and shortest in winter
- To know that tools are used to gather information about the weather. A rain gauge shows how much rain has fallen, a wind vane shows which way the wind is blowing and a thermometer measures temperature.
- Data is a collection of facts and we can present data in a graph.
- To understand that there are different types of clouds and dark clouds carry more water.
- Clouds are made of tiny droplets of water.
- Weather forecast tells us what the weather will be like in the next few days.

- Scientists who study the weather are called meteorologists
- Some weather can be dangerous: flood is an overflow of water; hurricane is a storm with strong wind.
- The weather is the current state of the atmosphere in a particular location on Earth.
- Too much rainwater causes floods. A long absence of rain is known as a drought. Be able to define the term weather.
- Appreciate that the weather can change very quickly.
- Understand that some weather conditions can cause problems.
- Understand that forecasters use computers to help them predict the weather.
- Realise that many people rely on accurate weather forecasts in order to do their jobs.

Vocabulary

Season, spring, summer, autumn, winter, axis, orbit, tilt, rain gauge, wind vane, thermometer, measure, observe, record, precipitation, graph, data, information, Cirrus (white, thin and wispy), Cumulus (fluffy like cotton wool), Stratus (grey and cover the whole sky), extreme, danger, tornado, hurricane, drought.

Questions to consider

- Does the wind always blow the same way?
- How would you group these things based on which season you are most likely to see them?
- Are there plants that are in flower in every season? What are they?
- Why is it useful to measure and record the weather?
- How can I find out how much rain has been falling today?
- Why might scientists study graphs?