





Year 1 Unit Overview

Seasonal Changes	Plants	Everyday materials	Animals including humans Part 1: All about animals *Part 2: All about me
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Scientists

 <p>Liam Dutton (Weatherperson/Meteorologist) John Dalton (British Weather pioneer)</p>	 <p>Beatrix Potter (Author and Botanist) Arit Anderson (Garden Designer and presenter of Gardeners World)</p>	 <p>William Addis (Inventor of the toothbrush) Dr Pearl Agyakwa (Materials scientist) Wilbur and Orville Wright</p>	 <p>Chris Packham (Animal Conservationist, Wildlife photographer, ASD) Malaika Vaz (Wildlife Videographer and National Geographic Explorer)</p>
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Careers

Meteorologist (studies the atmosphere and weather) Climatologist (studies climate patterns)	Arborist (cares for and manages trees) Botanist (studies plants)	Materials scientist (researches structures and properties of materials)	Zoologist (studies animals) Wildlife photographer (takes pictures of animals and plants)
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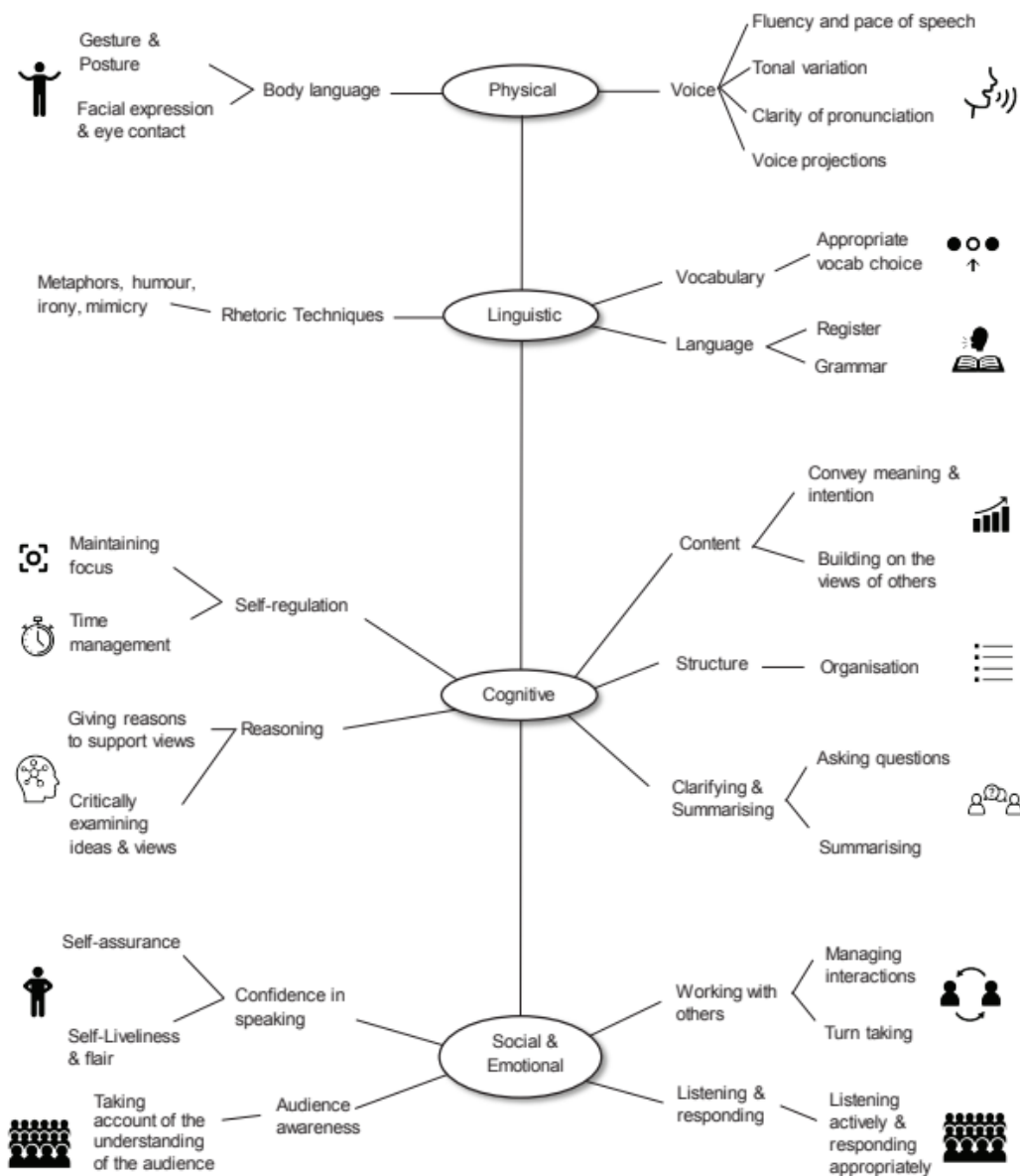
Working Scientifically

I'm using my observations to suggest answers to questions like a meteorologist. I'm gathering and recording data like a climatologist.	I'm observing closely like an arborist. I'm identifying and classifying like a botanist.	I'm performing simple tests like a materials scientist.	I'm asking questions like a zoologist. I'm observing closely, using simple equipment, like a wildlife photographer.
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* Animals, Including Humans, All about me unit will have a Oracy focused outcome.

Supporting Oracy Resources

Oracy Graphic Organiser



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Sentence Stems for giving feedback

Praise: What have they done well?

Be Specific

Give an example

Why was it good?

- Because you have...
- Your work has had the effect of...
- You have improved how...
- I notice that you...
- This means that...

- When you... it made me...
- Your use of... in order to...
- I enjoyed the part where...
- The part where you... has had the effect of...

Enhance: What do they need to do to improve?

Be specific

Give an example

Why will it enhance their learning?

Checking for Understanding	Reshaping and Extending Learning
<ul style="list-style-type: none"> • Why did you choose to...? • Can you explain how...? • Prove to me how you came to this conclusion by using... • What effect did ... have on ... 	<ul style="list-style-type: none"> • I've noticed that you haven't... • Can you prove...? • Could you have included...? • Where else could you use... in your learning? • In order to improve your learning, you need to...

Respond: Show that you understand

Read what you could have done better

Correct the mistake

Show how you now understand

- Thank you, I agree that...because...
- I can see why you've said that...
- I actually disagree with you because...
- I have now... the effect this has had is...

- Now that I've had time to reflect...
- I agree with your comment that... because...
- Now that you've pointed it out...
- You've helped me to understand...

Supporting Oracy Resources

Tiered Vocabulary Wall- A way to organise our words.

Tiered Vocabulary Walls are a way of organising words. The aim of using Tiered Vocabulary Walls is to increase the amount of Tier 2 and Tier 3 words which children hear and use themselves. Tier 2 and Tier 3 words make the most impact on our vocabulary and on our learning. These words need direct teaching in order for them to be understood and used.

Tier 3	<p><u>Subject specific words:</u></p> <p>These will be rare and will be heard within particular contexts or subject areas. These will need direct teaching, such as:</p> <p><i>estuary, alliteration, igneous...</i></p>
Tier 2	<p><u>Focus words:</u></p> <p>These will be common words that are found across subjects. These will need direct teaching, such as:</p> <p><i>contradict, circumstance, precede, retrospect...</i></p>
Tier 1	<p><u>Everyday words:</u></p> <p>These will be basic, everyday words which will be used from an early age. These will be used freely in speech, such as:</p> <p><i>warm, dog, tired, run, table, flower....</i></p>

For example, Tiered Vocabulary for weather could look like:

Tier 3: barometer, isobar, celsius, tsunami

Tier 2: predict, forecast, breeze, shower, pressure

Tier 1: sun, cloud, rain, cold, warm, wind



Talking like a Scientist Sentence Stems



- It is...because...
 - It will...because...
 - *How do you know (e.g. 'The porridge is hot')?*
- I think this...because...
 - I know this, so I think...
 - This will happen because...
 - *What do you think?*
 - *What will happen if...?*
- I know that... Therefore, I know that...
 - Due to the fact that..., I know that...will happen.
 - Maybe it's because...
 - It is true that...
 - Having analysed..., I believe that...
 - I can prove how I know this because...
- Can we prove that...?
 - In conclusion, I have found that...
 - I would like to prove / disprove...
 - Perhaps the reason is ...
 - Based on the evidence I have been presented with, I conclude...
 - Taking everything into account...
 - Having pondered...
 - Given this, it is likely that...
 - *If we accept this hypothesis, what else will be true?*

Exploring Everyday Materials

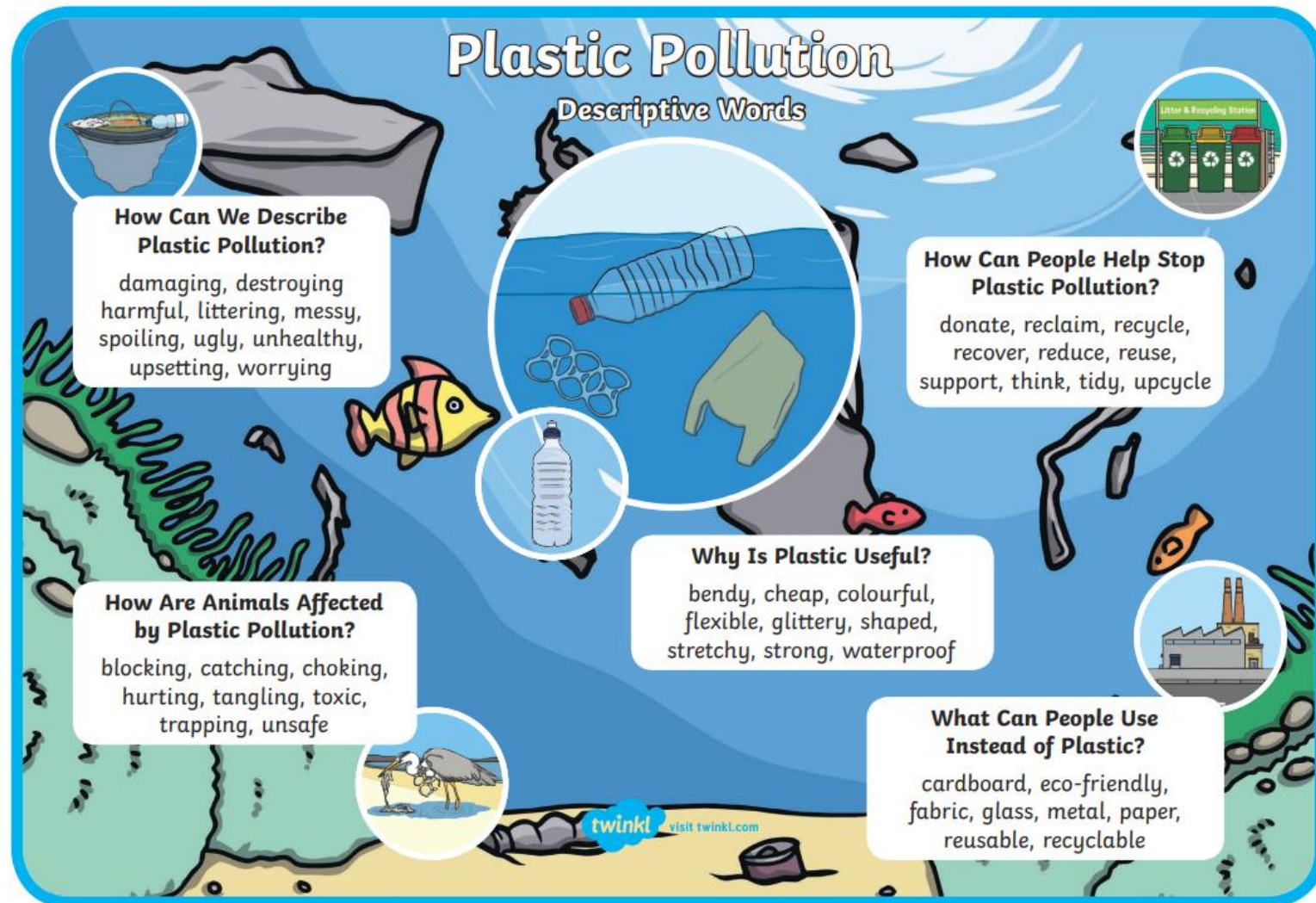
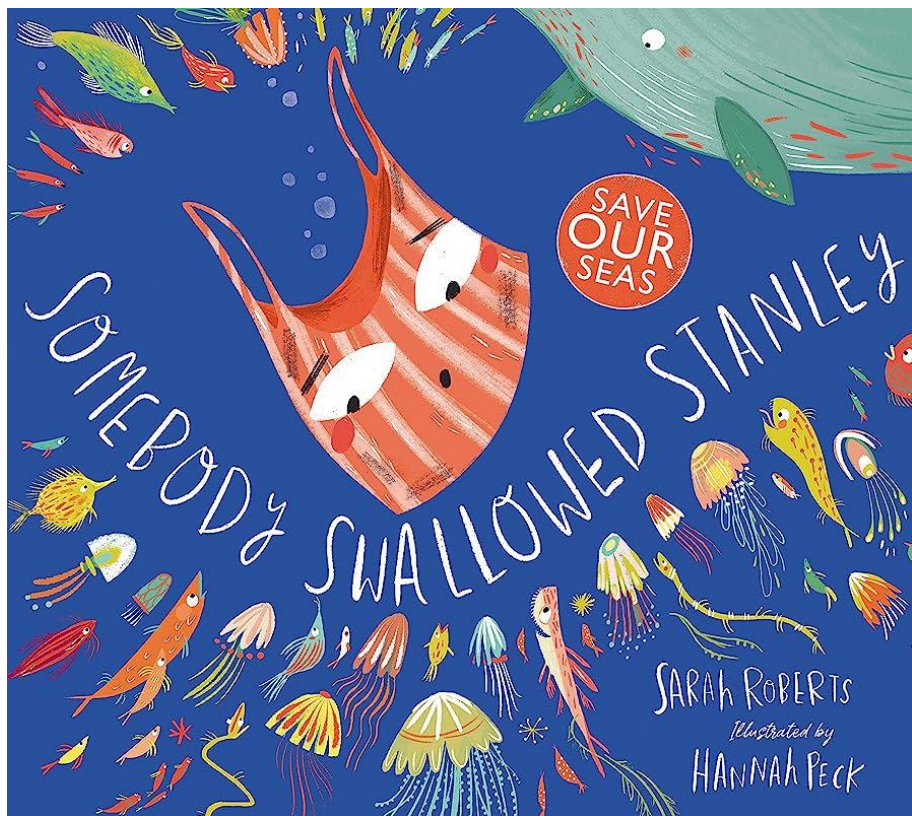
Global Neighbours Link:

Plastic: What can we do to help? (danger of pollution)

Link to the reading of 'Somebody Swallowed Stanley'

Somebody Swallowed Stanley Read Aloud

<https://www.youtube.com/watch?v=sF1-ZTRYdIM>



Unit	Year 1: Exploring Everyday Materials	
National Curriculum	Pupils should be taught to:- <ul style="list-style-type: none"> • 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 	
Prior Learning		Future Learning
Use all their senses in hands-on exploration of natural materials. (Nursery - Materials, including changing materials) Explore collections of materials with similar and/or different properties. (Nursery - Materials, including changing materials) Talk about the differences between materials and changes they notice. (Nursery - Materials, including changing materials)		Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. (Y2 - Uses of everyday materials) Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. (Y2 - Uses of everyday materials)
Key Learning		Key Vocabulary
All objects are made of one or more materials. Some objects can be made from different materials e.g. plastic, metal or wooden spoons. Materials can be described by their properties e.g. shiny, stretchy, rough etc. Some materials e.g. plastic can be in different forms with very different properties.		Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through
Common Misconceptions	Some children may think: <ul style="list-style-type: none"> • only fabrics are materials • only building materials are materials • only writing materials are materials • the word 'rock' describes an object rather than a material • 'solid' is another word for hard. 	

Unit	Year 1: Exploring Everyday Materials					
When	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
LQ	Can I identify a variety of common materials?	Can I describe materials according to their physical properties?	Can I group together materials by their physical properties?	Can I explore everyday materials which are opaque or transparent?	Do I know the story of Wilbur and Orville Wright?	Can I explore everyday materials which are absorbent or non-absorbent?
vocab	glass, plastic, metal, cardboard, wood	twist, transparent, opaque, sponge, squeeze	light, flexible, float, sink, rigid	translucent, clear, transparent, frosted, opaque	aeroplane, flight, Wilbur Wright, Orville Wright, design	sponge, absorb, swell, non-absorbent, oil spill
Skills	Identifying and classifying. Gathering and recording data to help in answering questions.	Identifying and classifying. Observing closely using simple equipment	Using observations and ideas - suggest answers and questions.	Performing simple tests	Performing simple tests. Carrying out simple tests	Performing simple tests - Carrying out simple tests
Knowledge	To describe the simple physical properties of a variety of everyday materials.	To describe the simple physical properties of a variety of everyday materials.	To 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 material. Explore properties such as: hard/soft; stretchy/stiff; shiny/dull; rough/smooth; bendy/not bendy; waterproof/not waterproof; absorbent/not absorbent; opaque/transparent.	To describe the simple physical properties of a variety of everyday materials.	To compare and group together a variety of everyday materials on the basis of their simple physical properties.
Suggested Activity	Use a 'Venn Diagram' to organise objects depending on the material they are made from. Venn Materials Range of objects made from different materials	Exploring everyday materials!	Sort materials Children will use words such as 'soft', 'smooth', 'hard', or 'bendy' to describe and/or sort a variety of materials and objects.	Transparent, translucent or opaque investigation.	Fly different paper aeroplanes, and time how their flights, to choose the best design. <i>Paper Aeroplane Testing</i>	
Scientist / Inventor		William Addis - different materials the toothbrush was made from through time			Wilbur and Orville Wright	
Assessment Questions	Which of these are made of fabric and which of these are made of metal? What does 'brittle' mean? Which of these would be the best material to make a swing out of? What does 'pull' mean?	What does opaque mean? Which of these things are made of paper? What materials can a spoon be made of? How often should you clean your teeth? True or false: A sponge will soak up water.	Which of these items are waterproof? Put these items into groups based on their colour. Items which are light or {{hollow}} will often float on water. On the other hand, items which are {{dense}} such as metal, {{sand}} and rocks will usually sink. What does 'waterproof' mean? Is cloth rigid or soft?	The window in many bathrooms is...what? ... so that light can pass through, but people cannot see in. A brick wall is ...what?.. so that you cannot see through it at all. True or false: A tree trunk is opaque. True or false: The human body is transparent. True or false: A car windscreen is translucent.	People fly by using feathers. Complete the statement: Two brothers called Orville and Wilbur {{Wright}} were the first to invent an aeroplane that {{flew}}! What is a glider? True or false: Over 100 years ago, Orville Wright flew the first aeroplane for the first time for a total of 12 seconds. What was the name of the first plane flown by Orville Wright?	What is an oil spill? True or false: A wet sponge will absorb (soak up) more water than a dry sponge. True or false: An oil tanker is a type of boat that carries oil from one place to another over the oceans. Complete the statement: Cotton {{absorbs}} oil but not {{water}}. This is why it is a good fabric to use when soaking up oil spills in the {{ocean}}. Which of these is absorbent?

Knowledge Organiser

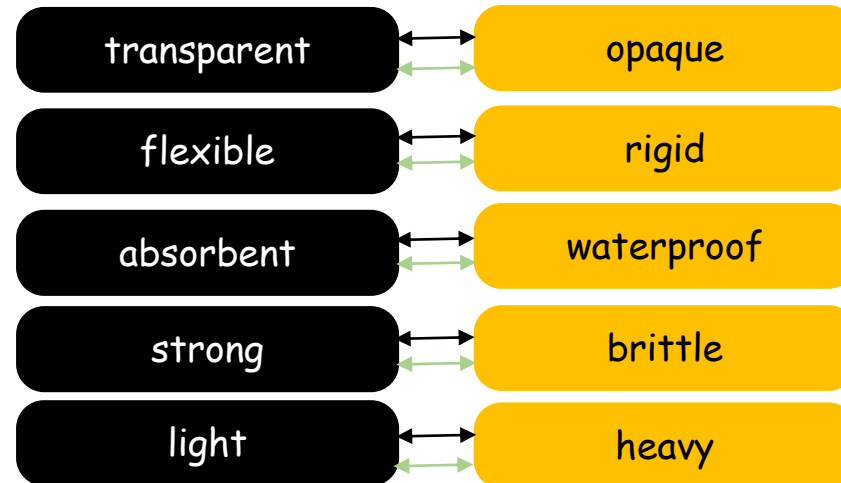
Unit: Everyday Materials

- Key Question 1**
 - Can I identify a variety of common materials?
- Key Question 2**
 - Can I describe materials according to their physical properties?
- Key Question 3**
 - Can I group together materials by their physical properties?
- Key Question 4**
 - Can I explore everyday materials which are opaque or transparent?
- Key Question 5**
 - Do I know the story of Wilbur and Orville Wright?
- Key Question 6**
 - Can I explore everyday materials which are absorbent or non-absorbent?



Opposites

Opposites



Key Vocabulary

Key Word	Meaning
flight	The action of something moving or flying through the air.
structure	The way something is built or put together.
transparent	When a material is see-through.
opaque	When you can't see through something.
translucent	A material which allows some light but not detailed shapes, to pass through it.
flexible	Capable of bending easily without breaking. The opposite of rigid.
rigid	Not able to be bent easily. The opposite of flexible.
oil	A liquid used for fuel and making plastics.

Animals, Including Humans

Part 1: All about animals

Unit	Year 1: Animals, Including Humans - Part 1: All about animals	
National Curriculum	Pupils should be taught to:- <ul style="list-style-type: none"> • 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). 	
Prior Learning	Future Learning	
Identify and name a variety of common animals that are carnivores, herbivores and omnivores. (Y1 - Animals, including humans) • Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. (Y1 - Animals, including humans)	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. (Y2 - Living things and their habitats) 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. (Y6 - Living things and their habitats) Give reasons for classifying plants and animals based on specific characteristics. (Y6 - Living things and their habitats)	
Key Learning	Key Vocabulary	
Animals vary in many ways having different structures e.g. wings, tails, ears etc. They also have different skin coverings e.g. scales, feathers, hair. These key features can be used to identify them. Animals eat certain things - some eat other animals, some eat plants, some eat both plants and animals.	head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves, names of animals experienced first-hand from each vertebrate group N.B. The children need to be able to name and identify a range of animals in each group e.g. name specific birds and fish. They do not need to use the terms mammal, reptiles etc. or know the key characteristics of each, although they will probably be able to identify birds and fish, based on their characteristics. The children also do not need to use the words carnivore, herbivore and omnivore. If they do, ensure that they understand that carnivores eat other animals, not just meat.	
Common Misconceptions	Some children may think: <ul style="list-style-type: none"> • an animal's habitat is like its 'home' • all animals that live in the sea are fish • respiration is breathing • breathing is respiration. 	

Unit	Year 1: Animals, including Humans - Part 1: All about animals					
When	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
LQ	Can I discover animal families?	What are the differences between mammals and birds?	What are the differences between amphibians, reptiles and fish?	What types of food do living things eat?	Where do animals live?	What are the differences between wild animals and pets?
vocab	Mammal, amphibian, bird, reptile, fish	Hatchling, backbone, characteristic, warm-blooded, feather	Reptile, cold-blooded, scale, fish, amphibian	Herbivore, canine, predator, omnivore, carnivore	Natural, veterinary, shelter, wild, pet	Similarities, climate, unsuitable, compare, differences
Skills	Grouping and Sorting	Using their observations and ideas to suggest answers to questions. Grouping and Sorting	Using their observations and ideas to suggest answers to questions Grouping and sorting	Using their observations and ideas to suggest answers to questions. Grouping and Sorting	Using their observations and ideas to suggest answers to questions. Grouping and Sorting	Using their observations and ideas to suggest answers to questions. Grouping and Sorting
Knowledge	Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals	Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)	Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)	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 and name a variety of common animals including fish, amphibians, reptiles, birds and mammals
Suggested Activity	Explore the 5 groups of animals - birds, mammals, reptiles, fish and amphibians. Identify the main characteristics of each group.	Teach the children about the key characteristics of mammals and birds. Throughout, ask the children to consider both the similarities and differences between these two groups. You may consider making a class list of the names of the mammals and birds that the children have seen in their gardens, at the park or on the way to school.	Teach the children about the similarities and differences between amphibians, reptiles and fish. Use your presentation to introduce children to the names of a variety of animals.	Teach the children what it means to be a carnivore, herbivore and an omnivore, giving examples of the animals. Demonstrate how Venn diagrams work to prepare for independent activity.	Use the main session to teach children the difference between wild animals and pets. Throughout this lesson, draw on the children's experiences of pets; do they have their own pets?	Recap and consolidate the learning throughout the unit. Suggested Activity: Children to create a fact file which includes the group their animal belongs to, what the animal eats and whether it is wild or a pet.
Scientist / Inventor						
Assessment Questions	Name a variety of common animals Identify the 5 groups of animals Describe the key characteristics of the 5 animal groups	Name a variety of common birds and mammals Name and describe a variety of common birds and mammals Name, describe and compare a variety of common birds and mammals	Name a variety of common amphibians, reptiles and fish Name and describe a variety of common amphibians, reptiles and fish Name, describe and compare a variety of common amphibians, reptiles and fish	Understand that animals eat different things Group animals based on their diet Explain the difference between herbivores, carnivores and omnivores	Know that some animals are wild and some are kept as pets Sort animals into those that are wild and those that suitable for a pet Describe the needs of a pet	Draw and label an animal and talk about its characteristics Draw and label an animal and write about its characteristics Draw and label an animal and write about its characteristics, using some scientific language

Knowledge Organiser

Unit: Animals, Including Humans, All About Animals

Where can animals live?
In our homes, in the wild, in a farm or in a zoo.

What are animals that eat different things called?
Carnivores, herbivores and omnivores.

Why do people have pets?
A pet can be lovely to care for and be a friend.

Key Question 1

• Can I discover animal families?

Key Question 2

• What are the differences between mammals and birds?

Key Question 3

• Can I explore how animals need to be cared for differently?

Key Question 4

• What types of food do living things eat?

Key Question 5

• Where do animals live?

Key Question 6

• What are the differences between wild animals and pets?



bird

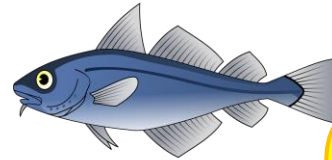


mammal

Pets need water, food, shelter and lots of care.

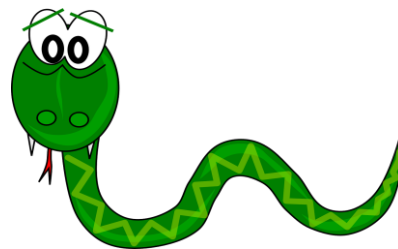


amphibian



fish

Animals that live in the wild need a habitat to live in.



reptile

All animals and plants are part of food chains.

Key Vocabulary

Key Word	Meaning
Pet	A tamed animal that is kept as a companion and looked after by its owner.
Mammal	Any animal where the female produces milk to feed her babies.
Offspring	Children or young from a parent.
Care	To look after something or someone.
Bird	A creature with wings and feathers that is able to fly.
Fish	A cold-blooded animal that lives in water.
Reptile	A cold-blooded animal such as a lizard.
Amphibian	An animal that can live in water and on land.

Animals, Including Humans

Part 2: All about me

Oracy Link

Year Group	Oracy Skills – Learning to talk	Oracy Skills – Learning <i>through</i> talk	Oracy Outcome			
	Physical, Linguistic, Cognitive, Social & Emotional	Subject specific skills	Purpose	Audience	Outcome (link to topic)	Resources
1 - Humans	Physical - To experiment with adjusting tone, volume and pace. Physical - To use gesture to support meaning.	Linguistic - To use vocabulary specific to the topic at hand. Linguistic - To take opportunities to try out new language.	To entertain and inform	Peers/ Early Years	Senses poetry recital	Student friendly oracy framework, Which one does not belong? Vocabulary bullseye.

The Oracy Framework



Here are some things to think about when you are using your oracy skills:



Physical

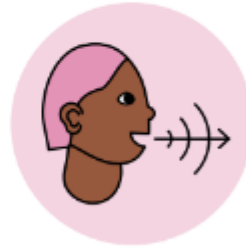
Are you thinking about the **speed** and **volume** of your voice?



Are you using **gestures** and **expression** to help make your point?



Are you **facing** who you are **speaking** or **listening** to?



Linguistic

Are you using **sentence stems** to link others' ideas?



Are you using **new** and **appropriate** vocabulary?



Cognitive

Is what you want to say **clear** and **organised**?



Are you asking **relevant questions** and **responding to others**?



Are you giving **reasons** for what you are saying?



Social & Emotional

Are you **taking turns** to **talk** and **listen** and **encouraging others** to take part?



Are you talking **confidently** and **thinking** about your **audience**?

Which one does not belong?



What is it?

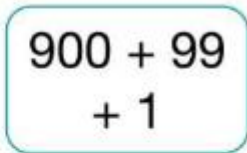
Playing *Which one does not belong?* is a great way of getting students to propose ideas, give reasons and provide evidence for their theories. To generate discussion, it is ideal if any of the items shared could be the odd one out.. Encourage students to listen to each other's justifications and decide whether or not to change their minds.

Which one does not belong?

A)



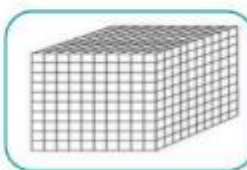
B)



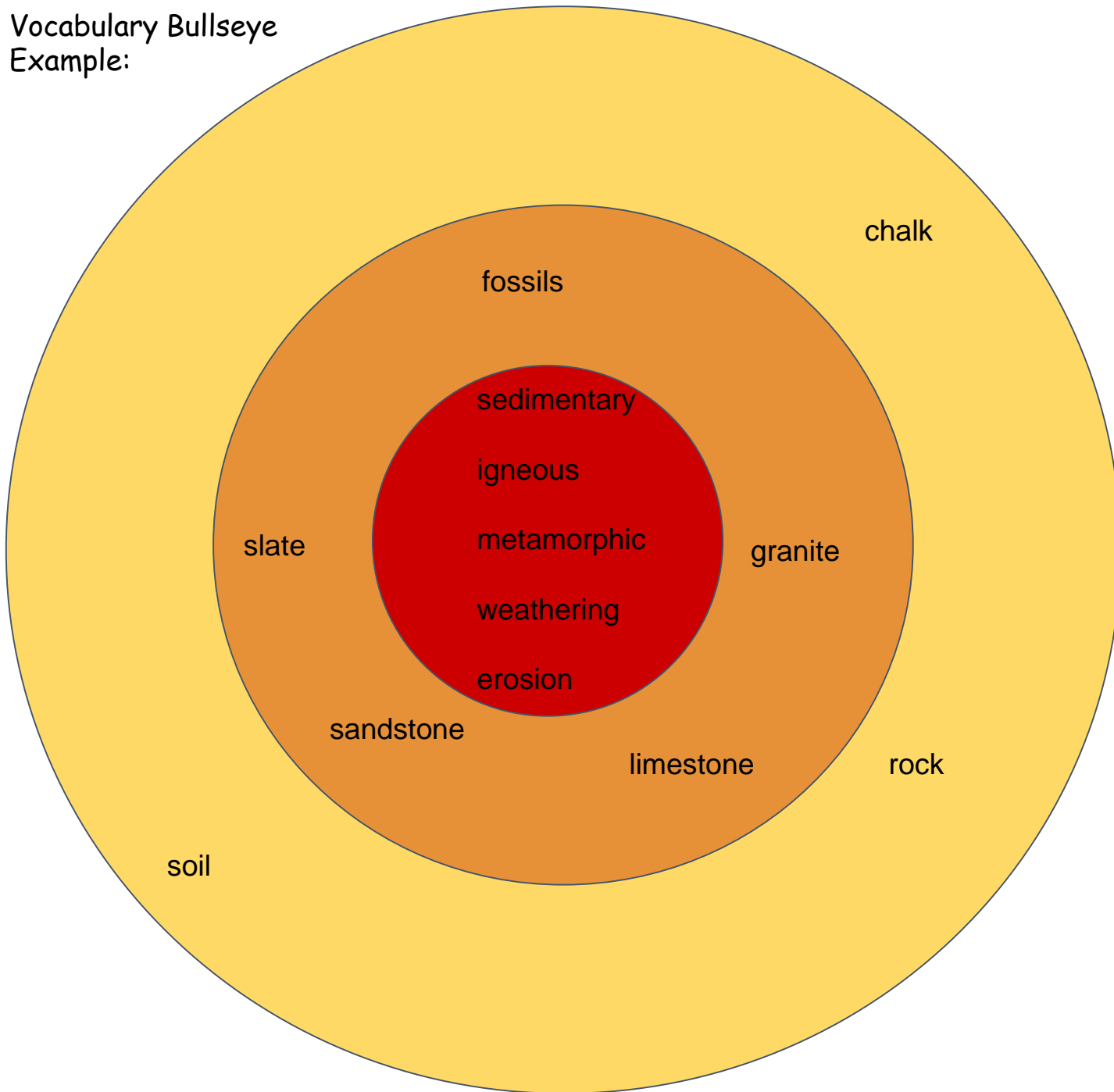
C)



D)



Vocabulary Bullseye
Example:



	Tally	Total
1 point words		
3 point words		
5 point words		
	Overall total =	

Unit	Year 1: Animals, Including Humans - Part 2: All about me	
National Curriculum	Pupils should be taught to:- <ul style="list-style-type: none"> • 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). 	
Prior Learning		Future Learning
Use all their senses in hands-on exploration of natural materials. (Nursery - Humans) Name and describe people who are familiar to them. (Reception - Humans)		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. (Y2 - Living things and their habitats) 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. (Y6 - Living things and their habitats) Give reasons for classifying plants and animals based on specific characteristics. (Y6 - Living things and their habitats)
Key Learning		Key Vocabulary
Humans have key parts in common, but these vary from person to person. Humans (and other animals) find out about the world using their senses. Humans have five senses - sight, touch, taste, hearing and smelling. These senses are linked to particular parts of the body.		parts of the body including those within the school's RSE policy, senses, touch, see, smell, taste, hear, fingers, skin, eyes, nose, ear, tongue
Common Misconceptions		

Unit	Year 1: Animals, including Humans - Part 1: All about me					
National curriculum	Pupils should be taught to: <ul style="list-style-type: none"> identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense 					
When	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
LQ	Can I name the basic parts of the human body?	What are the basic parts of the eye and what their functions?	What are the parts and functions of the ear?	What are the parts and functions of the tongue?	Can I explore my sense of touch?	How does my nose smell?
vocab	Limb, body, skeleton, head	Pupil, sight, eye, eyelash, brain	Ear, sound, vibration, loud, quiet	taste, mouth, flavour, sweet, tongue	organ, skin, fingertips, touch	nose hair, nostril, nose, odour, smell
Skills	Identifying and Classifying	Performing simple tests Gathering and recording data to help in answering questions	Performing simple tests Gathering and recording data to help in answering questions	Using their observations and ideas to suggest answers to questions.	Gathering and recording data to help in answering questions	Identifying and classifying
Knowledge	Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense					
Suggested Activity	Introduce the unit by giving learners a blank outline of a body - what do the children know? What can they label?					
Scientist / Inventor						
Assessment Questions	Can children identify the basic parts of the human body? Can children identify the different parts of the human body? Can children identify the different parts of the human body and explain what they are used for?	Can children understand that our eyes allow us to see? Do children know the basic parts of the eye? Do children know the basic parts of the eye and their functions?	Do children understand that our ears allow us to hear? Do children know that our ears help us tell the direction sound is coming from? Can children understand that sound is made up of vibrations?	Do children ... <ul style="list-style-type: none"> Understand that our tongue allows us to taste? Describe a range of different flavours? Understand why our sense of taste is important? 	Do children ... <ul style="list-style-type: none"> Understand that our skin helps us to feel? <ul style="list-style-type: none"> Know that our fingertips are sensitive to touch? Understand that our sense of touch can identify different textures? 	Do children ... <ul style="list-style-type: none"> Know that our nose allows us to smell? Understand that we can smell many different flavours? Know that our sense of smell helps to keep us safe?

Oracy Outcome		
Purpose	Audience	Outcome (link to topic)
To entertain and inform	Peers/ Early Years	Senses poetry recital

Knowledge Organiser
Unit: Animals, Including Humans, All About Me

Key Question 1

• Can I name the basic parts of the body?

Key Question 2

• What are the basic parts and functions of the eye?

Key Question 3

• What are the parts and function of the ear?

Key Question 4

• What are the parts and functions of the tongue?

Key Question 5

• Can I explore my sense of touch?

Key Question 6

• How does my nose smell?

Key Vocabulary

Key Word	Meaning	Key Word	Meaning
head	the top part of a human or an animal's body	ear	the organs, or body parts, in humans and many other animals that allow them to hear
body	the whole of a human or animal, including the head, brain, heart, legs and arms	sound	vibrations, or sound waves, that we can hear
brain	the control centre of the body	tongue	moving organ in the mouth that is used for talking, tasting, eating and licking
pupil	the black spot in the middle of the eye that lets in light, colour and shapes	taste	the sense by which sweet, sour, bitter, or salty flavours are detected through taste buds in the tongue

Body Parts



arm foot knee leg

5 Senses



SMELL SIGHT TOUCH HEARING TASTE
 smell sight touch hearing taste

Plants

Unit	Year 1: Plants	
National Curriculum	Pupils should be taught to:- <ul style="list-style-type: none"> 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. 	
Prior Learning	Future Learning	
Plant seeds and care for growing plants. (Nursery - Plants) Understand the key features of the life cycle of a plant and an animal. (Nursery - Plants) Begin to understand the need to respect and care for the natural environment and all living things. (Nursery - Plants) Explore the natural world around them. (Reception - Living things and their habitats) Recognise some environments that are different to the one in which they live. (Reception - Living things and their habitats)	Observe and describe how seeds and bulbs grow into mature plants. (Y2 - Plants) Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. (Y2 - Plants) Identify and name a variety of plants and animals in their habitats, including microhabitats. (Y2 - Living things and their habitats) Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. (Y3 - Plants) Investigate the way in which water is transported within plants. (Y3 - Plants)	
Key Learning	Key Vocabulary	
Growing locally, there will be a vast array of plants which all have specific names. These can be identified by looking at the key characteristics of the plant. Plants have common parts, but they vary between the different types of plants. Some trees keep their leaves all year while other trees drop their leaves during autumn and grow them again during spring.	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	
Common Misconceptions	Some children may think: <ul style="list-style-type: none"> plants are flowering plants grown in pots with coloured petals and leaves and a stem trees are not plants all leaves are green all stems are green a trunk is not a stem blossom is not a flower. 	

Unit	Year 1: Plants					
When	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
LQ	What do seeds grow into?	Can I identify the basic parts of a plant and tree?	Can I understand that different plants can grow in the same environment?	What are the differences between deciduous and evergreen trees?	Can I understand that fruit trees and vegetables are varieties of plants?	Can I record the growth of a plant?
vocab	plant, soil, water, light, seed	flower, leaf, branch, root, stem	weed, dandelion, daisy, wild, buttercup	bush, branch, seasons, evergreen, deciduous	tractor, farm, vegetable, fruit, supermarket	observe, adult plant, young plant, seedling, growth
Skills	Asking simple questions Observing closely, using simple equipment Using their observations and ideas to suggest answers to questions	Identifying and classifying Compare and contrast familiar plants Draw diagrams showing the parts of different plants including trees	Identifying and classifying Gathering and recording data Describing how they were able to identify and group different plants Compare and contrast what they have found out about different plants	Observing closely, using simple equipment	Observing closely Identifying and classifying Using their observations and ideas to suggest answers to questions Gathering and recording data to help in answering questions	Observing closely Gathering and recording data
Knowledge	Become familiar with common names of flowers and plant structures including seeds	Identify and describe the basic structure of a variety of common flowering plants, including trees Become familiar with common names of flowers and plant structures	Identify and name a variety of common wild and garden plants	To identify and name a variety of deciduous and evergreen trees	To understand how plants change over time	Observing the growth of flowers they have planted Become familiar with plant structures Keep records of how plants change over time
Suggested Activity	Explore what a plant is and discover that many plants begin as seeds. Examine a variety of different seeds, allowing learners to touch them and observe them using a magnifying glass. Ask learners to describe what the seeds look like. Compare and contrast seeds and discuss their similarities and differences. Encourage learners to ask their own questions and make predictions, for instance, 'How tall do you think each seed will grow?' 'Will the biggest seed grow into the biggest plant?' Activity: Plant a variety of seeds, for instance, garden flowers (sunflower, cosmos, dandelion) and include a variety of other plants such as tomato seeds, beans and vegetable seeds.	Identify the different parts of a flower. Using the slide presentations and the real flowers in pots show learners the roots, stem, leaf and flower of each plant. Learners can use the handout and in pairs identify the parts of each flower. Explain that although trees look different, they also have roots, leaves, flowers and a strong trunk so they can grow tall.	Look at some pictures of wildflowers. Ask learners to use their knowledge from the previous lesson to identify the basic structure of the plants: stem, leaf, petal, roots and flower. Discuss that these are wildflowers - what does wild mean? Use the local environment to observe different plant varieties. Encourage learners to notice the basic structures of the plants they see and compare and contrast the different plants they come across. ▪ Explore what grows in Forest School	Look at pictures of the same plant in the four different seasons. Can the learner explain what is happening? Can learners name the seasons and describe what the weather is like at those times of year? Explain that all plants have to adapt and change to suit their environment. Look at the pictures of trees. What do you think the words deciduous and evergreen mean? Identify the differences between evergreen and deciduous trees. Video: https://www.youtube.com/watch?v=7h5TiPevd-Q	Ask the learner to think back to their first lesson on plants. Why are plants so important? Remind them that plants are a source of food, medicine, timber and cotton. In pairs, can the learner think of plants that we might eat? Show the learner pictures of a selection of fruit trees and vegetable plants, identifying the fruit of each plant, blossoming fruit trees and vegetables growing in farmland. Suggested Activity: Have a selection of seeds and stones from various fruits and vegetables AND the matching fruit or vegetable. If this is not possible, use pictures of each one. Ask the learner to match the seed to the fruit/vegetable. They should record their predictions	Think back to when the learner planted their seeds. Ask them to tell their partner how they planted their seed. Ask them to look at their plants now, what do they notice? How has their plant changed?
Scientist / Inventor						
Assessment Questions	What is a seed? Which of these are plants? Complete the statement: Plants need {{water}}, {{light}} and nutrients (good foods that keep them {{healthy}}). Just like us! Which of these foods are plants?	Which of these have lots of seeds inside them, which have only one seed? An acorn is the seed of an..? Which of these are parts of a plant? Complete the statement: How does a seed turn into a plant? If you put it in {{soil}}, {{water}} it and place it in a {{light}}, warm place, it will usually start to sprout into a baby plant. What would grow from a sunflower seed? What are the parts of a tree?	Show learners a picture of someone's garden and ask them: why is there more variety in this garden than the flowers you saw on your walk in forest school?	Do children know that deciduous trees change throughout the year? Can children explain how a deciduous tree changes through the year? Can children make comparisons between a deciduous tree and an evergreen tree?	Do children understand that plants are a source of food? Can children make predictions? Can children record their findings in a table?	Do children understand that plants grow over time? Can children record the growth of a plant? Can children measure the height of a plant and record how much it has grown?

Knowledge Organiser

Unit: Plants

Key Question 1

• What do seeds grow into?

Key Question 2

• Can I identify the basic parts of a plant and tree?

Key Question 3

• Can I understand that different plants can grow in the same environment?

Key Question 4

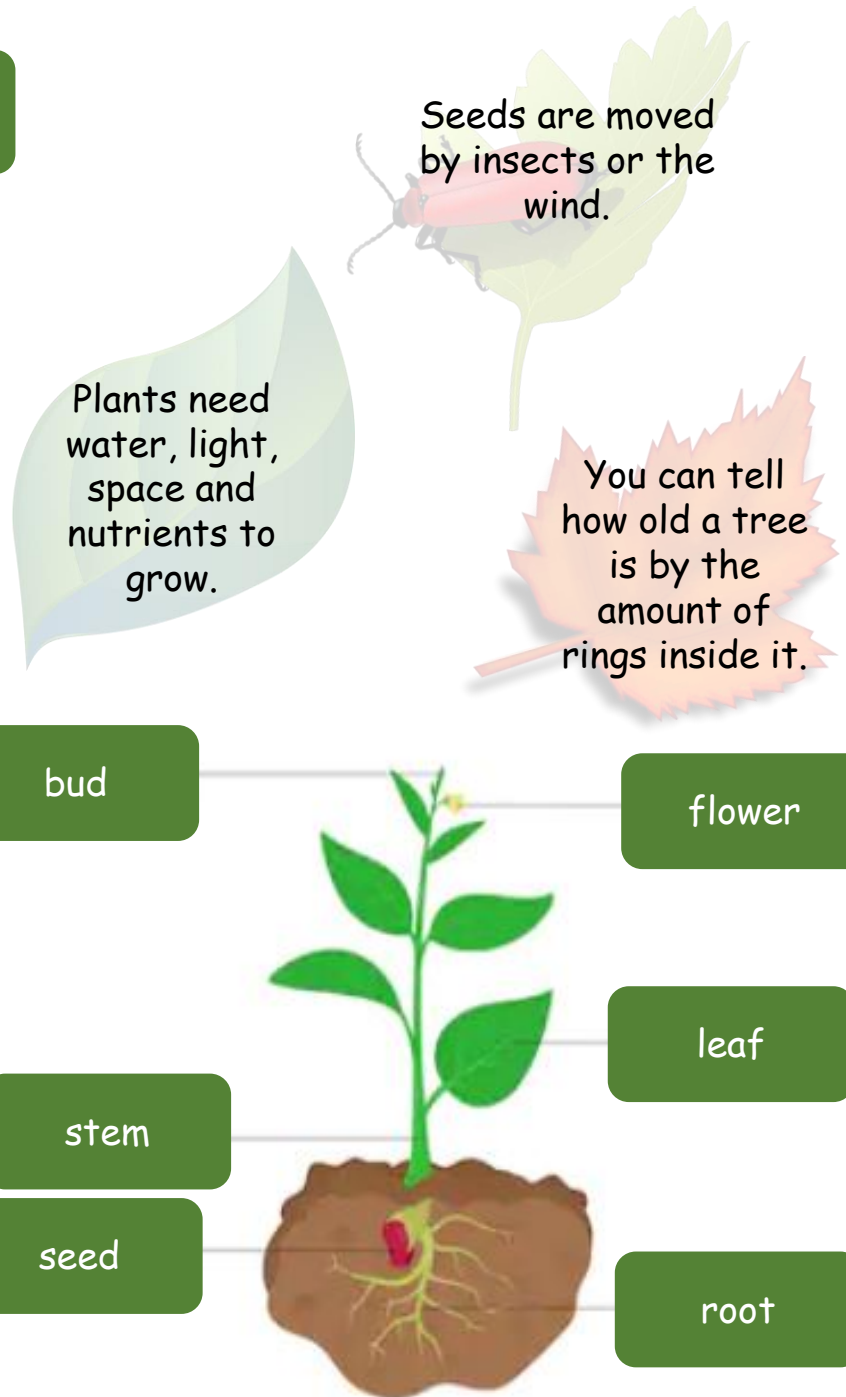
• What are the differences between deciduous and evergreen trees?

Key Question 5

• Can I understand that fruit trees and vegetables are varieties of plants?

Key Question 6

• Can I record the growth of a plant?



Key Vocabulary

Key Word	Meaning
seed	A small round or oval object produced by a plant.
root	The part of a plant that grows down into the earth to get water and food.
flower	The blossom of a plant.
stem	Stick-like central part of a plant that grows above the ground from which leaves grow.
crop	The name given to vegetable, cereal or grain that is grown to sell.
leaf	The flat, green part of a plant joined at one end to the stem.
fruit	Made by plants and usually come from flowers, we eat fruit and they are healthy.
grain	Wheat or other cereal grown to be used as food.
deciduous	A tree that loses its leaves in the autumn every year
evergreen	A tree that has leaves all year round

Seasonal Changes

Unit	Year 1: Seasonal Changes	
National Curriculum	Pupils should be taught to: <ul style="list-style-type: none"> • observe changes across the 4 seasons • observe and describe weather associated with the seasons and how day length varies 	
Prior Learning		Future Learning
Understand the key features of the life cycle of a plant and an animal. (Nursery - Plants & Animals, excluding humans) Explore the natural world around them. (Reception - Seasonal changes) Describe what they see, hear and feel whilst outside. (Reception - Seasonal changes) Understand the effect of changing seasons on the natural world around them. (Reception - Seasonal changes)		Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. (Y3 - Light) Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky. (Y5 - Earth and space) The seasons and the Earth's tilt, day length at different times of year, in different hemispheres. (KS3)
Key Learning		Key Vocabulary
In the UK, the day length is longest at mid-summer (about 16 hours) and gets shorter each day until mid-winter (about 8 hours) before getting longer again. The weather also changes with the seasons. In the UK, it is usually colder and rainier in winter, and hotter and dryer in the summer. The change in weather causes many other changes. Some examples are: numbers of minibeasts found outside; seed and plant growth; leaves on trees; and type of clothes worn by people.		weather, sunny, rainy, raining, shower, windy, snowy, cloudy, hot, warm, cold, storm, thunder, lightning, hail, sleet, snow, icy, frost, puddles, rainbow, seasons, winter, summer, spring, autumn, Sun, sunrise, sunset, day length
Common Misconceptions	Some children may think: <ul style="list-style-type: none"> • it always snows in winter • it is always sunny in the summer • there are only flowers in spring and summer • it rains most in the winter. 	

Unit	Year 1: Seasonal Changes					
When	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
LQ	What do we know about weather?	How can we measure rainfall?	Can I recognise the different types of cold weather?	Can I explain how to keep safe during thunderstorms?	How does the weather change across the seasons and how does it affect places on Earth?	How do trees change across the seasons?
vocab	weather, cloudy, rain, sunny, temperature	cloud, droplet, sky, sleet, flood	snow, blizzard, flurry, hail, ice	thunderstorm, thunder, lightning, safety, shelter	desert, rainforest, temperate, affect, humidity	Spring, Summer, Autumn, Winter, seasons
Skills	Using observations and ideas to suggest answers to questions	Using observations and ideas to suggest answers to questions	Using observations and ideas to suggest answers to questions	Performing simple tests	Gathering and recording data to help in answering questions	Using observations and ideas to suggest answers to questions
Knowledge	Observe and describe weather associated with the seasons and how day length varies Pupils should observe and talk about changes in the weather and the seasons.	Pupils might work scientifically by: making tables and charts about the weather; and making displays of what happens in the world around them, including day length, as the seasons change.	Pupils should observe and talk about changes in the weather and the seasons.	Observe and describe weather associated with the seasons and how day length varies Pupils should observe and talk about changes in the weather and the seasons.	Observe and describe weather associated with the seasons and how day length varies Pupils should observe and talk about changes in the weather and the seasons.	Observe changes across the 4 seasons
Suggested Activity	Observe the changes which happen with solutions over a period of time. Weather forecasting.	Create your own rain dance!	Match the cold weather and make a cold weather collage!	Weather role play!	Build a weather vane.	Make a tree of all seasons.
Scientist / Inventor						
Assessment Questions						

Knowledge Organiser Unit: Seasonal Changes

Key Question 1

- What do we know about weather?

Key Question 2

- How can we measure rainfall?

Key Question 3

- Can I recognise different types of cold weather?

Key Question 4

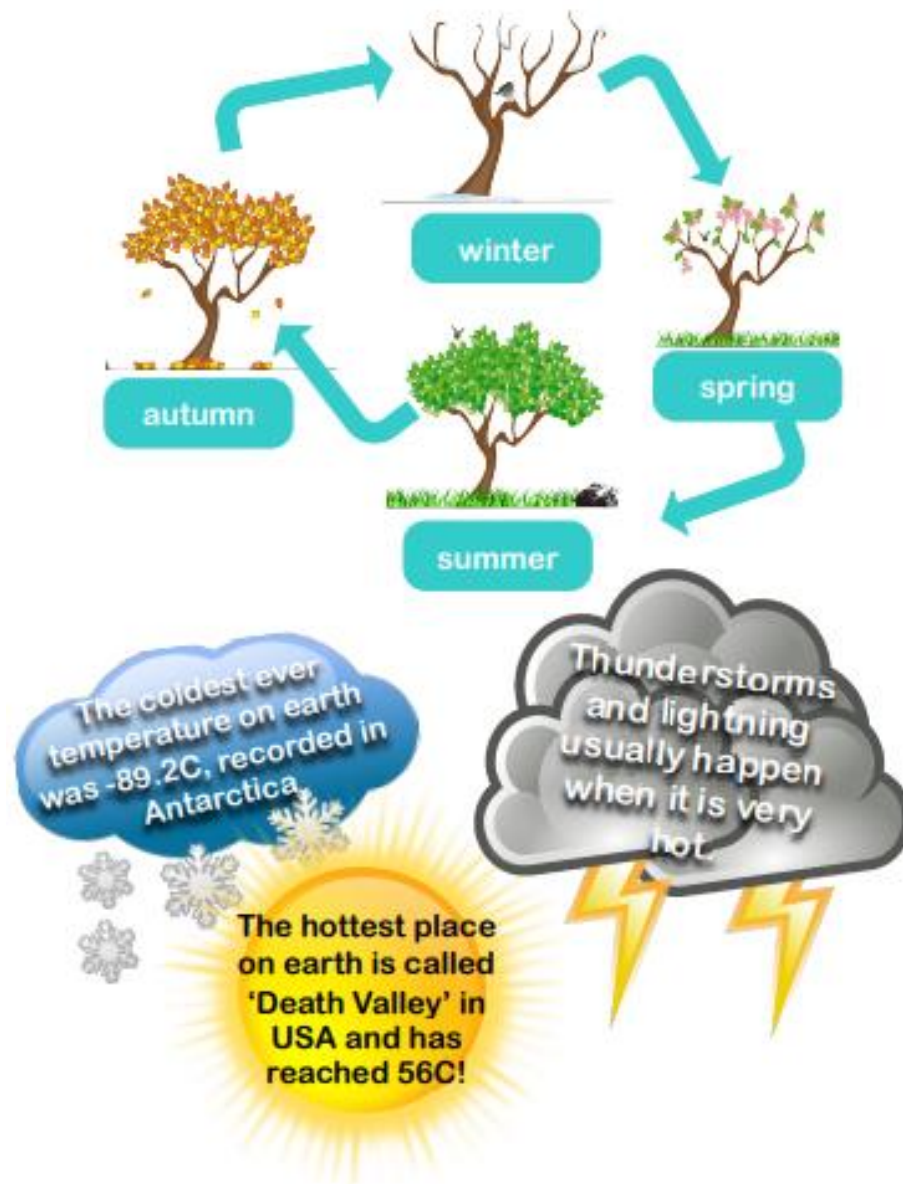
- Can I explain how to keep safe during thunderstorms?

Key Question 5

- How does the weather change across the seasons and how does it affect places on Earth?

Key Question 6

- How do trees change across the seasons?



Key Vocabulary

Key Word	Meaning
seed	A small round or oval object produced by a plant.
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flower	The blossom of a plant.
stem	Stick-like central part of a plant that grows above the ground from which leaves grow.
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