

Year Group 1

Term 1

Everyday Materials



Living things and their habitat



Everyday materials



Seasonal changes

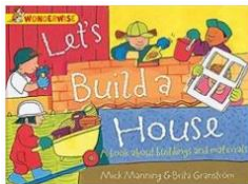


Plants



Animals including humans



<p>Enquiry Question</p>	<p>What materials are used to make the objects around us?</p>		
<p>Scientific Enquiry</p>	<ul style="list-style-type: none"> • Ask a range of different scientific questions • Identify and Classify different objects • Perform simple tests. 		
<p>NC Objectives</p>	<ul style="list-style-type: none"> • Distinguish between an object and the material from which it is made. • Identify and name a variety of every day materials, including wood, plastic, glass metal, water and rock. • Describe simple physical properties of a variety of everyday materials. • Compare and group together a variety of everyday materials on the basis of their physical properties. 		
<p>Curriculum Coherence</p>	<p>Prior Knowledge</p> <p>EYFS curriculum – Materials unit:</p> <ul style="list-style-type: none"> • Different types of materials and their properties 	<p>Future Learning</p> <p>Identify and compare the suitability of a variety of everyday materials including wood, metal, plastic, glass, brick, rock, paper and cardboard and its particular uses. (Y2)</p> <p>Find out how the shapes and solid objects made from some materials can be changed by squashing, bending, twisting & stretching. (Y2)</p>	<p>Vocabulary</p> <p>Compare & group, material, fabric, wood, plastic, metal, property, opaque, transparent, dull, stiff.</p>
	<p>High Quality Text</p> 	<p>Misconceptions</p> <p>The word 'material' refers only to fabrics & objects are only made from one material.</p> <p>Materials cannot be changed.</p>	<p>Assessment/Outcomes</p> <p>Retrieval Practice</p> <p>Written Task</p> <p>Online Platform</p>

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Animals including humans



Unit Summary: **Everyday Materials - Exploring Everyday Materials** is the first part of two units. This unit takes children through six lessons where they learn how to **distinguish between an object and the material from which it is made**. They also learn how to **identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock**. They **describe the simple physical properties of a variety of everyday materials**. And finally, they **learn how to compare and group together a variety of everyday materials on the basis of their simple physical properties**.

Knowledge Sequence	Lesson 1 – What materials do I see every day? During the lesson the children are using their observation skills to recognise the different materials objects in their classroom are made of. They will be able to find and names items made of wood, plastic, metal and fabric. They will consider different ways these items could be sorted. DE Lesson 1
	Lesson 2 – Are all objects made of the same materials? Within this lesson the children are encouraged to recall some of the different materials that they learnt about the previous week. They are also exposed to the new materials glass, rock and brick. The lesson will look to distinguish between a material and object with the science learning preparing them for thinking about materials being a substance or matter. The children will identify different objects and the materials they are made of. DE lesson 2
	Lesson 3 – What's a property and do all materials have the same? During this lesson the focus shifts to look at the term property and how different materials with have different properties. They will be exposed to words such as still, dull, transparent, opaque and consider which materials have these properties and why. DE lesson 3
	Lesson 4 – Where do different materials come from and are they all natural? This lesson progresses the children's learning to consider that objects are made of different materials and where in particular these materials come from. We explore the terms 'Natural and man made'. The children are encouraged to think about different objects in their local environment and beyond and consider whether the material is natural and has come from the earth or made specifically to do a certain job. DE Lesson 4
	Lesson 5 – Will I float or sink? Next up the children begin to look at the features of properties and begin to apply them to an investigation. The children will be asked a simple scientific question that they will need to explore. They will be exposed to the idea of a 'test' and some of the key features of these that they will need to employ. They will be asked to think – Why does it float? What are the properties of the object? Do objects made of this material float? DE Lesson 5
	Lesson 6 – What material is best for a...? During this final lesson in the sequence, the children will apply their knowledge and understanding of the different properties of materials and consider why certain materials are chosen for certain objects. They will focus on the terms absorbent and waterproof and decide which materials are best for an umbrella and why? DE Lesson 6
Aspiration	Your key knowledge will help you to be one of the following: structural engineer, builder, Physics monitor.
Scientist/Historical figure	John McAdam - John Loudon McAdam - Students Britannica Kids Homework Help – Inventor of the Modern Road Surface (Links later to the Romans)

Year Group 1

Term 2 & 5

Seasonal Changes



Living things and their habitat



Everyday materials



Seasonal changes

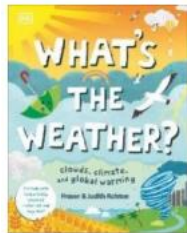


Plants



Animals including humans



Enquiry Question	What are the seasons and why do they change?		
Scientific Enquiry	To gather and record data Observe closely. To be able to ask questions and recognise they can be answered in different ways.		
NC Objectives	Observe changes across the four seasons Observe and describe weather associated with the seasons and how the day length varies.		
Curriculum Coherence	Prior Knowledge: EYFS Weather and Seasons unit: <ul style="list-style-type: none"> Different types of weather & Names of the 4 seasons 		Future Learning
	Vocabulary Season, spring, summer, autumn, winter, hibernate, harvest, measuring, record, results, graph.	High Quality Text 	Misconceptions It is always hot and sunny in summer. It always snows in winter. Flowers only grow in spring. Trees and flowers die in winter

Year Group 1

Term 2 & 5

Seasonal Changes



Living things and their habitat



Everyday materials



Seasonal changes



Plants



Animals including humans



Unit Summary: This unit on **'Seasonal Changes'** takes children through six lessons where they learn how to **observe changes across the 4 seasons and observe and describe weather associated with the seasons and how day length varies**. The lessons have been written in sequence and are designed to challenge children to recall the knowledge and skills they have covered in the previous lesson(s).


Knowledge Sequence	<p>Lesson 1 – How many seasons are there? During the lesson the children are going to be observing the weather outside at that moment but also the photos from earlier on in the week, month and term. They will be asked to consider what they notice. Throughout the lesson the children will be asked to consider the weathers that they have experienced and when they might have happened throughout the year. By the end of the lesson they will be able to name the 4 seasons and consider some of the changes that might occur. DE Lesson 1</p>
	<p>Lesson 2 – What happens in the autumn? Within this lesson the children will be encouraged to think about Autumn and what the weather is like outside. They will explore the school grounds and start to think about some of the changes that are occurring. They will be encouraged to think about how the weather is changing and the impact that this has. By the end of the lesson they will also be able to explain what happens to the plants and animals during autumn. DE lesson 2</p>
	<p>Lesson 3 – How does the weather change in the winter? During this lesson the focus shifts to look at the winter and in particular the changes in temperature and the amount of sunlight we get. The children will consider what provides us with the sunlight and make links to their learning in Geography by considering where the UK is on the earth and why this impacts our winter. DE lesson 3</p>
	<p>Lesson 4 – Has Spring Sprung? This lesson progresses the children's learning to consider that there are 4 different seasons in which 4 very different things happen. During this lesson the children start to consider what happens in spring and how this differs to Autumn and Winter. With the growth of new life they consider why and what changes are starting to happen to the length of the day and temperature. The children will revisit this learning in the spring to review their learning. DE Lesson 4</p>
	<p>Lesson 5 – What happens in the summer? This lesson provides the opportunity for children to compare different seasons and the changes that happen. They can apply their science knowledge to clearly explain how and why things are different linking with their knowledge and understanding of the earth and where the UK sits on the globe. Further links can be drawn to their learning on animals and considerations around what might happen during these seasons including hibernation and migration of animals. DE Lesson 5</p>
	<p>Lesson 6 – How can we measure how much rain falls? During this final lesson in the sequence, the children will use their knowledge of the basic SC1 skills to consider how they gather information and data, observe the changes that take place over time and recognise that the different questions that we ask will result in different outcomes. DE Lesson 6</p>
Aspiration	Your key knowledge will help you to be one of the following: Meteorologist, Climate Scientist, Coastguard.
Scientist/Historical figure	Jim Cantore - The Weather Group Jim Cantore Meteorologist



Year Group 1
Term 3 & 5

Plants

Living things and their habitat  Everyday materials  Seasonal changes  Plants  Animals including humans 

Enquiry Question	Do all plants and trees have leaves all of the time?		
Scientific Enquiry	Observe closely using different equipment. Gather and record data to answer different questions.		
NC Objectives	Identify and name a variety of common wild & garden plants, including deciduous and evergreen trees. Identify and describe the basic structure of a variety of common flowering plants, including trees.		
Curriculum Coherence	Prior Knowledge EYFS curriculum – Plants unit: Where to find plants How to look after plants	Future Learning Observe and describe how seeds and bulbs grow into mature plants. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	
	Vocabulary Seed, plant, stem, petal, deciduous, evergreen, fruit, vegetables	High Quality Text 	Misconceptions Plants are not alive: Trees are not plants Leaves are always green:

Year Group 1

Term 3 & 5

Plants



Living things and their habitat



Everyday materials



Seasonal changes



Plants



Animals including humans



Unit Summary: This unit on **'Plants'** takes children through six lessons where they learn how to **identify and name a variety of common wild and garden plants, including deciduous and evergreen trees**. They also learn how to **identify and describe the basic structure of a variety of common flowering plants, including trees**. The lessons have been written in sequence and are designed to challenge children to recall the knowledge and skills they have covered in the previous lesson(s).

Knowledge Sequence	<p>Lesson 1 – What is a plant? During the lesson the children are explore what a plant is and how they all grow from seeds that are different sizes, shapes and colours. The children are encouraged to compare the seeds to identify what is similar and different. They will also be encouraged to consider what will happen after the seeds have been planted. Children plant a range of seeds in transparent plastic cups so that they can observe the germination process week on week. DE Lesson 1</p>
	<p>Lesson 2 – Are plants and trees similar or different? Within this lesson the children will explore the structure of different plants exploring their key parts and observing their rook structure. They will be encouraged to try and draw and label different parts of the flower. They will also compare plants to trees. Are they the same or different? The hope is that the children will recognise that although they differ in size the general structure is the same. DE lesson 2</p>
	<p>Lesson 3 – What different plants grow in our gardens/school? During this lesson the children will begin to apply their knowledge of the structure of a plant and consider whether only one type of plant can grow in a garden/school grounds. Using the seeds planted in Lesson 1, the children can explore how the seeds have germinated and what they look like at similar stages. They need to consider whether the seeds have had anything different. Encourage the children to name some of the common plants they might find in the garden at home. DE lesson 3</p>
	<p>Lesson 4 – Do trees have leaves all year round? This lesson progresses the children’s learning to consider what happens to plants at different times throughout the year. Links will be made with the seasons unit. During the lesson the children will be encouraged to look at pictures of the same plant in different seasons throughout the year. They need to think about what is similar and what is different. DE Lesson 4</p>
	<p>Lesson 5 – How can plants help us? This lesson provides the opportunity for children to consider how essential plants are to humans. We will revisit their use in medicines and construction and then explore how plants provide food through the fruit and vegetables that they produce. Further links will be made back to the seasons unit considering when in the year certain plants are ready to harvest. The children will cut open fruits and look at the seeds considering the cycle the plant will have been on from seed to fruit. DE Lesson 5</p>
	<p>Lesson 6 – How can we measure how much rain falls? During this final lesson in the sequence, the children will reflect on the stages of growth from the plan from day 1 at the start of the unit to day 30 at the end of the unit and beyond. What did they notice? Did all plants grow at the same rate? Do they all end up the same size? DE Lesson 6</p>
Aspiration	Your key knowledge will help you to be one of the following: landscaper, biologist, ecologist, famer worker/farmer.
Scientist/Historical figure	Maria Sibylla Merian - Maria Sibylla Merian: metamorphosis unmasked by art and science Natural History Museum (nhm.ac.uk)

Year Group 1

Term 6

Animals including Humans



Living things and their habitat



Everyday materials



Seasonal changes

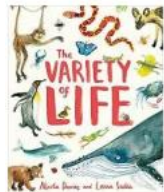


Plants



Animals including humans



Enquiry Question	How are the animals on our planet similar and different?		
Scientific Enquiry	<ul style="list-style-type: none"> Using their observations and ideas to suggest answers to questions Grouping and sorting 		
NC Objectives	<ul style="list-style-type: none"> 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) Identify and name a variety of common animals that are carnivores, herbivores and omnivores 		
Curriculum Coherence	Prior Knowledge To identify different plants and animals from pictures provided. (EYFS)		Future Learning To learn about growth in plants. Animals and Humans including how they have offspring. (Y2) Understand the basic needs of plants, animals and humans. (Y2)
	Vocabulary Classify, group and sort Fish amphibian reptile mammal bird, Herbivore carnivore omnivore predator	High Quality Text 	Misconceptions All animals have a backbone (vertebrae). All animals live on the land.

Year Group 1

Term 4

Animals including Humans



Living things and their habitat



Everyday materials



Seasonal changes



Plants



Animals including humans



Unit Summary: '**Animals, including humans - All about animals**' is the second part of two units. This unit takes children through six lessons where they learn how to **identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals**. They learn how to **identify and name a variety of common animals that are carnivores, herbivores and omnivores**. And finally, they learn how to **describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)**.

Knowledge Sequence

Lesson 1 – How are different animals grouped together? During this lesson the children are exposed to the different ways in which we can group animals and their names. They are encouraged to recall the names of some common animals and describe some of their key characteristics. DE Lesson 1
Lesson 2 – Are birds and mammals similar or different? Within this lesson the children are encouraged to name and identify common mammals and birds. This builds on the learning from lesson 1 by narrowing the number of different groups. The children explore the characteristics of these key groups and begin to sort and order animals based on these characteristics. DE lesson 2
Lesson 3 – Are amphibians, reptiles and fish all part of the same family? During this lesson the focus shifts to look at fish, amphibians and reptiles. Comparisons are made between the previous two groups (mammals and birds) with similarities and differences identified and emphasised. By the end of the session the children will be able to name a range of different animals and categorise them based on their key characteristics. DE lesson 3
Lesson 4 – Do all animals eat the same type of food? This lesson progresses the children's learning and focus to their diet and the different food that is eaten. The children are introduced to the terms carnivores, herbivores and omnivores . Links are created with the key animals discovered previously in this unit. The children begin to order them based on diet – comparisons are made with previous methods of grouping and questions such as 'Are all birds carnivores?' DE Lesson 4
Lesson 5 – Why do some animals live in the wild and others with us? Next up the children begin to look at the features of a wild animal and those that are pets. The children begin to sort the based on this characteristic. They will explore Wild animals and pets are fundamentally different in terms of their natural habitat, behaviour, and the nature of their relationship with humans. The children will be able to explain that wild animals are those that live and thrive in their natural environment without human intervention. They are not domesticated and are usually born and raised in the wild. DE Lesson 5
Lesson 6 – What are the key features of different animals? During this final lesson in the sequence, the children will review some of the animals that they have studied and ensure that they can characterise them to include: the key group, their diet, main habitat. They will compare this with another animal that might have similar characteristics but that falls within a different category.

Aspiration

Your key knowledge will help you to be one of the following: Agriculture (working on a farm), Vet or caring for animals, Dog trainer, Beekeeper.

Scientist

Tanesha Allen - [Dr Tanesha Allen | Department of Biology \(ox.ac.uk\)](#) – Zoologist

Year Group 1

Term 6

Animals including Humans 2



Living things
and their
habitat



Everyday
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Seasonal
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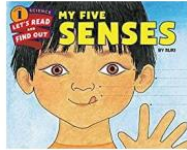


Plants



Animals including
humans



Enquiry Question	What are my senses and how do they help me?		
Scientific Enquiry	Recognise and answer questions in different ways. Observe closely.		
NC Objectives	Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense..		
Curriculum Coherence	Prior Knowledge EYFS curriculum – Our body unit: <ul style="list-style-type: none"> Names of body parts Names of the 5 senses 		Future Learning Observe and describe how seeds and bulbs grow into mature plants. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.
	Vocabulary Head, body, brain, pupil, ear, sound, tongue, taste, sight, hearing, touch.	High Quality Text 	Misconceptions Only our hands can feel the sense of touch: Our sense organs act alone:

Year Group 1

Term 6

Animals including Humans 2



Unit Summary: '**Animals, including humans - All about me**' is the first part of two units. This unit takes children through six lessons where they learn how to **identify, name, draw and label the basic parts of the human body** and say which **part of the body is associated with each sense**.

Knowledge Sequence	<p>Lesson 1 – All about me! During the lesson the children are exploring their body and the different parts of it and what they do. They will consider how different parts of the body work and what they are used for. DE Lesson 1</p>
	<p>Lesson 2 – Senses – sight – how do our eyes work? Within this lesson the children will recap their understanding of the basic parts of the body and their functions from the previous lesson. They will then consider their eyes and the sense of sight. Children will explore their eyes using a mirror and consider what is similar and different between their eyes and that of their partner. DE lesson 2</p>
	<p>Lesson 3 – Senses – sound – What sounds can we hear and how? During this lesson the children will begin to consider the next sense, sound. During a walk around the school and outside they will consider the different sounds they can hear and where they might be coming from. During the lesson we will look briefly at how sound travels and what part of the body helps you to hear it. The children will also think about how a sound is made and use instruments to make different sounds. Foundation knowledge for Sound unit covered in Year 4. DE lesson 3</p>
	<p>Lesson 4 – Senses – taste – Are all flavours nice? This lesson progresses the children’s learning to consider the next sense. A recap of the previous senses is essential. Within this learning we expand children’s vocabulary to consider how foods can be sweet, sour, bitter, spicy and how the organ (Tongue) will allow you to taste different flavours. During the lesson the children will taste a range of different foods and identify flavours (fruits/vegetables). DE Lesson 4</p>
	<p>Lesson 5 – Senses – touch – What can we feel? This lesson provides the opportunity for children to explore their sense of touch. They will consider how not only can we feel the texture of a object (soft, smooth, rough) we can use touch to explore the temperature of items. Our touch sense can be one that protects us from danger telling us if something is too hot or cold. The children will use their sense to compare different objects labelling based on their use of touch. DE Lesson 5</p>
	<p>Lesson 6 – Senses – smell – Smells – nice and nasty, what do you think? During this final lesson in the sequence, the children will reflect on the sense learnt so far and consider which they think is most important and why? Is there a sense that they believe that they could live without. Consider how developments in technology have helped us to improve or maintain some of our sense (glasses for sight and hearing aids for sound) but that some senses we cannot replicate. Explore the sense of smell and the importance of this to taste. When people have a cold or who are feeling under the weather this can sometimes impact their sense of taste. Smells can be appealing and not appealing. Discuss the smells they like and dislike. Set up an investigation where certain items have been placed into a sealed box with holes. What is the smell? Do they like it? If they don’t why? Can they identify the item from the smell? DE Lesson 6</p>
Aspiration	Your key knowledge will help you to be one of the following: dietician, Doctor, Vet, Care worker, Ambulance worker/paramedic.
Scientist/Historical figure	Miller Hutchinson - 1- helping us hear-ear trumpets (ogdentrust.com)