


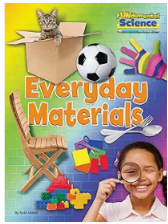



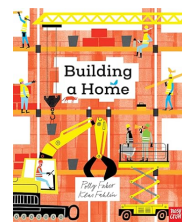
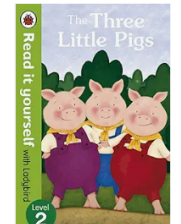


Enquiry Question	Why does the weather change during the different seasons?	
	Required Prior Knowledge	Knowledge to be taught
<b>Substantive Knowledge</b>	<p>Know there are four seasons</p> <p>Use some scientific words to describe their environment and link it to the season they are in.</p> <p>Describe the changes between each season and describe why some things belong in certain seasons.</p> <p>(Reception Seasons)</p>	<p>Name the four seasons and identify in the year when they occur.</p> <p>Describe the weather in different seasons.</p> <p>Describe days being longer in summer and shorter in winter.</p> <p>Compare seasons.</p>
<b>Disciplinary Knowledge</b>		
Asking Questions	Ask simple questions and recognise that they can be answered in different ways.	
Making Predictions	Predict colours in a leaf	
Planning Enquiries		
Observation & Measuring	Observe similarities and differences within the seasons.	
Recording Data	Record different signs of Spring using labelled diagrams and pictures.	
Interpreting & Conclusions	Explain what winter feels like.	
Evaluation	Evaluate my test and suggest improvements.	
<b>Vocabulary</b>	<b>autumn, spring, winter, summer, seasons, grow, new life, year, change, tree, plant, shadow, sun, snow , rain, hail, wind, cold, hot, warm</b>	

<b>Recommended Reading</b>							
<b>Teaching Sequence</b>	<p><b>INTRODUCTION</b></p> <ul style="list-style-type: none"> <li>Begin with a question, demonstration or real-world example to spark curiosity and connect to the topic.</li> <li>Review or revisit related concepts.</li> </ul>		<p><b>INVESTIGATE AND RECORD</b></p> <ul style="list-style-type: none"> <li>Introduce new scientific ideas or concepts through hands-on activities, experiments or observations.</li> <li>Guide pupils to understand the scientific concepts behind their exploration.</li> </ul>			<p><b>ASSESSMENT</b></p> <ul style="list-style-type: none"> <li>Reflect on learning</li> <li>Demonstrate their understanding</li> </ul>	
<b>Learning Questions</b>	<b>What are the four seasons?</b>	<b>What happens in Autumn?</b>	<b>What happens in Winter?</b>	<b>What happens in Spring?</b>	<b>What happens in Summer?</b>	<b>How does the weather change during the seasons?</b>	<b>Unit quiz</b>
<b>Mastery Keys</b>	<ul style="list-style-type: none"> <li>➤ Can name four seasons and identify when in the year they occur.</li> <li>➤ Can observe and describe weather in different seasons.</li> <li>➤ Can describe days being longer in summer and shorter in winter.</li> <li>➤ Present data in tables charts and compare seasons.</li> </ul>						


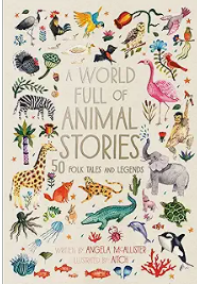
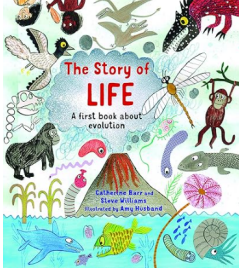
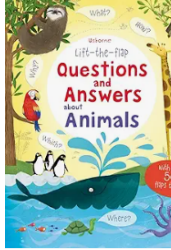

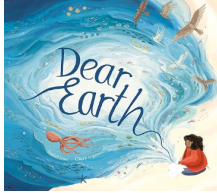
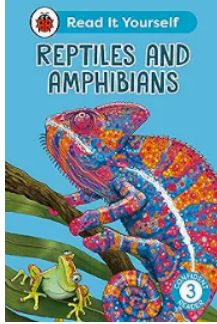


Enquiry Question	Why do we use different materials for different things?	
	Required Prior Knowledge	Knowledge to be taught
Substantive Knowledge	Can identify that there are different materials. Identify the properties and purposes of different materials. Use materials for a purpose. (Reception Materials)	Label a picture of an object based on what it is made of. Describe the properties of materials. Sort materials using its properties. Know terms: wood, plastic, glass, metal, water and rock.
Disciplinary Knowledge		
Asking Questions	Ask and answer questions to group materials.	
Making Predictions	Make predictions based on the best materials to block out light.	
Setting up tests	Carry out a simple comparative test using my own ideas.	
Observing & Measuring	Use observations to classify.	
Recording Data	Record my results in a table/	
Interpreting & Communicating results	Report and interpret my findings.	
Evaluating	Evaluate my test and suggest improvements.	
Vocabulary	<b>material, fabric, object, fragile, waterproof, hard, soft, rough, smooth, wood, metal, plastic, glass, rubber, rock , fabric, paper, brick, hard, soft, rough, bumpy, smooth, fragile, strong, heavy, light</b>	

<b>Recommended Reading</b>								
<b>Teaching Sequence</b>	<b>INTRODUCTION</b> <ul style="list-style-type: none"> <li>Begin with a question, demonstration or real-world example to spark curiosity and connect to the topic.</li> <li>Review or revisit related concepts.</li> </ul>		<b>INVESTIGATE AND RECORD</b> <ul style="list-style-type: none"> <li>Introduce new scientific ideas or concepts through hands-on activities, experiments or observations.</li> <li>Guide pupils to understand the scientific concepts behind their exploration.</li> </ul>				<b>ASSESSMENT</b> <ul style="list-style-type: none"> <li>Reflect on learning</li> <li>Demonstrate their understanding</li> </ul>	
<b>Learning Questions</b>	<b>What are materials?</b>	<b>What are objects made from?</b>	<b>How can we sort materials?</b>	<b>How are materials the same and different?</b>	<b>Which material would be best for curtains in a rocket?</b>	<b>Which material is the most stretchy?</b>	<b>End of Topic Test</b>	
<b>Mastery Keys</b>	<ul style="list-style-type: none"> <li>➤ Can label a picture/diagram of an object made from different materials.</li> <li>➤ Can describe the properties of materials.</li> <li>➤ Can sort materials using their properties.</li> <li>➤ Can test evidence to answer a question.</li> </ul>							



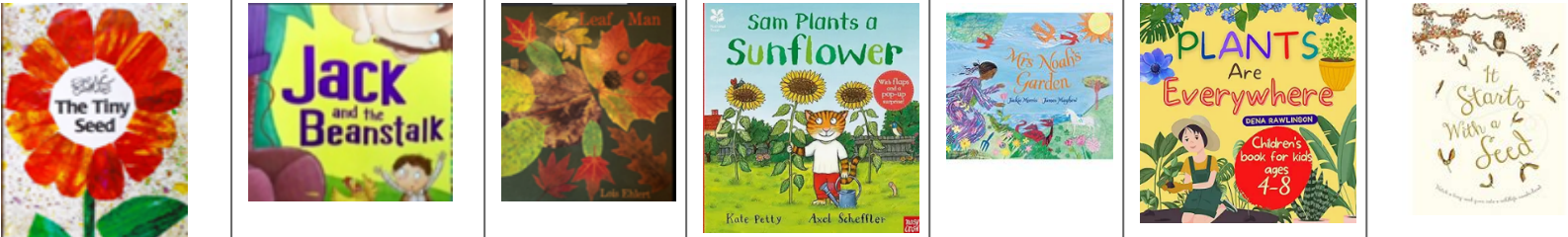
Enquiry Question	How are animals and humans the same and different?	
	Required Prior Knowledge	Knowledge to be taught
<b>Substantive Knowledge</b>	Identify why habitats are important to some animals. Understand hibernation and its purposes. Discuss why some animals are suited for different habitats. (Reception Animals) Name basic body parts. Describe people who are familiar to them. Know how to take care of themselves. Understand some of their senses. (Reception All about Me)	Name a range of animals which include animals from each of the vertebrate groups. Understand and categorise animals who are herbivore, carnivore and omnivore. Describe and compare animals based on observable characteristics. Know terms: reptile, amphibian, mammal. Name, draw and label parts of the human body and say what sense is associated. Name the 5 senses.
Disciplinary Knowledge		
Asking Questions	Ask questions to identify, sort and classify.	
Making Predictions	Make predictions using my senses.	
Setting up tests	Carry out tests to compare and classify.	
Observing & Measuring	Observe closely the structure of different minibeasts and the features of a human body. Closely observe bird characteristics.	
Recording Data	Use sorting rings and Venn diagrams to record my findings. Complete a simple table and record my findings using drawings, writing or symbols.	
Interpreting & Communicating results	Make comparisons between animals and give my reasons. Interpret my results and make simple conclusions.	
Evaluating	Evaluate test.	
Vocabulary	<b>hear, smell, touch, taste, see, beak, wing, paw, feather, claw, talons, head, neck, arms, elbows, legs, knees, face, ears, hair, mouth, teeth, abdomen, chest, shoulders, toes, herbivore, carnivore, omnivore, mammal, bird, fish, reptile, amphibian</b>	

<b>Recommended Reading</b>							
<b>Teaching Sequence</b>	<b>INTRODUCTION</b> <ul style="list-style-type: none"> <li>Begin with a question, demonstration or real-world example to spark curiosity and connect to the topic.</li> <li>Review or revisit related concepts.</li> </ul>		<b>INVESTIGATE AND RECORD</b> <ul style="list-style-type: none"> <li>Introduce new scientific ideas or concepts through hands-on activities, experiments or observations.</li> <li>Guide pupils to understand the scientific concepts behind their exploration.</li> </ul>			<b>ASSESSMENT</b> <ul style="list-style-type: none"> <li>Reflect on learning</li> <li>Demonstrate their understanding</li> </ul>	
<b>Learning Questions</b>	<b>What are our body parts called?</b>	<b>Which part of the body is associated with each sense?</b>	<b>How can we sort animals?</b>	<b>How are animals the same and different?</b>	<b>What can our bodies do?</b>	<b>What can we learn about birds?</b>	<b>End of Topic Test</b>
<b>Mastery Keys</b>	<ul style="list-style-type: none"> <li>➤ Can name a range of animals which includes animals from each of the vertebrate groups.</li> <li>➤ Can describe the key features of named animals.</li> <li>➤ Can label key features on a picture/diagram.</li> <li>➤ Can write descriptively about an animal.</li> <li>➤ Can write a 'What am I?' riddle about an animal.</li> <li>➤ Can describe what a range of animals eat.</li> <li>➤ Can compare and classify animals.</li> </ul>						



Enquiry Question	How can we identify different plants and trees?	
	Required Prior Knowledge	Knowledge to be taught
<b>Substantive Knowledge</b>	Identify foods that are grown and come from plants. Identify any of the things a plant needs to grow. (Reception Minibeasts)	Name common plants and describe the basic parts of flowering plants (deciduous/evergreen) Describe key features of trees and plants e.g. shapes of leaves, colour of flower, blossom. Use photos to talk about how plants change. Talk about plant lifecycles. Know basic parts of plant e.g. leaf, stem, petal, flower, stalk, bud, roots, fruit, bark, blossom.
Disciplinary Knowledge		
Asking Questions	Ask yes and no questions to begin to classify.	
Making Predictions	Make simple predictions.	
Setting up tests		
Observing & Measuring	Make careful observations.	
Recording Data	Carefully draw and label a plant.	
Interpreting & Communicating results	Keep a diary to explain how a seed grows.	
Evaluating		
<b>Vocabulary</b>	<b>plant, root, grow, branch, deciduous, evergreen, tree, flower, leaf, seed, stem, soil, trunk, to plant, to water, tree, daisy, birch, dandelion, fir tree, buttercup, wildplant, pine tree, fruit, flower, nettle, oak tree, holly, vegetable, weed, sycamore tree</b>	



<b>Recommended Reading</b>							
<b>Teaching Sequence</b>	<p><i>INTRODUCTION</i></p> <ul style="list-style-type: none"> <li>Begin with a question, demonstration or real-world example to spark curiosity and connect to the topic.</li> <li>Review or revisit related concepts.</li> </ul>	<p><i>INVESTIGATE AND RECORD</i></p> <ul style="list-style-type: none"> <li>Introduce new scientific ideas or concepts through hands-on activities, experiments or observations.</li> <li>Guide pupils to understand the scientific concepts behind their exploration.</li> </ul>					<p><i>ASSESSMENT</i></p> <ul style="list-style-type: none"> <li>Reflect on learning</li> <li>Demonstrate their understanding</li> </ul>
<b>Learning Questions</b>	<b>What are fruits and vegetables?</b>	<b>How do plants grow from seeds?</b>	<b>What are the parts of a plant called?</b>	<b>What are flowering plants?</b>	<b>What are leaves?</b>	<b>Why do leaves fall off trees?</b>	<b>End of Topic Test</b>
<b>Mastery Keys</b>	<ul style="list-style-type: none"> <li>➤ Can name trees and other plants they see regularly.</li> <li>➤ Can describe key features of the trees and plants e.g. shapes of leaves/colour of the flower/blossom.</li> <li>➤ Can point out trees which lost their leaves and those who keep them all year.</li> <li>➤ Can point to and name parts of a plant.</li> <li>➤ Can use simple charts to sort.</li> <li>➤ Can use photos to talk about how plants change.</li> </ul>						