

3. Progression + Coverage of Core Knowledge & Skills – Science

Subject Leader: **A.Jacques**

Year Group: **Year 2**

	Autumn 1 7 weeks	Autumn 2 7 weeks	Spring 1 5 weeks	Spring 2 6 weeks	Summer 1 6 weeks	Summer 2 7 weeks
Topic	Great People Who Changed the World		All Creatures Great and Small		Land Ahoy!	
Coverage Overview	Materials: - Properties - Suitability of materials - Changing materials investigation (bending, stretching, twisting, squashing).	Materials: - Inventor of waterproof material – <i>Charles Macintosh</i> (History ink) - Waterproof materials investigation (floor book)	Living things and their habitats: - Animal classification (Year 1 recap) - Suitability of habitats: animals - Living and non-living	Living things and their habitats: - Food chain Animals: - Offspring	Living things and their habitats: - Suitability of habitats: plants Plants: - Plant investigation (floor book – needs for survival)	Animals - Humans: - Diet, hygiene and exercise - Human needs for survival (link to plant investigation)
Core Knowledge	I know a variety of materials. I understand that materials have properties. I understand that materials are suitable for different objects and are used for different purposes. I understand what a 'prediction' is. I know how to carry out an investigation to find something out. I understand that not all materials can be changed in the same way.	I know who Charles Macintosh is and what he invented. I know how to carry out an investigation to find something out and I know what a 'fair test' is. I know that I can use my findings to explain what I have find out.	I understand that animals are classified into groups depending on what they look like and what they eat. I understand what a habitat is. I understand what a micro-habitat is. I understand that different animals are suited to certain habitats. I understand the difference between something that is living, dead or has never been alive.	I know what a food chain is. I understand how food chains work. I know what 'offspring' means. I know that animals and humans have offspring which grow into adults.	I understand what a habitat is. I understand that different plants are suited to certain habitats. I know what most plants need in order to survive. I know how to carry out an investigation to find something out and I understand how to make it a 'fair test'. I know that I can use my findings to explain what I have find out.	I know what humans need in order to survive. I understand why humans need a healthy diet, to be hygienic and to exercise.

Skills Development	<p>I can name a wide range of materials.</p> <p>I can classify objects depending on the material they are made from.</p> <p>I can identify the properties of a range of materials and use these to describe the material.</p> <p>I can identify which material it most suitable for an object and explain why (using my knowledge of properties of materials).</p> <p>I can give a prediction and a reason for my idea.</p> <p>I can carry out an investigation when modelled by a teacher.</p> <p>I can record my findings in a table with support from a teacher.</p> <p>I can say something I have found out in my investigation.</p>	<p>I can recall who Charles Macintosh is and explain what he invented.</p> <p>I can give a prediction, using what I already know and give a reason for my idea.</p> <p>I can carry out an investigation in a group.</p> <p>I can record my findings and share them with my class.</p> <p>I can explain what a 'fair test' is.</p> <p>I can explain what I have found out and whether my prediction was correct or incorrect.</p>	<p>I can classify animals depending on what they eat and explain how I have grouped them.</p> <p>I can classify animals depending on what they look like and explain how I have grouped them.</p> <p>I can explain what a habitat is.</p> <p>I can explain what a micro-habitat is.</p> <p>I can classify animals into different habitats.</p> <p>I can explain why different animals are suited to certain habitats.</p> <p>I can classify objects into living, dead and never been alive.</p>	<p>I can explain what a food chain is and what a food chain is showing (consumer, producer, predator).</p> <p>I can create a food chain to show my understanding.</p> <p>I can classify animals by matching animals to their correct offspring.</p>	<p>I can give a clear and precise definition of what a habitat is.</p> <p>I can classify plants into different habitats.</p> <p>I can explain why different plants are suited to certain habitats.</p> <p>I can explain what most plants need in order to survive.</p> <p>I can give a sensible prediction, using what I already know and give a clear reason for my idea.</p> <p>I can carry out a class investigation to observe how a plant is changing.</p> <p>I can comment on what I am observing and what this is telling me.</p> <p>I can record my findings and share them with my class.</p> <p>I can explain how we are carrying out a 'fair test'.</p> <p>I can clearly explain what we have found out and whether my prediction was correct or incorrect.</p>	<p>I can explain what humans need in order to survive.</p> <p>I can compare what a human needs for survival and what a plant needs for survival and say what is similar of different.</p> <p>I can explain what a 'healthy diet' means.</p> <p>I can explain ways in which we can be hygienic.</p> <p>I can explain why it is important to exercise.</p>
Critical Vocab	<p>materials: (plastic, wood, fabric, rock, metal, stone)</p> <p>properties: (hard/soft; stretchy/stiff; shiny/dull; rough/smooth; bendy/not bendy; waterproof/not waterproof; absorbent/not absorbent; opaque/transparent, solid, water resistant, durable, comfortable, rigid/flexible).</p> <p>suitable, suited, purposes, predict, investigate, record, findings, observe</p>	<p><i>Recap on Autumn 1 as necessary, plus:</i></p> <p>fair test, explain.</p>	<p>classify, group, sort, habitat, micro-habitat, suited, certain, living, dead, non-living, alive.</p> <p>animal classification:</p> <ul style="list-style-type: none"> - herbivore, omnivore, carnivore - reptile, amphibian, mammal, bird, fish. 	<p><i>Recap on Spring 1 as necessary, plus:</i></p> <p>food chain, consumer, producer, predator, dependant, survive, obtain, habitat, offspring.</p>	<p><i>Recap on Spring as necessary, plus:</i></p> <p>plants, habitat, micro-habitat, suited, survive/survival, investigate, record, findings, observe, fair test, explain, observe, identify, prediction, reason</p>	<p><i>Recap on Spring and Summer 1 as necessary, plus:</i></p> <p>humans, diet, healthy, exercise, hygiene, hygienic, compare, similarities, differences</p>

Enrichment Opps	<p>Identifying materials suited to different objects inside school and outside in school grounds.</p> <p>Changing materials investigation.</p>	<p>Waterproof investigation.</p> <p>'Did you know' fact page about the investigation.</p>	<p>Identifying animal habitats in school grounds.</p> <p>Using Geography knowledge of different areas of the world – match animal to different habitats.</p> <p>PowerPoint (linked to computing) to show animals suited to different habitats.</p> <p>Identify living, non-living, dead in school grounds.</p>	<p>Ribbon food chain.</p> <p>Offspring matching.</p>	<p>Identifying plant habitats in school grounds.</p> <p>Using Geography knowledge of different areas of the world – match plant to different habitats.</p>	<p>'Healthy Me' poster</p>
Assessing Impact	<p>Booklet to show suitability of materials.</p>	<p>Investigation on waterproof materials – write up/floor book Investigation.</p> <p>True or false quiz on Charles Macintosh.</p>	<p>Written piece on different habitats – explanation as to why animals are suited (Non-fiction book – link to English)</p> <p>Animals and habitats quiz.</p> <p>Sort images/words into living, dead and never been alive.</p>	<p>To create a food chain using images. Children to verbally explain what is happening in their food chain and what the different parts are called.</p> <p>Match animal to offspring.</p>	<p>Floor book – growth of a seed investigation.</p> <p>Individual discussion with children.</p>	<p>Poster – importance of healthy lifestyle.</p>