

**Medium Term Plan****Subject: Science****Term: AT1**

Topic from LTP: Materials and Animals

Lessons per week: 3

Group(s):

Fuller

In this topic students will learn about the different materials and their properties and be able to evaluate the suitability of materials for their uses. Students will show success by answering the big question ‘What is the best material to make a roof to protect against monsoon rain?’. Students will also understand the classification and interdependence of organisms. They will also be able to recognise habitats and explain how a habitat provides for the animals’ needs as well as adaptations and food webs. All of the practical tasks are constructed to encourage independence. The power point presentations and field work will link to communication. Group work is a vital part of this unit to share their ideas. Trips to the parks and different habitat will contribute to student wellbeing.

	Topic	Learning Intentions	Tasks	Assessed IIs
W1	Describing materials	<ul style="list-style-type: none"> <li>• Students will understand the difference between an object and the material it is made of.</li> <li>• They will be able to identify a variety of common materials and describe simple properties</li> <li>• They will understand why material are suitable for different uses</li> <li>• Students will understand the difference between man-made and natural materials</li> </ul>	<ul style="list-style-type: none"> <li>• Students will create their own word mat using key words and objects around the room</li> <li>• They will sort natural and manmade materials</li> <li>• They will undertake a treasure hunt to find man-made and natural materials</li> <li>• Students will begin to match why materials are suitable for their purpose</li> </ul>	<b>I can</b> <ul style="list-style-type: none"> <li>• Distinguish between an object and the material that it is made from</li> <li>• Identify and name a variety of everyday objects</li> <li>• Describe the simple physical properties of everyday materials</li> <li>• Compare and group together a variety of everyday objects based on their properties</li> <li>• Identify and compare the suitability of a variety of everyday materials for different uses</li> <li>• Sort man-made and natural materials</li> </ul>

W2/3	Material Properties investigations	<ul style="list-style-type: none"> <li>• Students will know how materials such as wood, ceramics, metals, glass and plastic are obtained</li> <li>• They will be able to list properties of these materials and suggest why they are a suitable material for their functions.</li> <li>• They will compare natural and manmade materials that can do the same job</li> </ul>	<ul style="list-style-type: none"> <li>• Students will investigate the properties of different materials, for example, they will test the absorbency of polymers in nappies, the strength of paper by building a bridge, the conductivity of metals strength of natural and man-made materials using bags</li> </ul>	<p><b>I can</b></p> <ul style="list-style-type: none"> <li>• Explain how materials such as wood, ceramics, metals, glass and plastic are obtained</li> <li>• List properties of these materials and suggest why they are a suitable material for their functions.</li> <li>• Compare natural and manmade materials that can do the same job</li> </ul>
W4	Monsoon project	<ul style="list-style-type: none"> <li>• Students will use their new knowledge to decide what the best material for a roof in a monsoon is</li> </ul>	<ul style="list-style-type: none"> <li>• Students will work together in small groups and present their ideas to answer the big question</li> </ul>	<p><b>I can</b></p> <ul style="list-style-type: none"> <li>• Explain why I chose a material for a particular job</li> </ul>
W5	Animal Classification	<ul style="list-style-type: none"> <li>• Students will be able to identify a variety of common animals and sort them into groups</li> <li>• They will be able to classify animals</li> </ul>	<ul style="list-style-type: none"> <li>• Students are to sort animal into groups and suggest why they did this.</li> <li>• Activities such as animal bingo, 20 questions will test understanding of new vocabulary.</li> <li>• They will start a project about an animal of their choice to add to as they progress.</li> <li>• Students will construct animal keys</li> <li>• They will visit to the garden to find and classify different animals including vertebrates and invertebrates</li> </ul>	<p><b>I can</b></p> <ul style="list-style-type: none"> <li>• Identify a number of animals including reptiles, mammals, amphibians, birds and fish</li> <li>• Describe how living things are classified due to</li> <li>• Explore and use classification keys to help group, identify and name animals</li> </ul>

W6	Animal Habitats	<ul style="list-style-type: none"> <li>• Students are to be able to identify different habitats.</li> <li>• They will understand how a habitat provides for the animals needs and know what animals need to survive</li> <li>• Students will develop this concept further and identify threats to the habitat – natural and manmade.</li> </ul>	<ul style="list-style-type: none"> <li>• They are to study different habitats such as Beddington Park, Waddon Pond and the school gardens</li> <li>• They are to research habitats and create their own habitat.</li> <li>• They are to build on materials knowledge and design an investigation to create a warm nest</li> <li>• Students are to create a power point outlining threats to the habitat</li> </ul>	<p><b>I can</b></p> <ul style="list-style-type: none"> <li>• Identify and name a variety of animals in their habitats</li> <li>• Explain that most living things live in habitats to which they are suited</li> <li>• Describe how different habitats provide for the basic needs of different animals</li> <li>• Describe how animals are adapted to survive</li> <li>• Recognise a threat to an environment</li> </ul>
W7	Animals and food	<ul style="list-style-type: none"> <li>• Students will recognise food sources and be able to suggest if an animal is a carnivore, omnivore or herbivore based on their food source.</li> <li>• They will be able to create a simple food chain</li> <li>• Some students will build on this and produce more complex food chains and webs,</li> </ul>	<ul style="list-style-type: none"> <li>• Students will match animals and their food sources using Clicker 7.</li> <li>• Students are to create food chains and webs.</li> <li>• Some students will identify producers and consumers in the food chain and be able to predict what will happen if the food chain is disrupted.</li> <li>• All students will add to their project and present their findings.</li> </ul>	<p><b>I can</b></p> <ul style="list-style-type: none"> <li>• Recognise food sources</li> <li>• Describe how animals get their food from animals and plants</li> <li>• Name common carnivores, herbivores and omnivores</li> <li>• Create a simple food chain and identify food sources</li> <li>• Identify producers and consumers</li> <li>• Create a simple food web</li> <li>• Suggest what happens when the food web is disrupted</li> <li>• Present finding about my animal</li> </ul>

		<p>identifying producers and consumers</p> <ul style="list-style-type: none"><li>• They will be able to predict what will happen if the food chain is disrupted</li></ul>		
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