



## Science Unit Map

Year Group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>R</b>	Talks about differences between materials and changes they notice.		Explore non-contact forces (gravity and magnetism) Talks about differences between materials and changes they notice.	how things grow.		Can talk about different life cycles
<b>R</b> <b>Consistent learning over the year</b>	Understand the effects of seasons on the natural world, discussing when and how things grow. Understand the need to respect and care for the natural environment and all living things. Name and order the seasons. Explain what their five senses are.					
<b>1</b>	Seasonal changes (main unit and revisit each season)  <b><u>To understand seasonal changes</u></b>  <b>changes across the four seasons</b>  <b>Observe and describe weather associated with the seasons and how day length varies.</b>		<b><u>To investigate everyday materials</u></b>  To know how to distinguish between an object and the material from which it is made  <b>identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</b>	<b><u>To understand animals and humans</u></b>  <b>identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</b>  <b>Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</b>	<b><u>To understand plants</u></b>  <b>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</b>  <b>Identify and describe the basic structure of a variety of common flowering plants (seeds, roots etc), including trees.</b>	

<p><b>1</b> Consistent learning over the year</p>	<p>Working Scientifically &amp; Seasonal Changes</p>					
<p><b>2</b></p>	<p><u>To investigate living things</u></p> <p>explore and compare the differences between things that are living, dead, and things that have never been alive</p> <p>identify that most living things live in habitats to which they are suited</p> <p>identify and name a variety of plants and animals in their habitats, including microhabitats</p> <p>Describe how animals obtain their food from plants and other animals</p>		<p><u>To investigate everyday materials</u></p> <p>Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p>Identify and compare and know the uses of a variety of everyday materials, including wood, metal, plastic, glass, brick/rock, and paper/cardboard</p>	<p><u>To understand animals and humans</u></p> <p>To know that animals, including humans, have offspring which grow into adults</p> <p>To know and describe the basic needs of animals, including humans, for survival (water, food and air)</p>	<p><u>To understand plants</u></p> <p>To observe and know how seeds and bulbs grow into mature plants</p> <p>To find out and describe how plants need water, light and suitable temperature to grow and stay healthy</p>	
<p><b>2</b> Consistent learning over the year</p>	<p>Working Scientifically</p>					

<p><b>3</b></p>	<p><u>Forces and magnets</u></p> <p>Compare how things move on different surfaces and contact/non-contact forces.</p> <p>Magnetism- materials, constitution.</p>	<p><u>Light</u></p> <p>Need light in order to see things (reflection) and that dark is absence of light. Shadows.</p> <p>Sun- dangers and protection.</p>	<p><u>Animals, including humans</u></p> <p>Nutrition- cannot make own food so need to eat.</p>	<p><u>Animals, including humans</u></p> <p>Identify and know that humans and some animals have skeletons and muscles for support, protection and movement.</p>	<p><u>Plants</u></p> <p>Functions of different parts of flowering plants.</p> <p>Requirements of plants for life and growth and how these vary from plant to plant.</p> <p>Water transport in plants.</p> <p>Plant life cycle, pollination.</p>	<p><u>Rocks</u></p> <p>Compare and group together different kinds of rocks and soils.</p> <p>Describe how fossils are formed.</p> <p><b>Trip to Kimmeridge</b></p>
<p><b>3</b> <b>Consistent learning over the year</b></p>	<p>Working Scientifically</p>					
<p><b>4</b></p>	<p><b>Sound</b></p> <p>How sounds are made.</p> <p>Vibrations from sounds travel through a medium to the ear.</p> <p>Pitch and volume.</p>	<p><b>Materials - States of Matter</b></p> <p>Compare and group materials together, according to whether they are solids, liquids or gases.</p> <p>Observe changes of state through heating or cooling.</p> <p>Evaporation and condensation in the water cycle.</p>	<p><b>Animals, including humans</b></p> <p>Simple functions of the basic parts of the digestive system in humans.</p> <p>Different types of teeth in humans and their functions.</p> <p>Construct and interpret a variety of food chains.</p>	<p><b>Electricity</b></p> <p>Electrical circuits</p> <p>Common electrical appliances.</p> <p>Construct a simple series electrical circuit, identifying/naming basic parts.</p> <p>Identify whether or not a lamp will light in a simple series circuit.</p> <p>Function of a switch.</p> <p>Conductors and insulators.</p>		<p><b>Living things</b></p> <p>Plants and animals in the local and wider environment.</p> <p>Classify plants and animals based on specific characteristics.</p> <p>Recognise changes in and dangers to habitats.</p>

<p><b>4</b> Consistent learning over the year</p>	<p>Working Scientifically</p>					
<p><b>5</b></p>	<p><b>All living things and their habitats</b> Life cycles of a mammal, an amphibian, an insect and a bird. Reproduction of a plant</p>	<p><b>Forces and Magnets</b> Gravity, air resistance, water resistance and friction. Mechanisms including levers, pulleys and gears.</p>	<p><b>Properties and changes of materials</b> Dissolving to form a solution, and recovering a substance from a solution. Separating mixtures, including through filtering, sieving and evaporating Dissolving, mixing and changes of state as reversible changes Some changes result in the formation of new materials and are usually irreversible.</p>	<p><b>Properties and changes of materials</b> Compare and group together everyday materials on the basis of their properties. Give reasons for the particular uses of everyday materials.</p>	<p><b>Earth and space</b> Movement of the Earth, and other planets. Movement of the Moon. Sun, Earth and Moon as approximately spherical bodies Day and night looking at the Earth's rotation.</p>	<p><b>Animals, including humans</b> Describe the changes as humans develop to old age</p>
<p><b>5</b> Consistent learning over the year</p>	<p>Working Scientifically</p>					
<p><b>6</b></p>	<p><u>Living things and their habitats</u>  describe how living things are classified into broad groups  Give reasons for classifying plants and animals based</p>	<p><u>Animals, including humans</u>  identify and name the main parts of the human circulatory system  recognise the impact of diet, exercise,</p>	<p><u>Evolution and inheritance</u>  recognise that living things have changed over time  Identify how animals and plants are adapted to suit their</p>		<p><u>Light</u>  recognise that light appears to travel in straight lines  explain that we see things because light travels from light</p>	<p><u>Electricity</u>  associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit</p>

	on specific characteristics.	drugs and lifestyle on the way their bodies function	environment in different ways and that adaptation may lead to evolution.		sources to our eyes or from light sources to objects and then to our eyes	use recognised symbols when representing a simple circuit in a diagram.
<b>6 Consistent learning over the year</b>	<b>Working Scientifically</b>					