



*A united, caring community of learners*









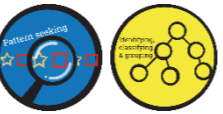





# Science

**Plymouth Science**

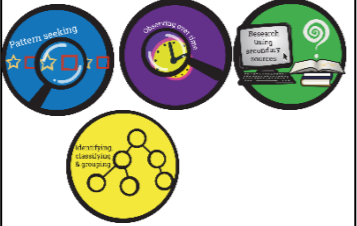
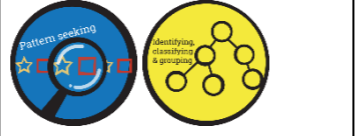





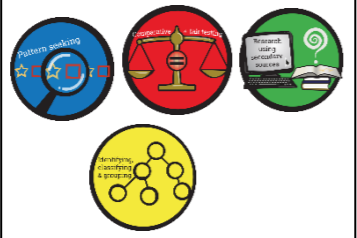


"In Science, we can inspire something...every discovery, however small is a permanent gain"

Pierre Curie














## Science Curriculum Map: Autumn Term

Term	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Nursery works in two cycles and uses different core stories to teach each area.							
<b>Autumn 1</b>	<p><b>Settling in time.</b> <b>Focus on routines and rules.</b></p>	<p><b>All about me</b> Knowledge &amp; Understanding Focus: Identify the basic features on their faces. Name basic body parts.</p> 	<p><b>Animals including humans:</b> Knowledge &amp; Understanding Focus: What are the names for all the parts of our body?</p> 	<p><b>Living things and their habitats</b> Knowledge &amp; Understanding Focus: What is a habitat and why is it important to plants and animals?</p> 	<p><b>Forces &amp; Magnets</b> Knowledge &amp; Understanding Focus: Which materials are magnetic and why?</p> 	<p><b>Materials – States of matter:</b> Knowledge &amp; Understanding Focus: How can water change?</p> 	<p><b>Earth and Space</b> Knowledge &amp; Understanding Focus: Sun, Earth &amp; Moon: What is moving and how do we know?</p> 	<p><b>Light</b> Knowledge &amp; Understanding Focus: Why do shadows have the same shape as the objects that cast them?</p> 
<b>Autumn 2</b>	<p><b>Seasonal changes</b> Knowledge &amp; Understanding Focus: Learn about the changes that happen during Autumn. <b>Light and Dark:</b> Knowledge &amp; Understanding Focus: Talk about the differences between day and night.</p>	<p><b>Seasonal changes</b> Knowledge &amp; Understanding Focus: Observe what happens to the environment during Autumn.</p> <p><b>Celebrations:</b> Knowledge &amp; Understanding Focus: Observe changes to the world around them and discuss changes of state.</p> 	<p><b>Seasonal changes</b> Knowledge &amp; Understanding Focus: What is it like in Autumn?</p> <p><b>Animals including humans</b> Knowledge &amp; Understanding Focus: What is a carnivore, herbivore and omnivore?</p> 	<p><b>Materials</b> Knowledge &amp; Understanding Focus: Which materials are best to create my model?</p> 	<p><b>Rocks</b> Knowledge &amp; Understanding Focus: Are all rocks</p> 	<p><b>Sound</b> Knowledge &amp; Understanding Focus: How can we make different sounds?</p> 	<p><b>Forces</b> Knowledge &amp; Understanding Focus: How and why do objects move?</p> 	<p><b>Evolution and Inheritance</b> Knowledge &amp; Understanding Focus: What is evolution, how does it happen and how do scientists know?</p> 

## Science Curriculum Map: Spring Term

<p><b>Spring 1</b></p>	<p><b>Seasonal changes</b>  <u>Knowledge &amp; Understanding Focus:</u>                      Learn about the changes that happen during Winter.</p> <p><b>Materials</b>  <u>Knowledge &amp; Understanding Focus:</u>                      Changing states of matter - snow and ice. Explore melting and freezing.</p>	<p><b>Seasonal changes</b>  <u>Knowledge &amp; Understanding Focus:</u>                      Observe what happens to the environment during Winter.</p> <p><b>Animals</b>  <u>Knowledge &amp; Understanding Focus:</u>                      Observe and find the similarities and differences of some animals. Understand that not all animals live in the same environments.</p> 	<p><b>Seasonal changes</b>  <u>Knowledge &amp; Understanding Focus:</u>                      What is it like in Winter?</p> <p><b>Animals including humans</b>  <u>Knowledge &amp; Understanding Focus:</u>                      Why are animals different?</p> 	<p><b>Animals including humans</b>  <u>Knowledge &amp; Understanding Focus:</u>                      Why is exercise and eating right important?</p> 	<p><b>Animals, including humans</b>  <u>Knowledge &amp; Understanding Focus:</u>                      Why are skeletons important?</p> 	<p><b>Animals including humans</b>  <u>Knowledge &amp; Understanding Focus:</u>                      Why are teeth important?                      The digestive system.</p> 	<p><b>Animals including humans</b>  <u>Knowledge &amp; Understanding Focus:</u>                      How do humans change across their lifetime?</p> 	<p><b>Animals including humans</b>  <u>Knowledge &amp; Understanding Focus:</u>                      Why does my heart beat?                      How do our choices affect how our bodies work?</p> 
<p><b>Spring 2</b></p>	<p><b>Seasonal changes</b>  <u>Knowledge &amp; Understanding Focus:</u>                      Learn about the changes that happen during Spring.</p> <p><b>Materials</b>  <u>Knowledge &amp; Understanding Focus:</u>                      Explore collections of materials with similar or different properties. Talk about the differences they notice – linked to The Three Little Pigs and Three Billy Goats Gruff.</p>	<p><b>Under the sea</b>  <u>Knowledge &amp; Understanding Focus:</u>                      Look at different habits of animals that live under the sea. Learn the features of different underwater animals.</p> 	<p><b>Plants</b>  <u>Knowledge &amp; Understanding Focus:</u>                      What are the names of different plants?</p> 				<p><b>Properties &amp; Changes of materials</b>  <u>Knowledge &amp; Understanding Focus:</u>                      How can we change materials?</p> 	

## Science Curriculum Map: Summer Term

<p><b>Summer 1</b></p>	<p><b><u>Plants and the environment:</u></b>  <u>Knowledge &amp; Understanding Focus:</u>                      Plant seeds and care for living plants. Learn what a plant needs to grow. Learn to respect and care for the environment.</p>	<p><b><u>Seasonal changes</u></b>  <u>Knowledge &amp; Understanding Focus:</u>                      Observe what happens to the environment during Spring.</p> <p><b><u>Everyday Materials</u></b>  <u>Knowledge &amp; Understanding Focus:</u>                      Notice simple properties of materials. I notice the difference in liquids and solids.</p> 	<p><b><u>Seasonal changes</u></b>  <u>Knowledge &amp; Understanding Focus:</u>                      What is it like in Spring?</p> <p><b><u>Everyday Materials</u></b>  <u>Knowledge &amp; Understanding Focus:</u>                      What are the properties of different materials?</p> 	<p><b><u>Plants</u></b>  <u>Knowledge &amp; Understanding Focus:</u>                      What is needed to make healthy plant grow?</p> 	<p><b><u>Plants</u></b>  <u>Knowledge &amp; Understanding Focus:</u>                      Why are plants important for life and growth?</p> 	<p><b><u>Electricity</u></b>  <u>Knowledge &amp; Understanding Focus:</u>                      What can we do with electricity?</p> 	<p><b><u>Properties &amp; changes of materials</u></b>  <u>Knowledge &amp; Understanding Focus:</u>                      How can we change materials?</p> 	<p><b><u>Electricity</u></b>  <u>Knowledge &amp; Understanding Focus:</u>                      Can we vary the effects of electricity?</p> 
<p><b>Summer 2</b></p>	<p><b><u>Seasonal changes</u></b>  <u>Knowledge &amp; Understanding Focus:</u>                      Learn about the changes that happen during Summer.</p> <p><b><u>Forces and Magnets</u></b>  <u>Knowledge &amp; Understanding Focus:</u>                      Forces – Floating and sinking with boats and items in the Water tray. Explore magnets and sorting objects that are magnetic/non-magnetic.</p>	<p><b><u>Seasonal changes</u></b>  <u>Knowledge &amp; Understanding Focus:</u>                      Observe what happens to the environment during Summer.</p> <p><b><u>Keeping Healthy</u></b>  <u>Knowledge &amp; Understanding Focus:</u>                      Learn how to keep healthy and understand why it is important to be healthy.</p> 	<p><b><u>Seasonal changes</u></b>  <u>Knowledge &amp; Understanding Focus:</u>                      What is it like in Summer?</p> <p><b><u>Everyday Materials</u></b>  <u>Knowledge &amp; Understanding Focus:</u>                      What are the properties of different materials? Continued from Summer 1.</p> 	<p><b><u>Plastic Pollution</u></b>  <u>Knowledge &amp; Understanding Focus:</u>                      How can we protect our animals and habitats from plastic pollution?</p> 	<p><b><u>Light</u></b>  <u>Knowledge &amp; Understanding Focus:</u>                      How are shadows made?</p> 	<p><b><u>Living things and their habitats</u></b>  <u>Knowledge &amp; Understanding Focus:</u>                      Are living things in danger?</p> 	<p><b><u>Living things and their habitats</u></b>  <u>Knowledge &amp; Understanding Focus:</u>                      Do all plants and animals reproduce in the same way?</p> 	<p><b><u>Living things and their habitats</u></b>  <u>Knowledge &amp; Understanding Focus:</u>                      In what ways can we sort living things?</p> 