

## St. Philip Neri with St. Bede's Science Overview 2021 – 2022

	Advent 1	Advent 2	Lent 1	Lent 2	Pentecost 1	Pentecost 2
Year 1	<p><b>Animals Inc Humans</b> Name and identify basic body parts. Senses.</p>	<p><b>Everyday Materials</b> Distinguish between object and material. Name everyday materials.</p>	<p><b>Animals Inc Humans</b> Name and identify animals. Type of vertebrates. Carnivore, omnivore, herbivore.</p>	<p><b>Everyday materials</b> Simple physical properties.</p>	<p><b>Seasonal Changes</b> Observe change across the four seasons. Describe weather associated with seasons. Day length.</p>	<p><b>Plants</b> Identify and name common plants. Basic structure of plants. Deciduous/evergreen.</p>
Year 2	<p><b>Living Things &amp; Their Habitats</b> Living, dead, never been alive. Life cycles. Minibeasts and their habitats. Know that habitats provide basic needs.</p>	<p><b>Animals Inc. Humans</b> Macrohabitats and animal/plant adaptations. Healthy eating. Basic needs. Exercise and hygiene.</p>	<p><b>Materials</b> Identify and compare suitability of everyday materials. How shapes of solid objects can be changed: squashing, bend, twist, stretch.</p>		<p><b>Living Things &amp; Their Habitats</b> Simple food chains, focusing on plant/animal food sources.</p>	<p><b>Plants</b> How seeds/bulbs mature into plants. Describe what plants need to stay healthy.</p>
Year 3	<p><b>Plants – water transportation &amp; light</b> Functions of different parts of a plant. Requirements of plants for life and how they vary.</p>	<p><b>Rocks &amp; Soils</b> Compare and group different rocks based on appearance and physical properties. How fossils are formed Soil is made from rocks.</p>	<p><b>Forces &amp; Magnets</b> Compare how things move on different surfaces. Know that some forces need contact, others don't. Magnets attract/repel: poles.</p>	<p><b>Animals Inc Humans</b> Right types and amounts of nutrition: know that we cannot make nutrition. Skeletons, muscles.</p>	<p><b>Rocks &amp; Soils (+ Water Cycle: Outstanding objectives from Advent)</b> Basics of water cycle. Soil sampling along a river.</p>	<p><b>Light</b> Dark is absence of light. Light is needed to see. Reflection. Sunlight = dangerous to look at directly. How shadows are formed and change.</p>

Year 4	<p><i>Living Things &amp; Their Habitats</i> Grouping. Classification keys for identification. Environments can change.</p>	<p><i>Animals Inc Humans</i> Digestive system. Teeth. Food chains - predator, producer, prey.</p>	<p><i>States of Matter</i> Solid, liquid, gas. Know that materials change state when heated/cooled. Water Cycle: condensation/evaporation, rate of evaporation related to temperature.</p>	<p><i>Sound</i> How sound is made: vibrations. How sound travels through medium to ear. Find patterns in pitch and feature of object. Patterns in volume and strength of vibrations Know that sounds gets fainter further from source.</p>		<p><i>Electricity</i> Identify common appliances that use electricity. Construct simple series circuits. Will the lamp light up? - full loop circuits. Switches open/close circuit. Conductors, insulators.</p>
Year 5	<p><i>Micro-Organisms</i> Know what micro-organisms. Know that not all micro-organisms are harmful. Louis Pasteur.</p>	<p><i>Earth &amp; Space</i> Movement of Earth and planets around Sun. Movement of Moon relative to Earth. Know that the Earth/Moon/Sun spherical bodies. Earth's rotation to explain day length and movement across the sky.</p>	<p><i>Properties of Materials</i> Group materials based on properties. Dissolving (recovery and reversibility). How to separate mixtures. Some changes result in a new material.</p>	<p><i>Animals Inc. Humans</i> Development and changes to humans from baby to elderly.</p>	<p><i>Living Things and their Habitats</i> Differences in life cycle between insect, bird, mammal, amphibian. Reproduction.</p>	<p><i>Forces</i> Gravity. Effect of water / air resistance. Friction- act between moving surfaces.</p>
Year 6	<p><i>Animals Inc Humans</i> Circulatory system. Impact of diet/exercise/drugs. Transportation of water and nutrients around the human body.</p>		<p><i>Living Things and their Habitats</i> Classification inc. microorganisms. Reasons for classification based on specific characteristics.</p>	<p><i>Evolution and Inheritance</i> Living things have changed over time. Fossils provide evidence. Living things produce offspring but not identical to parents. How plants animals adapted to suit their environment – adaptations may lead to evolution.</p>	<p><i>Light</i> Know that light travels in straight lines. Objects are seen because they reflect light to our eyes. Shadows same shape as objects that cast them.</p>	<p><i>Electricity</i> Associate brightness/volume with voltage. Give reasons for variation in common components. Use recognised symbols when drawing circuits.</p>