



LITERATURE-LED  
CURRICULUM

# SCIENCE

# Curriculum Intent

Spa's Science curriculum aims to equip pupils so that they will:



develop scientific knowledge and conceptual understanding through the specific disciplines of **biology, chemistry** and **physics**



develop understanding of the **nature, processes** and **methods** of science through different types of **science enquiries** that help them to answer scientific questions about the world around them



are equipped with the scientific knowledge required to understand the uses and **implications of science, today and for the future**

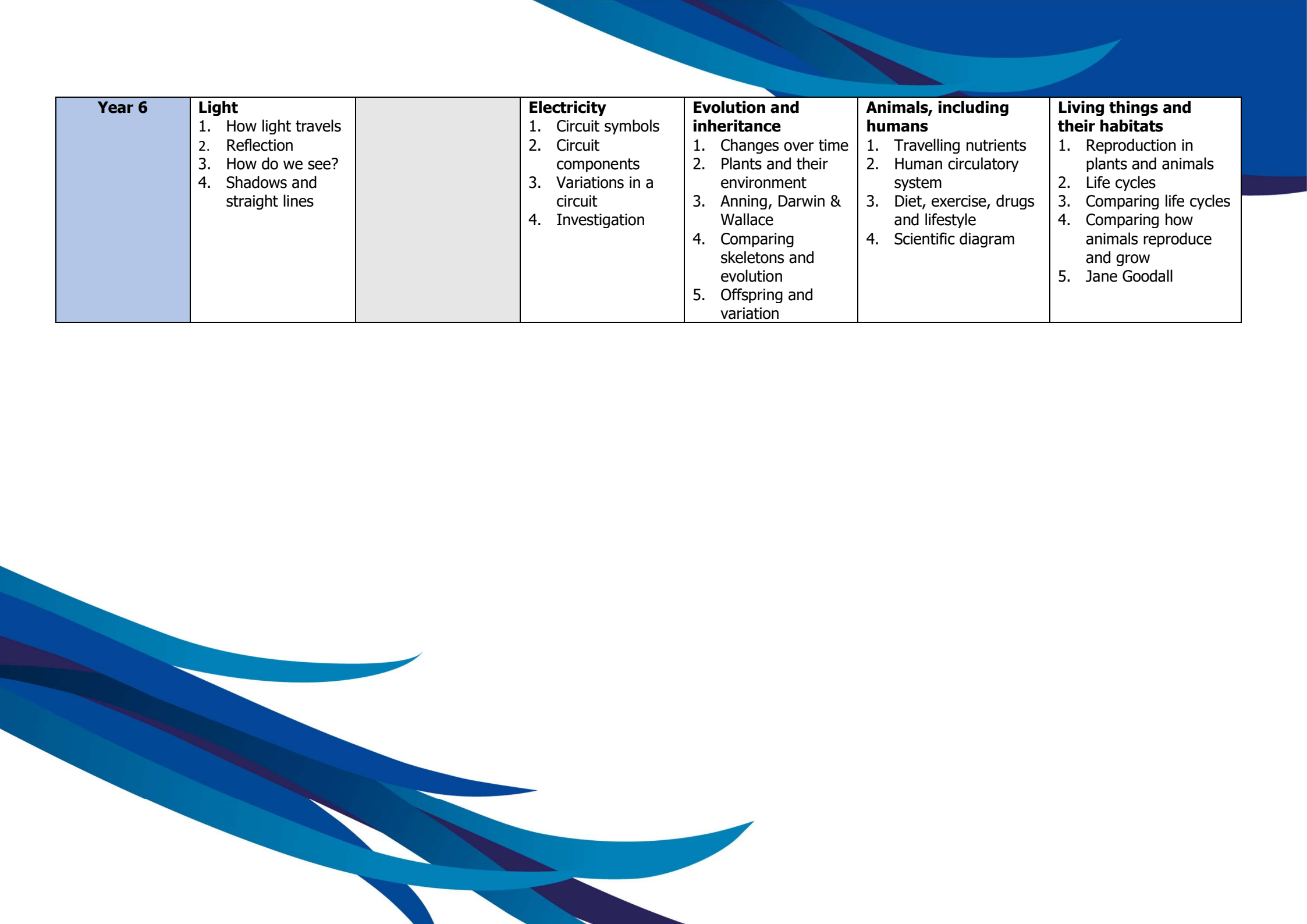
# National Curriculum Coverage and Sequencing

The National Curriculum breaks down which aspects of science are to be taught in each year group.

Our curriculum sequencing matches these and relevant objectives.

enquiry	Observation	measure	classify	predict	conclude
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	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Year 3</b>	<b>Light</b> <ol style="list-style-type: none"> <li>1. Shadows</li> <li>2. Reflection</li> <li>3. Dangers of the sun</li> <li>4. Shadow patterns</li> </ol>		<b>Forces and magnets</b> <ol style="list-style-type: none"> <li>1. Magnets and poles</li> <li>2. Attract or repel</li> <li>3. Friction</li> <li>4. Comparative test</li> </ol>	<b>Rocks</b> <ol style="list-style-type: none"> <li>1. What are rocks (including grouping)?</li> <li>2. Soil</li> <li>3. How is soil formed?</li> <li>4. Fossils</li> </ol>	<b>Animals, including humans</b> <ol style="list-style-type: none"> <li>1. Skeletons and muscles</li> <li>2. Grouping animals</li> <li>3. Diets</li> <li>4. Nutrition</li> <li>5. Scientific diagram</li> </ol>	<b>Plants</b> <ol style="list-style-type: none"> <li>1. What do plants need to live?</li> <li>2. Parts of a plant</li> <li>3. Different plants, different needs</li> <li>4. How is water transported?</li> <li>5. Life cycle of plants</li> </ol>
<b>Year 4</b>	<b>Sound</b> <ol style="list-style-type: none"> <li>1. Vibrations</li> <li>2. Pitch and sound</li> <li>3. Distance</li> <li>4. Volume and vibrations</li> </ol>		<b>Electricity</b> <ol style="list-style-type: none"> <li>1. Conductors and insulators</li> <li>2. Circuits</li> <li>3. Will the circuit work?</li> <li>4. Comparative test</li> </ol>	<b>States of matter</b> <ol style="list-style-type: none"> <li>1. Heating and cooling</li> <li>2. Solids, liquids and gases</li> <li>3. Grouping materials (state)</li> <li>4. Evaporation and condensation</li> </ol>	<b>Animals, including humans</b> <ol style="list-style-type: none"> <li>1. Digestive system</li> <li>2. Teeth</li> <li>3. Food chains</li> <li>4. What damages teeth?</li> <li>5. Scientific diagram</li> </ol>	<b>Living things and their habitats</b> <ol style="list-style-type: none"> <li>1. Classification</li> <li>2. Grouping animals and plants</li> <li>3. Habitat changes</li> <li>4. Dangers in the environment</li> </ol>
<b>Year 5</b>	<b>Earth and space</b> <ol style="list-style-type: none"> <li>1. Inform: spherical bodies &amp; the solar system</li> <li>2. Orbits and rotation: Earth</li> <li>3. Orbits and rotation: The Sun</li> <li>4. Theories of the solar system</li> </ol>		<b>Forces</b> <ol style="list-style-type: none"> <li>1. Gravity</li> <li>2. Resistance-Air</li> <li>3. Resistance - Water</li> <li>4. Levers, pulleys and gears</li> <li>5. Comparative test</li> </ol>	<b>Properties and changes of materials</b> <ol style="list-style-type: none"> <li>1. Reversible and irreversible</li> <li>2. Separating mixtures</li> <li>3. Uses of materials</li> <li>4. Grouping materials (properties)</li> </ol>	<b>Animals, including humans</b> <ol style="list-style-type: none"> <li>1. Changes to humans</li> <li>2. Changes to animals and plants</li> <li>3. Gestation</li> <li>4. Scientific diagram</li> </ol>	<b>Living things and their habitats</b> <ol style="list-style-type: none"> <li>1. Classification of living things</li> <li>2. Similarities and differences</li> <li>3. Classification characteristics</li> <li>4. Carl Linneaus</li> </ol>



<b>Year 6</b>	<b>Light</b> <ol style="list-style-type: none"> <li>1. How light travels</li> <li>2. Reflection</li> <li>3. How do we see?</li> <li>4. Shadows and straight lines</li> </ol>		<b>Electricity</b> <ol style="list-style-type: none"> <li>1. Circuit symbols</li> <li>2. Circuit components</li> <li>3. Variations in a circuit</li> <li>4. Investigation</li> </ol>	<b>Evolution and inheritance</b> <ol style="list-style-type: none"> <li>1. Changes over time</li> <li>2. Plants and their environment</li> <li>3. Anning, Darwin &amp; Wallace</li> <li>4. Comparing skeletons and evolution</li> <li>5. Offspring and variation</li> </ol>	<b>Animals, including humans</b> <ol style="list-style-type: none"> <li>1. Travelling nutrients</li> <li>2. Human circulatory system</li> <li>3. Diet, exercise, drugs and lifestyle</li> <li>4. Scientific diagram</li> </ol>	<b>Living things and their habitats</b> <ol style="list-style-type: none"> <li>1. Reproduction in plants and animals</li> <li>2. Life cycles</li> <li>3. Comparing life cycles</li> <li>4. Comparing how animals reproduce and grow</li> <li>5. Jane Goodall</li> </ol>
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