

# Hollywell's Science Curriculum Roadmap



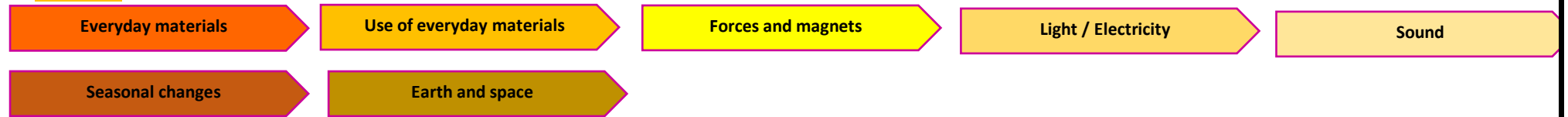
## Biology

Animals including humans		Plants		Living things and their habitat		Evolution and inheritance	
YR	Y1	Y2	Y3	Y4	Y5	Y6	Y6
Exploring the natural world. Observations and drawings of animals and plants.	<p>Basic parts of the human body/ senses.</p> <p>Identifying and classifying types of animals/ plants.</p> <p>Basic structure of a flowering plant.</p>	<p>Differences between living, dead, never been alive. Exploring plants and animals in their habitats.</p> <p>Interdependence, food chains.</p> <p>Basic needs of animals and plants.</p>	<p>Nutritional needs of animals.</p> <p>Support, protection and movement: investigating skeletons and muscles.</p> <p>Functions of parts of flowering plants/ stages of the life cycle.</p>	<p>Teeth and the digestive system.</p> <p>Using classification keys to group living things in the local and wider environment.</p> <p>Food chains.</p> <p>Exploring how the environment can change/dangers to living things.</p>	<p>Exploring differences in life cycles.</p> <p>Describing changes as humans develop to old age.</p> <p>Exploring non-flowering plants and animal reproduction/ mammal, amphibian, insect and bird.</p>	<p>Main parts and functions of the human circulatory system.</p> <p>Impact of diet, exercise and drug on bodily functions.</p> <p>Absorption of water and nutrients in animals.</p> <p>Classification of micro-organisms, plants and animals.</p> <p>Exploring how plants and animals have adapted to suit their environment.</p>	

## Chemistry

States of matter		Properties and changes of materials		Rocks and fossils		
YR	Y1	Y2	Y3	Y4	Y5	Y6
Understanding changes in the natural world including states of matter.	<p>Identifying everyday materials and grouping them according to their properties.</p>	<p>Comparing the suitability of everyday materials for particular uses.</p>	<p>Identifying and grouping different types of rocks. To describe how fossils and different types of soils are formed from organic matter.</p>	<p>Identifying the three states of matter and explore how heating or cooling can cause a material to change state. To describe the water cycle.</p>	<p>Testing materials for solubility, conductivity and response to magnets.</p> <p>Separating mixtures.</p> <p>Identifying reversible/ irreversible changes.</p>	<p>Exploring how fossils can provide information about living things which inhabited the Earth millions of years ago.</p>

## Physics



YR	Y1	Y2	Y3	Y4	Y5	Y6
<p>Describing changes in the seasons.</p> <p>Identifying similarities and differences in contrasting environments.</p>	<p>Naming the four seasons.</p> <p>Describing weather associated with the four seasons including variation in day length.</p>	<p>Investigating how squashing, bending, twisting and stretching can change the shape of some solid objects.</p>	<p>Identifying light sources and reflectors.</p> <p>Understanding that light from the sun can be dangerous.</p> <p>Investigating how shadows are formed.</p> <p>Comparing how objects move on different surfaces.</p> <p>Investigating how magnets work and identifying some magnetic materials.</p>	<p>Investigating that sounds are made by vibrations and travel through a medium to the ear.</p> <p>Anatomy of the ear.</p> <p>Exploring quality of sound such as pitch and volume, identifying what might affect those.</p> <p>Identifying appliances which run on electricity.</p> <p>Constructing and naming the components in a series circuit.</p> <p>Recognising some common conductors and insulators.</p>	<p>Investigating the effects of gravity, air resistance, water resistance and friction.</p> <p>Finding out how levers, pulleys and gears allow a small force to have a greater effect.</p> <p>Describing the movement of the Earth and other planets relative to the sun. Describing the movement of the Moon relative to the Earth.</p> <p>Describing the phases of the Moon. Explaining why night and day/ the seasons occur.</p>	<p>Using recognised symbols when representing a circuit in a diagram.</p> <p>Investigating how the number and voltage of cells in a circuit affects the components.</p> <p>Investigate ways of showing that light travels in a straight line.</p> <p>Anatomy of the eye.</p> <p>Investigating changes in the shape of shadows.</p>