



# Christ Church Charnock Richard C of E Primary School

## Subject Overview 2020-2021: Science

Biology	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
<b>ANIMALS INCLUDING HUMANS</b>	<ul style="list-style-type: none"> <li>name and locate parts of the human body, including those related to the senses</li> <li>describe and compare the observable features of animals from a range of groups</li> </ul>	<ul style="list-style-type: none"> <li>describe the importance of exercise, a balanced diet and hygiene for humans</li> <li>describe the basic needs of animals for survival and the main changes as young animals, including humans, grow into adults</li> </ul>	<ul style="list-style-type: none"> <li>name and describe the functions of the main parts of the musculoskeletal system</li> </ul>	<ul style="list-style-type: none"> <li>name and describe the functions of the main parts of the digestive system.</li> </ul>	<ul style="list-style-type: none"> <li>describe and compare different reproductive processes and life cycles in animals</li> </ul>	<ul style="list-style-type: none"> <li>Name and describe the functions of the main parts of the circulatory system.</li> <li>describe the effects of diet, exercise, drugs and lifestyle on how the body functions</li> </ul>
<b>LIVING THINGS &amp; THEIR HABITATS</b>	<ul style="list-style-type: none"> <li>group animals according to what they eat</li> <li>describe seasonal changes</li> </ul>	<ul style="list-style-type: none"> <li>identify whether things are alive, dead or have never lived</li> <li>describe how animals get their food from other animals and/or from plants, and use simple food chains to describe these relationships</li> <li>name different plants and animals and describe how they are suited to different habitats</li> </ul>		<ul style="list-style-type: none"> <li>construct and interpret food chains</li> <li>explain how environmental changes may have an impact on living things</li> </ul>		<ul style="list-style-type: none"> <li>use the observable features of plants, animals and micro-organisms to group, classify and identify them into broad groups, using keys or other methods</li> </ul>
<b>PLANTS</b>	<ul style="list-style-type: none"> <li>identify and name a variety of common wild and garden plants</li> </ul>	<ul style="list-style-type: none"> <li>describe the basic needs of plants for survival and the impact of changing these and the main changes as seeds and bulbs grow into mature plants</li> </ul>	<ul style="list-style-type: none"> <li>name, locate and describe the functions of the main parts of plants including those involved in transporting water and nutrients</li> <li>describe the requirements of plants for life and growth</li> </ul>		<ul style="list-style-type: none"> <li>name, locate and describe the functions of the main parts of plants, including those involved in reproduction</li> </ul>	
<b>EVOLUTION &amp; INHERITANCE</b>						<ul style="list-style-type: none"> <li>use the basic ideas of inheritance, variation and adaptation to describe how living things have changed over time and evolved and provide evidence for evolution</li> </ul>

Physics	YEAR 3	YEAR 4	YEAR 5	YEAR 6
---------	--------	--------	--------	--------



# Christ Church Charnock Richard C of E Primary School

## Subject Overview 2020-2021: Science

<b>FORCES</b>	<ul style="list-style-type: none"> <li>describe the effects of simple forces that act at a distance (magnetic forces, including those between like and unlike magnetic poles)</li> </ul>		<ul style="list-style-type: none"> <li>describe the effects of simple forces that involve contact (air and water resistance, friction)</li> <li>identify simple mechanisms, including levers, gears and pulleys, that increase the effect of a force</li> </ul>	
<b>LIGHT</b>	<ul style="list-style-type: none"> <li>describe the formation and size of shadows</li> </ul>		<ul style="list-style-type: none"> <li>use the idea that light from light sources, or reflected light, travels in straight lines and enters our eyes to explain how we see objects</li> <li>describe the formation, shape and size of shadows.</li> </ul>	
<b>SOUND</b>		<ul style="list-style-type: none"> <li>use the idea that sounds are associated with vibrations, and that they require a medium to travel through, to explain how sounds are made and heard</li> <li>describe the relationship between the pitch of a sound and the features of its source; and between the volume of a sound, the strength of the vibrations and the distance from its source</li> </ul>		
<b>SPACE</b>			<ul style="list-style-type: none"> <li>describe the shapes and relative movements of the Sun, Moon, Earth and other planets in the solar system; and explain the apparent movement of the sun across the sky in terms of the Earth's rotation and that this results in day and night</li> <li>describe the effects of forces including gravity</li> </ul>	
<b>ELECTRICITY</b>		<ul style="list-style-type: none"> <li>use simple apparatus to construct and control a series circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</li> </ul>		<ul style="list-style-type: none"> <li>describe how a series circuit may be affected when changes are made to it; and use recognised symbols to represent simple series circuit diagrams</li> </ul>

Chemistry	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
-----------	--------	--------	--------	--------	--------	--------



# Christ Church Charnock Richard C of E Primary School

## Subject Overview 2020-2021: Science

<b>MATERIALS</b>	<ul style="list-style-type: none"> <li>distinguish objects from materials, describe their properties, identify and group everyday materials</li> </ul>	<ul style="list-style-type: none"> <li>compare the suitability of everyday materials for different uses.</li> </ul>	<ul style="list-style-type: none"> <li>group and identify materials, including rocks, in different ways according to their properties, based on first-hand observation</li> <li>describe how fossils are formed</li> </ul>	<ul style="list-style-type: none"> <li>describe the characteristics of different states of matter and group materials on this basis</li> <li>describe how materials change state at different temperatures, using this to explain everyday phenomena, including the water cycle</li> </ul>	<ul style="list-style-type: none"> <li>group and identify materials in different ways according to their properties, based on first-hand observation; and justify the use of different everyday materials for different uses, based on their properties based on first-hand observation</li> <li>identify and describe what happens when dissolving occurs in everyday situations; and describe how to separate mixtures and solutions into their components</li> <li>identify, with reasons, whether changes in materials are reversible or not</li> </ul>	