



Oxford Gardens Primary School

Year 4 & 5 Cycle 1 IPC Curriculum Map

	<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>	<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>
IPC Science History Geography Art/D&T	Space Explorers Focusing on: Earth and space, light (Y6 objectives) <ul style="list-style-type: none"> ♣ describe the movement of the Earth, and other planets, relative to the Sun in the solar system ♣ describe the movement of the Moon relative to the Earth ♣ describe the Sun, Earth and Moon as approximately spherical bodies ♣ use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky. ♣ recognise that light appears to travel in straight lines ♣ use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye ♣ explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes ♣ use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. ♣ identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich 	Fascinating Forces and Full Power Focusing on Forces Properties and changes of materials, electricity (Y6 objectives) <ul style="list-style-type: none"> ♣ explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object ♣ identify the effects of air resistance, water resistance and friction, that act between moving surfaces ♣ recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. ♣ compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets ♣ know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution ♣ use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating ♣ give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic ♣ demonstrate that dissolving, mixing and changes of state are reversible changes ♣ explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda. ♣ associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit ♣ compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches ♣ use recognised symbols when representing a simple circuit in a diagram. <li style="text-align: center;">D&T – ♣ understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] ♣ apply their understanding of how to strengthen, stiffen and reinforce more complex structures 	The Great, The Bold and The Brave Focusing on: The Roman Empire and its impact on Britain, Ancient Greece <ul style="list-style-type: none"> ♣ construct informed responses using a range of historical sources in a range of ways – personal response (using key information and evidence) ♣ build on prior knowledge of appropriate historical terms to describe events ♣ develop a chronologically secure knowledge (using timelines over longer periods of time, discuss overlapping periods of times) ♣ devise historically valid questions about change, cause similarity and difference and significance using information gathered/given and answer using evidence Art <ul style="list-style-type: none"> ♣ build on their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay] ♣ create IPC sketch books to record their observations and use them to review and revisit ideas D&T <ul style="list-style-type: none"> ♣ build on their understanding of how key events and individuals in design and technology have helped shape the world 	Going Global Human and Physical Geography <ul style="list-style-type: none"> ♣ describe and understand key aspects of: physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle ♣ describe and understand key aspects of: human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water ♣ Geographical skills ♣ use fieldwork to observe, measure record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies ♣ Local knowledge – these skills should have been covered in Y3 so there needs to be a deeper skill set covered ♣ locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities ♣ name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time D&T – Cooking <ul style="list-style-type: none"> ♣ understand and apply the principles of a healthy and varied diet e.g. Going Global ♣ understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed ♣ prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques 		



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	<p>Meridian and time zones (including day and night)</p> <p>Tim Peake Not Neil Armstrong (covered in KS1)</p>	<ul style="list-style-type: none">✦ understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages e.g.✦ evaluate their ideas and products against their own design criteria and consider the views of others to improve their work✦ investigate and analyse a range of existing products✦ begin to select from and use a wider range of tools and equipment to perform practical tasks e.g.✦ select from and use a wider range of materials and components, including construction materials e.g.✦ research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups✦ generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design✦ begin to apply their understanding of computing to program, monitor and control their products		
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