

Science - Curriculum Maps

Age phase: <u>Upper KS2</u> Year: <u>A</u>

Theme	World War Two	Significant Authors - Shakespeare	Global Comparison - Amazon	Invaders – Vikings	Ancient Civilisations - Aztecs	Farming — County Show
Science heading	Animals inc Humans	Electricity	Properties of Materials		Forces	Living Things and their habitats
NC Objectives	describe the changes as humans develop to old age	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.	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		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.	describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird; describe the life process of reproduction in some plants and animals.

Age phase: <u>Upper KS2</u> Year: <u>B</u>

Theme	Staying Alive	Ancient	Dare to	Climate Heroes	Rivers -	Explorers –
		Civilisations -	Dream		From source to sea	Space
		Egyptians				•
Science	Animals inc	Living Things and		Evolution and	Light	Earth and Space
Heading	Humans	their habitats		Inheritance		·
NC	identify and name the	describe how living		recognise that living things	recognise that light	describe the movement of
Objectives	main parts of the	things are classified into		have changed over time	appears to travel in	the Earth, and other
	human circulatory	broad groups according		and that fossils provide	straight lines;	planets, relative to the Sun
	system, and describe	to common observable		information about living		in the solar system;
	the functions of the	characteristics and based		things that inhabited the	use the idea that light	
	heart, blood vessels	on similarities and		Earth millions of years	travels in straight lines to	describe the movement of
	and blood;	differences, including microorganisms, plants		ago;	explain that objects are seen because they give	the Moon relative to the Earth;
	recognise the impact	and animals;		recognise that living things	out or reflect light into	,
	of diet, exercise, drugs	,		produce offspring of the	the eye;	describe the Sun, Earth
	and lifestyle on the	give reasons for		same kind, but normally	J ,	and Moon as
	way their bodies	classifying plants and		offspring vary and are not	explain that we see	approximately spherical
	function;	animals based on specific		identical to their parents;	things because light travels from light sources	bodies;
	describe the ways in	cital acteristics		identify how animals and	to our eyes or from light	use the idea of the Earth's
	which nutrients and			plants are adapted to suit	sources to objects and	rotation to explain day
	water are transported			their environment in	then to our eyes;	and night and the
	within animals,			different ways and that	literate our eges,	apparent movement of the
	including humans			adaptation may lead to	use the idea that light	sun across the sky.
				evolution.	travels in straight lines to	
					explain why shadows	
					have the same shape as	
					the objects that cast	
					them.	