

Year 5 Curriculum Overview (2019-20)

BIG questions are to promote effective lifelong learning inventory (ELLI) skills

	Term One	Term Two	Term Three	Term Four	Term Five	Term Six
Primary focus	History	Science	RE	Geography	History	History/Art
Secondary focus	Music/science	French/DT/RE	Geography/ science	Science	Science/music/art	Science/PSHE
The BIG question:	How did the Romans impact, adapt and inspire changes in the UK?	How has curiosity played a role in the continual discovery of out space?	How do inspirational leaders create good relationships?	How do we plan ahead so that earth's natural resources are not diminished?	How did the Egyptian civilisation persevere and achieve great wealth, prosperity and power?	How is weather connected to the water cycle?
Wow moments (first week)		Star gazing Make planets to scale to create a display	Research different people, who inspire us. Visitors who could inspire us for the future (raising aspirations)		Mummify each other	
Trip/ Bristol links		Planetarium@ Bristol		Bristol University – Downs & dissecting squid (Need to contact as usually T6)	Visit religious building (Jewish synagogue)	Visit Wessex water Willsbridge Mill
Celebration		Presentation on space for parents	Presentation about who inspires us and why			RE assembly - Judaism
High quality texts..... power of reading & Pie Corbett, reading spine	The wolves of Willouby chase (PC) Stormbreaker	The water tower War of the world (Film & text)	Wolf brother (PC) Street child (PC) The lost thing	Kensuke's Kingdom Literacy Shed—The Dream Giver. Fireweed (PC)	Skellig (PC) Holes (PC) The highway man The lady of Shallot	Father (PC) Riverboy (PC)
Linked enquiry texts/stimulus... topic books	The body: The ultimate guide Your breath taking lungs and rocking respiratory system	The Martian video extracts. Literacy shed –Planet Pandora. Brochure advertisement, description/persuade.	Biographies of inspirational people	Greta Thunberg speeches	The Egyptian Cinderella (TB) Secrets of the sun king (TB) The red pyramid (TB)	Journey of a river (TB) Wind and the willows (TB) Floodlands (TB) River story (TB) Flush
Science	Circulatory and respiratory system <u>Circulatory</u> *Pioneering work of William Harvey *Heart: four chambers (atrium/atria or atriums [plural] and	Astronomy *The 'Big Bang' as one theory *The universe: an extent almost beyond imagining *Galaxies: Milky Way and Andromeda *Our solar system o Sun: source of energy (heat	Chemistry <u>Atoms</u> *All matter is made up of particles too small for the eye to see, called atoms *Scientists have developed models of atoms; while these models have changed	Life Cycles & seasonal changes *The life cycle: birth, growth, reproduction, death *Describe the life process of reproduction in some plants and animals *Explain the differences		Metrology *The water cycle evaporation, condensation, precipitation *Clouds: cirrus, stratus, cumulus (Review from Year 3)

	<p>ventricle/ventricles), aorta</p> <p>*Blood: Red blood cells, white blood cells, platelets, haemoglobin, plasma, antibodies; Blood vessels: arteries, veins, capillaries o Blood pressure, pulse</p> <p>*Filtering function of liver and spleen</p> <p>*Fatty deposits can clog blood vessels and cause a heart attack.</p> <p>*Blood types (four basic types: A, B, AB, O) and transfusions</p> <p><u>Respiratory system</u></p> <p>*Process of taking in oxygen and getting rid of carbon dioxide</p> <p>*Nose, throat, voice box, trachea (windpipe)</p> <p>*Lungs, bronchi, bronchial tubes, diaphragm, ribs, alveoli (air sacs)</p> <p>*Smoking: damage to lung tissue, lung cancer</p>	<p>and light) o The nine planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto [Note that, in 2006, Pluto was classified as a dwarf planet]</p> <p>*Planetary motion: orbit and rotation: How day and night on Earth are caused by the Earth's rotation; sunrise in the east and sunset in the west; How the seasons are caused by the Earth's orbit around the sun, tilt of the Earth's axis</p> <p>*Gravity, gravitational pull: Gravitational pull of the moon (and to a lesser degree, the sun) causes ocean tides on Earth; Gravitational pull of 'black holes' prevents light from escaping</p> <p>*Asteroids, meteors ('shooting stars'), comets, Halley's Comet</p> <p>*How an eclipse happens</p> <p>* Stars and constellations</p> <p>*Orienteering (finding your way) by using North Star, Big Dipper</p> <p>*Exploration of space o Observation through telescopes: Rockets and satellites: from unmanned flights; Apollo 11, first landing on the moon: 'One small step for a man, one giant leap for mankind'; Space shuttle</p>	<p>over time as scientists make new discoveries, the models help us imagine what we cannot see.</p> <p>*Atoms are made up of even tinier particles: protons, neutrons, electrons.</p> <p>*The concept of electrical charge - Positive charge (+): proton - Negative charge (-): electron - Neutral (neither positive nor negative): neutron - 'Unlike charges attract, like charges repel' (relate to magnetic attraction and repulsion).</p> <p><u>Properties of matter</u></p> <p>*Mass: the amount of matter in an object, similar to weight</p> <p>*Volume: the amount of space a thing fills</p> <p>Chemistry is everywhere</p> <p>*Density: how much matter is packed into the space an object fills</p> <p>*Vacuum: the absence of matter</p> <p><u>Elements</u></p> <p>*Elements are the basic kinds of matter, of which there are a little more than one hundred. -There are many different kinds of atoms, but an element has only one kind of atom. - Familiar elements, such as gold, copper, aluminium, oxygen, iron -</p>	<p>in the life cycles of a mammal, an amphibian, an insect and a bird - From seed to seed with a plant - From egg to egg with a chicken; - From frog to frog; - From butterfly to butterfly: metamorphosis (Review Year 3 insects); - Describe the changes as humans develop from birth to old age.</p> <p>*The four seasons and Earth's orbit around the Sun</p> <p>*Seasons and life processes o Spring: sprouting, sap flow in plants, mating and hatching o Summer: growth o Fall: ripening, migration o Winter: plant dormancy, animal hibernation</p>		<p>*The atmosphere: Troposphere, stratosphere, mesosphere, thermosphere, exosphere; How the Sun and the Earth heat the atmosphere</p> <p>*Air movement: wind direction and speed, prevailing winds, air pressure, low and high pressure, air masses</p> <p>*Cold and warm fronts: thunderheads, lightning and electric charge, thunder, tornadoes, hurricanes</p> <p>*Forecasting the weather: barometers (relation between changes in atmospheric pressure and weather), weather maps, weather satellites</p> <p>*Weather and climate: 'weather' refers to daily changes in temperature, rainfall, sunshine, etc., while 'climate' refers to weather trends that are longer than the cycle of the seasons</p>
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History	<p>Period Study: Roman Empire and its impact on Britain 43BC – AD110)</p> <p>Era study: The Roman empire 740BC- AD 410)</p>				<p>Period study: The achievements of the Ancient Egypt civilization – The new kingdom 1520BC – 175BC</p>	
Geography			<p>Locational knowledge of England and the world</p>	<p>Natural resources</p> <p>*The earth provides finite resources.</p>		<p>The water cycle and rivers</p>

			<p>*Know the counties of east coast of England: East England, East Midlands, Yorkshire and Humber</p> <p>*Know significant waterways in England (Avon, Grand Union Canal, Mersey, River Ouse, River Trent, Thames, Tyne)</p> <p>Name countries within 7 major continents.</p> <p>*Reference continents within their respective hemispheres.</p> <p>*Revise global biomes and vegetation belts and climate zones (Y3 & Y4)</p> <p>*Know major cities of the world, their respective countries and continents. (London, Moscow, Mumbai, New York, Paris, Rio de Janeiro, Singapore, Sydney, Tokyo,)</p>	<p>*Identify the non-renewable resources found in the ground, including the south-west England.</p> <p>*Natural resources can be extracted from underground (drilling, open cast mining, underground mining)</p> <p>*Natural resources are used to for human purposes (building materials, jewellery, energy, transport)</p> <p>*Identify the impact of the removal of natural resources on the physical landscape</p> <p>*Burning fossil fuels, such as coal, contribute to climate change.</p>		<p>*Understand the Water Cycle (Linked to Y3 & Y5 science)</p> <p>*Evaporation from the sea/lakes, condensation, precipitation, run-off and groundwater</p> <p>*Discuss the different paths that water takes.</p> <p>*Discuss how urban areas modify the drainage of water. Rivers</p> <p>*Know the features of a river: bank, bed, upper/middle and lower course, source, mouth, basin</p> <p>*Understand that a river basin is an area of land drained by a river and its tributaries.</p> <p>*Identify features of a river basin: springs, mountain streams, channel, valley, floodplain, lakes, estuary, coastline.</p> <p>*Follow the course of a river from source to mouth while using a map.</p> <p>*Discuss differences between mountain streams and lowland meandering rivers.</p> <p>*Understand the terms erosion and deposition: Erosion is a physical process in which soil, rock and other surface material are removed from one location and transported to another.</p>
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Skills	<p>use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied</p> <p>use the 8 points of a compass, 4- and 6-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world</p> <p>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</p> <p>Fieldwork to include river study: Calculate velocity of a river (distance / average time) and measure depth of the river cross section in upper, middle and lower course.</p> <p>Draw simple geographical diagrams to represent physical processes</p>					
DT		<p>Packaging</p> <p>Use a range of tools and equipment expertly</p> <p>Produce a detailed step-by-step plan</p> <p>Produce prototypes to show my ideas</p> <p>Explain why my finished product is going to be of good quality</p> <p>Can I think about the functionality of my work</p> <p>Can I say if my product is fit for purpose</p> <p>Can I test and evaluate my final product</p>				<p>Practise my evaluation skills by evaluating existing products against criteria which I have set</p> <p>Come up with a range of ideas after I have collected information?</p> <p>Explain how my product will appeal to the audience</p> <p>Keep checking that my design is the best it can be</p> <p>Check whether anything could be improved</p> <p>Think about the aesthetic qualities of my work</p> <p>Suggest some alternative plans and say what the good points and drawbacks are about each</p>

Art	<p>Manipulate colour and texture by adding materials to paint and using different techniques of application? Discuss why artists have used colour in a particular way? (Van Gogh)</p> <p>Show an understanding of a painters' use of perspective to illustrate space? (Italian renaissance)</p> <p>Explain my understanding of primary, secondary and tertiary colours and the vocabulary of 'warm, cold and tone'? (JMW Turner)</p> <p>Use tone to create a sense of space and perspective? (Beryl Cook)</p>		<p>Use art vocabulary to describe abstract art? (smooth, flow, rhythm, branching, exploding, spiralling)</p> <p>Create my own monochrome abstract art and describe it confidently using art vocabulary?</p> <p>Use pattern for a variety for decorative art? (objects, paper, buildings)</p> <p>Look at how figures and objects relate to one another in an artist's work? (Oleg Shuplyak)</p> <p>Explore and create a pattern for textiles? (collage, printing)</p>		<p>Explore an artist's work for texture? (Van Gogh – building on vocabulary; 'feathery, wet, furry, waxy, shiny, waxy)</p> <p>Draw and paint using techniques that produce different textural effects?</p> <p>Produce artwork with more complex shape arrangement and composition?</p> <p>Understand art in different cultural contexts? (e.g. Traditional Japanese art)</p> <p>Create a piece of art that reflects my own cultural context? (To reflect the subject in a story or decorate a script)</p>	
Music	'Water' - Graphic Scores	Winter Concert	Singing and Performing - Pitch	Learning an Instrument – Xylophone	Samba – Further Developing Pulse and	Summer Showcase
Computing	<p>Introduce Scratch, start to use it to make basic animations</p> <p>Introduce I Can Present and Introduce Sumo Paint</p> <p>E-Safety KS2 Lesson 5 and 6</p>					
Computing		<p>Create a database on Excel.</p> <p>Create a table</p> <p>Add columns for: produce, money made, country of origin</p> <p>Change font/colour of cells.</p> <p>Explore wrapping text, merging cells and changing direction of text left/right.</p>		<p>Create a PowerPoint</p> <p>Insert titles using WordArt inside shapes</p> <p>Insert background/theme for slides</p> <p>Add slide animations and videos</p> <p>Present PowerPoint to another class/assembly</p>		
R.E.	<p>Unit 8 - What do people believe about life?</p> <p>Festival: Hanukkah</p>		<p>Unit 9 - How should we live and who can inspire us?</p> <p>Festival: Passover</p>		<p>What does it mean to belong to a religion? (Unit 11 - Judaism)</p>	
PSHE	Being me in my world	Celebrating difference	Dreams and goals	Healthy me	Relationships	Changing me
Real PE	Unit 1 – Cognitive	Unit 2 – Creative	Unit 3 – Social	Unit 4 – Physical	Unit 5 – Health and Fitness	Unit 6 – Personal
French	Les planets (The planets)		Bon appetite sante (Healthy eating)		Je suis le musician (I am the music man)	