



St Mary's
Catholic Primary School and Nursery

Year 6 Knowledge and Skills Tracker

Autumn 1 Ancient Egypt	Autumn 2 Ancient Egypt	Spring 1 WW2	Spring 2 WW2/Revision	Summer 1 Transition Project	Summer 2 Transition Project
Science Knowledge					
Living Things & Habitats Animals including Humans	Living Things & Habitats Animals including Humans	Light	Electricity	Evolution & Inheritance	Evolution & Inheritance
<p>To describe how living things can be classified into further groups.</p> <p>To understand that the heart pumps blood around the body.</p> <p>To know that oxygen is breathed into the lunged where it is absorbed by the blood.</p>	<p>To describe ways in which some choices can be harmful to the circulatory system and our overall health.</p> <p>To recognise that animals and humans get nutrition from what they eat.</p> <p>To explain that nutrition is transported through our blood.</p>	<p>To know that light travels in straight lines.</p> <p>To recognise that animals see light sources when light travels from the source into their eyes.</p> <p>To know that light reflects off all objects (unless they are black) and that non-shiny surfaces</p>	<p>To know that electricity is a form of energy.</p> <p>To identify that when more bulbs to a simple circuit will reduce the electrical energy and will dim the light.</p> <p>To recognise that the number and voltage of a cell can impact how bright/dim a</p>	<p>To recognise how life cycles have evolved to help organisms survive adulthood.</p> <p>To know that, over time, the characteristics that are most suited to the environment become increasingly common.</p> <p>To understand that variation exists within a population</p>	<p>To explain that organisms that are best suited to their environment are more likely to survive long enough.</p> <p>To recognise that sometimes environments can change and this has an effect on the plants and animals that exist there.</p>

<p>To know that muscles need oxygen to release energy from food to do work.</p>		<p>scatter the light so that the beam cannot be seen.</p> <p>To recognise that shadows are caused when certain materials block light.</p>	<p>bulb is within a circuit.</p> <p>To identify the key components of a circuit – battery, wire, bulb, buzzer, motor and switch.</p>	<p>(and between offspring of some plants)</p> <p>To know that organisms reproduce and offspring have similar characteristic patterns.</p>	
<p>Science Skills</p>					
<ul style="list-style-type: none"> • Describe how and why living things are classified into broad groups. • Identify and name main parts of the human circulatory system and describe their function. • Report and present findings from enquiries. (WS) 	<ul style="list-style-type: none"> • Recognise the impact of diet, exercise, drugs and lifestyle on the way our bodies function. • Describe how nutrients and water are transported within animals, including humans. • Plan scientific enquiries to answer questions, controlling variables where necessary. (WS) 	<ul style="list-style-type: none"> • Recognise that light appears to travel in straight lines. • Explain that, to see, light travels from light sources, reflects from objects and then enters our eyes. • Explain why shadows have the same shape as objects that cast them. • Report and present findings from enquiries. (WS) 	<ul style="list-style-type: none"> • Understand effect of changing number and voltage of cells used in a circuit • Compare and give reasons for variations in how components of a circuit function • Use recognised symbols when representing a simple circuit in a diagram • Report and present findings from enquiries. (WS) 	<ul style="list-style-type: none"> • Recognise fossils show how living things have changed over time. • Recognise living things produce offspring, but normally offspring are not identical to parents. • Use test results to make predictions to set up further comparative and fair tests. (WS) 	<ul style="list-style-type: none"> • Identify that living things adapt and that adaptation may lead to evolution. • Report and present findings from enquiries. (WS)

	<ul style="list-style-type: none"> Identify scientific evidence that has been used to support or refute ideas or arguments. (WS) 	<ul style="list-style-type: none"> Plan scientific enquiries to answer questions, controlling variables where necessary. (WS) 	<ul style="list-style-type: none"> Plan scientific enquiries to answer questions, controlling variables where necessary. (WS) Record data and results of increasing complexity. (WS) Take measurements. (WS) 		
History Knowledge					
<p>To know about some Egyptian artefacts and explain their purpose.</p> <p>To know the key dates of some Ancient Civilisations.</p>	<p>To know the controversy surrounding Cleopatra</p>	<p>To know key events and key players during WW2</p> <p>To know about key turning points in the war</p>	<p>To know the impact of WW2 on Crewe and the surrounding area.</p> <p>To know how Britain changed during and after WW2.</p> <p>To know that sources of information may vary.</p>		
History Skills					

<p>Examine artefacts and explain what they show us about that time in history.</p> <p>Place events, people and changes into correct periods of time and chronological order.</p> <p>Use and understand abstract terms such as empire, civilisation, parliament and peasantry.</p>	<p>Suggest reasons for conflicting historical accounts (Egypt)</p> <p>Identify and describe changes within and between different period in history.</p>	<p>Discuss the impact of significant historical events, people and places in their own locality (WW2)</p> <p>Make links between events and changes; giving reasons for them and explaining the result (WW2)</p>	<ul style="list-style-type: none"> • Discuss the impact of significant historical events, people and places in their own locality. • Discuss the impact and causes of historical changes in Britain. • Identify and describe changes within and between different period in history. • Analyse sources of information for accuracy, usefulness and relevance. 		
Geography Knowledge					
<p>To know the Seven continents and some countries in Africa</p>	<p>To know the importance of accuracy in map making</p>	<p>To know how the geography in the UK has changed following WW2.</p>	<p>To know the difference between political, physical and thematic maps</p>	<p>To know about a topical geographical issue (e.g. climate change) and how it</p>	<p>To know how OS maps are used to show how the land changes e.g. height/steepness</p>

To know that the equator and tropics are imaginary lines used on maps	To know why key historical sites are protected	To know how to interpret and create a scale on a map.		affects us now and in the future.	
To know how to use interactive maps	To know how to read and write a 6 figure grid reference				
Geography Skills					
Locate the world's continents/countries	To use photographs and measurements to create an accurate map of an area (Egypt)	Make a scale drawing using scales based around powers of 10.	Understand how the geography of the UK has changed over time.	Explore and explain topical geographical issues over time.	Read the scale on contour lines on an OS map.
Locate the Tropics of Capricorn and Cancer, the Greenwich Meridian and time zones.	To explore and explain topical geographical issues over time (Egypt)	Locate places on an OS map using 6 figure grid reference (WW2)	Make own simple thematic map based on own data (WW2)	Use longitude and latitude as a guide to a location on an atlas.	Locate places on an OS map using 6 figure grid reference
Use digital/computer mapping to locate places in the KS2 PoS.					
Art Knowledge					
To know the work of an artist		To know about propaganda posters		To know how to record minute detail	
To know how to control charcoal to best effect		To know how to layer colour		To know how to add detail to background colours	
Art Skills					

<ul style="list-style-type: none"> • Replicate images by well-known artists. • Use charcoal with increasing control. • With pencil, control perception of distance. 	<ul style="list-style-type: none"> • Explore impact of well-known artists and architect's work on the society at the time (WW2) • With coloured pencil, can layer colours • Prepare a drawing surface to create a wax crayon image. 	<ul style="list-style-type: none"> • Use pens to record minute detail. • Create different effects with paint • Create layers of paint to add detail to background colours. • Prepare a drawing surface to create a wax crayon image.
D&T Knowledge		
<p>To know how to follow a recipe</p> <p>To know and understand simple units of measure when cooking</p> <p>To know that world cuisines vary</p> <p>To know ow to maintain a healthy lifestyle</p>	<p>To know how to code a simple program</p> <p>To know how Morse Code was used during WW2</p> <p>To know how an electrical circuit works.</p>	<p>To know how products are designed, evaluated and modified according to their intended purpose.</p>
D&T Skills		
<ul style="list-style-type: none"> • Select the appropriate tools to follow a given recipe to make a savoury dish. • Estimate amounts of ingredients to an appropriate level of accuracy. • Understand how different foods are produced in different areas of the world. • Understand what different affects food types have on the body. 	<ul style="list-style-type: none"> • Use a computer design program to communicate ideas (WW2 Lego) • Explore impact of well-known designers and inventors' products. • Include an electrical circuit that produces more than one outcome 	<ul style="list-style-type: none"> • Design products that are innovative and appeal to individuals or groups. • Evaluate existing products in relation to their purpose and audience.
Music Knowledge		

<p>To know the meaning of key musical terminology</p>	<p>To know what a soundscape is.</p>	<p>To know about the morale boosting songs of the war</p> <p>To know how to sing a round</p> <p>To know how to lead a round</p> <p>To know how to alter lyrics for own composition</p>	<p>To know how music is expressed on paper.</p> <p>To know how to describe music using key vocabulary.</p>	<p>To know about some historical composers and musicians.</p>	<p>To know how to control own voices when performing a song.</p>
<p>Music Skills</p>					
<ul style="list-style-type: none"> • Compare pieces thinking about texture, structure, timbre and dynamics. • Sing expressively combining dynamics, tempo and pitch 	<ul style="list-style-type: none"> • Compose a soundscape 	<ul style="list-style-type: none"> • Explain how the music of the past reflected the society of the time (WW2) • Take part in a three-part harmonies and descant (WW2) • Lead a group in a performance (WW2) • Perform own compositions from memory (WW2) 	<ul style="list-style-type: none"> • Pick out details within a piece and recall these details from memory. • Starting to interpret musical notation. • Sing expressively combining dynamics, tempo and pitch. (Sing up Day) 	<ul style="list-style-type: none"> • Find similarities and differences between different historical composers and musicians. 	<ul style="list-style-type: none"> • Understand when to use varying volumes, pitch and expression in voice to portray an idea or mood.

Computing Knowledge					
<p>To know how to use the program design process, including flowcharts, to develop algorithms for more complex programs using and understanding of abstraction and decomposition to define the important aspects of the program.</p> <p>To effectively code, test and debug from these designs.</p>	<p>To know how to create and interrogate a spreadsheet.</p>	<p>To know the importance of staying safe online.</p> <p>To know how to report concerns about what children see online.</p>	<p>To identify the purpose of a blog and its key features.</p> <p>To plan the theme and content of a blog and write the content.</p> <p>To consider the effect on the audience in changing the physical properties of the blog.</p> <p>To understand how and why blog posts are approved by the teacher.</p>	<p>To know what the internet consists of.</p> <p>To know what LAN and WAN are.</p> <p>To know how the internet is accessed in school.</p> <p>To recognise the age of the internet and consider what the future may hold.</p>	<p>To know how to use a variety of software to create a digital quiz.</p> <p>To recognise how audience must be considered when creating effective software.</p>
Computing Skills					
<ul style="list-style-type: none"> • Solve problems in writing programs by decomposing them into smaller parts. • Use selection and repetition in programs. 	<ul style="list-style-type: none"> • Combine a variety of software to accomplish given goals on a range of digital devices • Design and create systems 	<ul style="list-style-type: none"> • Understand the importance of using technology safely, respectfully and responsibly • Identify a range of ways to report 	<ul style="list-style-type: none"> • Understand the opportunities computer networks offer for collaboration. • Understand the basic workings of computer 	<ul style="list-style-type: none"> • Understand the opportunities computer networks offer for collaboration. • Understand the basic workings of computer 	<ul style="list-style-type: none"> • Combine a variety of software to accomplish given goals on a range of digital devices. • Design and create systems

<ul style="list-style-type: none"> Explain how some simple algorithms work and detect and correct errors in them. Combine a variety of software to accomplish given goals on a range of digital devices. 	<p>that accomplish given goals</p> <ul style="list-style-type: none"> Analyse and evaluate information and data 	<p>concerns about content and contact</p>	<p>networks including the internet.</p> <ul style="list-style-type: none"> Understand the importance of using technology safely, respectfully and responsibly. Identify a range of ways to report concerns about content and contact. 	<p>networks including the internet.</p>	<p>that accomplish given goals.</p> <ul style="list-style-type: none"> Analyse and evaluate information and data.
PE Knowledge					
<p>To know the rules for playing a game of hockey.</p> <p>To know that dance comes in various styles</p>	<p>To know how to follow a simple map.</p> <p>To know how to sequence a range of gymnastic movements</p>	<p>To know how to attack and defend in invasion games, including finding space.</p> <p>To know different ways of passing / hitting the ball in team games.</p>	<p>To understand the rules of the game of netball.</p> <p>To recognise how creating space improves game play.</p> <p>To perform a range of dance actions in order to create individual routines.</p>	<p>To know when is suitable to use a sprint when running according to distance.</p> <p>To understand how to compose the body correctly in order to effectively run/jump/throw.</p>	<p>To understand the rules of the game of tennis.</p> <p>To know the different strokes in a game of tennis.</p>
PE Skills					
Hockey:	Orienteering:	Tag Rugby/Seated Volleyball:	Netball:	Athletics: <ul style="list-style-type: none"> Run longer 	Tennis:

<ul style="list-style-type: none"> • In a game, select the most appropriate person to pass to and the style of pass to use. • Hit a ball into space to help increase score within a game. • Dribble a ball in different directions and avoid obstacles. • Help other members of team to find space within a team game. • Use a range of attacking and defending skills when playing a team game. <p>Dance:</p> <ul style="list-style-type: none"> • Perform dance actions with control and expression. • Choose own dance steps and movements and then develop them into a routine. • Choreograph short routines to portray a 	<ul style="list-style-type: none"> • Plan a simple orienteering trial for others to complete • Read a wide variety of map symbols and use a compass when following a given route. Plan ideas of how to solve a problem before attempting it. • Decide if verbal or non-verbal communication is the most effective choice when solving problems. Take the lead within a group challenge and give clear instructions to others. • Evaluate own and the team's performance and suggest improvements 	<ul style="list-style-type: none"> • Choose the most appropriate throw to use within a game. • Call out for a catch in a game showing they know they are in the best place. • In a game, select the most appropriate person to pass to and the style of pass to use • Help other members of team to find space within a team game. • Use a range of attacking and defending skills when playing a team game. 	<ul style="list-style-type: none"> • Help other members of team to find space within a team game. • Use a range of attacking and defending skills when playing a team game. <p>Dance:</p> <ul style="list-style-type: none"> • Perform dance actions with control and expression. • Choose own dance steps and movements and then develop them into a routine. 	<p>distances; knowing when to use a sprint.</p> <ul style="list-style-type: none"> • Use a body shape to decrease air resistance when running. • Use the correct action to throw a javelin with a run up. • Jump: one foot to same foot to two feet. 	<ul style="list-style-type: none"> • Hit a ball into a space to help increase score within a game. • Help other members of team to find space within a team game. <p>Rounders:</p> <ul style="list-style-type: none"> • Help other members of team to find space within a team game. • In a game, select the most appropriate person to pass to and the style of pass to use. • Hit a ball into space to help increase score within a game. • Call out for a catch in a game showing they
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<p>particular mood or style.</p>	<p>Gymnastics:</p> <ul style="list-style-type: none"> • Perform actions in and out of rolls. • Lead others in a stretching routine to prepare for gymnastics. Perform a range of balances with a high level of control and accuracy. • Hold different positions when balancing and use different shapes to express a given theme/mood. Create sequences that have changes of speed and level. • Select the most appropriate ways to travel from one balance to another. 				<p>know they are in the best place.</p> <ul style="list-style-type: none"> • Choose the most appropriate throw to use within a game.
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END POINTS	END POINTS	END POINTS	END POINTS	END POINTS	END POINTS
<p>Children will have a greater understanding and appreciation of an ancient civilisation.</p>	<p>Children will have a greater understanding and appreciation of an ancient civilisation.</p>	<p>Children will have a greater understanding and appreciation of WW2 and its impact on modern Britain.</p>	<p>Children will have a greater understanding and appreciation of WW2 and its impact on modern Britain.</p>	<p>Children will have developed their personal, emotional and social skills to take with them to secondary school and beyond.</p>	<p>Children will have developed their personal, emotional and social skills to take with them to secondary school and beyond.</p>