St. Margaret's Prep

Year 4 Curriculum Map

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Maths	Place Value to 10, 000 Formal paper methods for +/- to 10000 with up to three decimal places Round any number to the nearest 10, 100 or 1000 and decimals to the nearest whole number Multiply numbers up to four digits by a two-digit number on paper Identify multiples and factors including finding all the factor pairs of a number Solve problems involving multiplication and division Make number patterns Round numbers to the nearest 1000 +/- with and without renaming		Divide numbers up to 4 digits by a one-digit number using the efficient written method of short division and interpret remainders appropriately for the context Solve x and ÷ word problems (multi-step) Multiply 3-digit numbers Understand the relation between non-unit fractions and x and ÷ of quantities, with particular emphasis on 10ths and 100ths Order numbers with up to 3 decimal places Recognise and describe linear number sequences, including those involving fractions and decimals, and find the term-to-term rule Equivalent fractions, mixed numbers and improper fractions Add and subtract fractions with the same denominator involving mixed numbers Recognise and write fraction/decimal equivalents to quarters, 10ths, 100ths, fifths		Describe positions on a 2D grid as coordinates in the first quadrant Describe movements between positions as translations of a given unit to the left/right and up/down Plot specified points and draw sides to complete a given polygon Compare and classify geometric shapes, including naming all quadrilaterals and triangles, based on their numbers of pairs parallel lines, (right) angles, same length sides and lines of symmetry Recognise and use the 8 main points of the compass Know angles are measured in degrees; estimate and measure them and draw a given angle, writing its size in degrees (°) Find perimeters and areas of rectangles Convert between metric units of measure including use of decimals Write Roman numerals to 100	

			Draw and read bar and picture graphs Construct and interpret simple line graphs, particularly showing change over time Read, write and convert time between analogue and digital 12 and 24-hour clocks Convert between mins and secs, mins and hrs Compare and order decimal numbers Record in tenths and hundredths Round decimal numbers Solve simple measure and money problems involving fractions and decimals		Record and compare amounts and estimate amounts of money Round to the nearest pound and solve money problems	
	Priority is given to mental arithmetic, problem solving and reasoning throughout the academic year.					
English	Personal Recounts Holiday postcards, Link with Florida. 'At the Beach – postcards from Crabby Spit by Roland Harvey' (Inform) The Firework Maker's Daughter (Entertain, Persuade)	Werewolf Club Rules Poems by Joseph Coelho (Performance Poetry) The History Detective Investigates: Anglo-Saxons. Neil Tonge (Non-Chronological report - Sutton Hoo - Inform)	Pantomime playscript (Playscripts – Entertain) Dear Greenpeace by Simon James (Informal Letters - Inform)	Viking Boy Tony Bradman (Historical Narrative - Entertain) Film trailer unit (Adventure Stories – Entertain, Inform)	Rhythm of the Rain by Graham Baker-Smith (Entertainment, Inform) Anisha, Accidental Detective by Serena Patel (Entertain, Inform)	101 Small Ways to Change the World Aubre Andrus (Inform, Persuade) One Leaf Rides the Wind - Poetry (Cinquain and Haiku)

	Comprehension skills and spelling are taught throughout the year within English lessons and guided reading sessions alongside Accelerated Reader. Spelling, punctuation and grammar skills are embedded in English lessons throughout the year.					
Science	**Humans and Other Animals – Digestive System & Teeth** Identify the names and locations of major organs. Describe the simple functions of the basic parts of the digestive system in humans. Identify the different types of teeth in humans and their simple functions. Recognise the difference between the teeth of carnivores and herbivores. Explain why it is necessary to test the effects of exercise on the pulse rates of several people.	**Electricity** Identify common appliances that run on electricity. Construct a simple series circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery. Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple circuit.	**Living Things & Their Habitats – Keys & Feeding Relationships** Recognise that living things can be grouped in a variety of ways. Explore and use classification keys to help group identify and name variety of living things in their local and wider environment. Life processes occur in familiar animals and plants and how these are determined by which habitats in which they are found. Recognise that environments can change and that this can sometimes pose dangers to living things. Observe and describe ways in which living things and the environment need protection. Construct and interpret a variety of food chains, identifying producer, predator and prey. Explore how nearly all food chains start with a green plant.	**States of Matter – Changing States & The Water Cycle** Compare and group materials together according to whether they are solids, liquids or gases. Recognise differences between solids, liquids and gases in terms of ease of flow and maintenance of shape and volume. Observe that some materials change state when they are heated or cooled, (water, clay, dough) and measure or research the temperature at which this happens in degrees Celsius. Identify the part played by evaporation and condensation in the water cycle and	**Sound – Vibration, Pitch & Strength** Identify how sounds are made, associating some of them with something vibrating but that vibrations are not always directly visible. Recognise that vibrations from sounds travel through a medium (solids, liquids, air but not a vacuum) to the ear. Identify what is vibrating in a range of musical instruments. Know how the ear works; that sound causes the ear

		Recognise some common conductors and insulators, and associate metals with being good conductors. Know the effect of changing the components in a circuit on the brightness of a bulb. Identify the importance of working safely with electricity and how dangers can be avoided.		associate the rate of evaporation with temperature. State that materials e.g. metals h ave to be heated to a very high temperature before they melt.	to vibrate and different people have different audible ranges. Know the effects of loud noises on the ear causing temporary or permanent damage to hearing. Find patterns between the pitch of a sound and features of the object that produced it. Find patterns between the volume of a sound and the strength of the vibrations that produced it. Recognise that sounds get fainter as the distance from the source increases.
	Pupils will be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:				

	• planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary • taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate • recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs • using test results to make predictions to set up further comparative and fair tests • reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations • identifying scientific evidence that has been used to support or refute ideas or arguments					
History		**Anglo Saxons** To learn about the Saxon invasion of Britain and the fall of the Roman empire. To learn about a Saxon burial and funeral from artefacts and other evidence. To explore Saxons within the timeline of British history. To understand the locations of the Saxon Kingdoms and settlements.		**Vikings** To understand when the Viking period was. To draw a timeline of important events during Viking times. To understand where the Vikings came from. To find out what a Viking raid was like. Who were Alfred the Great and Athelstan and why are they so important to British history? What role does Edward the	**Ancient Greeks** Learn about the location, physical features and climate of modern Greece. To place Ancient Greece in time. To locate Ancient Greece, Athens and Sparta on a map. That Ancient Greece consisted of city states. To identify some of the similarities and differences between life in Athens and Sparta.	

		To understand how the Anglo Saxons lived. To learn about the conversion to Christianity.		Confessor play in this era of History? How and why did the Saxon/Viking era come to an end?	To select and combine information from different sources about life in Ancient Greece. To produce structured work making appropriate use of dates and terms. To use a range of sources to find out about life in Ancient Greek schools and make inferences. To understand how the Greek alphabet influenced our language. To show some understanding that aspects of the past have been represented and interpreted in different ways. To understand how Ancient Greece was governed.	

					To find out how the Olympic games have changed from the Ancient Greek Olympics. To be aware that different sources give different information.	
Geography	**Florida** **Locational Knowledge** Europe including Russia North America South America United Kingdom Latitude and longitude Northern and Southern Hemisphere and time zones **Place Knowledge** Region within North or South America **Human & Physical** Climate zones Settlement and land use		**Why are Jungles So Wet & Deserts So Dry?** **Locational Knowledge** South America United Kingdom Latitude and longitude Northern and Southern Hemisphere **Human & Physical** Climate zones Biomes and vegetation belts **Skills & Fieldwork** Maps, atlases, globes and digital/computer mapping			**How Can We Live More Sustainably?** **Locational Knowledge** United Kingdom **Human & Physical** Natural Resources **Skills & Fieldwork** Maps, atlases, globes and digital/computer mapping Fieldwork – observe, measure, record and present

	Economic activity and trade **Skills & Fieldwork** Maps, atlases, globes and digital/computer mapping Eight points of compass Map symbols and key		Eight points of compass Map symbols and key			
RE	**Buddha's Teachings** Key Question: Is it possible for everyone to be happy?	**Christianity - Incarnation** Key Question: What is the most significant part of the nativity story for Christians today?	**Judaism - Passover** Key Question: How important is it for Jewish people to do what God asks them to do?	**Christianity - Easter** Key Question: Is forgiveness always possible for Christians?	**Buddhism - The 8-fold Path** Key Question: What is the best way for a Buddhist to lead a good life?	**Buddhism - The 8-fold Path** Key Question: Can the Buddha's teachings make the world a better place?
PSHE	**Me & My Relationships** Link to detailed scheme of work here.	**Rights & Respect**	**Valuing Difference**	**Being My Best**	**Keeping Myself Safe**	**Growing & Changing**
DT	Electrical Units		Textiles		Food & Nutrition	
MFL	Practise numbers up to 60. Understand and ask questions on personal identity. Give details about your personal identity (1st name, surname, age, birthday, place of residence).		Practise numbers up to 70. Name some members of their family. Use "Il y a" to describe their family. Understand how to use the possessive adjectives "mon", "ma", and "mes". Ask someone if they have siblings.		Revise numbers up to 70 and practise numbers 80 to 90. Understand and use "Quelle heure est-il?". Tell the time using the 12-hour clock (on the hour and minutes past). Name some school subjects.	

	Learn the French alphabet and spell their name. Ask how something is spelt. Understand that the "Il" and "Elle" forms are used to talk about other people. Name some pets. Ask someone if they have pets. Say if you have pets, or not, at home. Give some information about their pets name, age and colour. Develop their ability to justify opinions. Talk about Christmas in France.		Say if you have brothers or sisters, or not. Understand how to form negative sentences with "ne … pas". Give some information about their relatives (name and age) using the "Il" and "Elle" forms. Understand word order and plural agreements when using adjectives. Discover some facts about and words related to the New Year traditions and Easter. Join in new songs and rhymes.		Say what school subjects they learn on different days, at different times. Express some opinions on school subjects. Justify their likes and dislikes of various school subjects using "car" or "parce que". Recognise and respond to simple classroom commands. Identify simple classroom objects. Say what classroom objects are and are not in the classroom using "Il y a" " Il n'y a pas de".	
Computing	**Computer Networks and Systems – The internet** •The Internet and the World Wide Web •Content ownership •Evaluating content	**Creating Media – Audio production** •Identifying input and output devices •Discuss ownership and copyright •Plan, record and produce a podcast	**Programming - Repetition in shapes** •Repetition and loops •Planning, modifying and testing commands •Logo – text-based commands	**Creating Media - Photo Editing** •Editing digital images •Impact of editing images •Evaluate choices	**Data handling - Data logging** •Data collection over time •Using sensors and coding •Analyse data	**Programming – Repetition in games** •Count-controlled and infinite loops •Modifying with repetition •Design & create a game

Music	Choral singing, including part-singing techniques African drumming- percussion ensemble skills and improvisation, group composition Understanding scales and intervals Improvised and notated recorder work (Recorder Karate programme) Link to Habitats: Animal Crackers unit (Musical Contexts)	Choral singing, including part-singing techniques Musical theatre skills – solo/ small group/ ensemble Pantomime performances Percussion ensemble performance (patterns and structures) Improvised and notated recorder work (Recorder Karate programme) Link to Science/Geography: Water Music unit (Musical Contexts)	Developing aural and notation awareness through exercises Exploring programme music through history Musical signals Composing music for a purpose –raps with a message Improvised and notated recorder work (Recorder Karate programme) Link to Sound and Vibration: timbre and pitch
Art	**Texture** This unit builds on the Colour and Brushwork unit taught in Year 3. It also provides good opportunities to work outdoors. What is texture? Look at works showing good use of texture to create mood and atmosphere and interest. *Real (actual) texture* vs *visual (implied) texture*. Explain the difference. Explore the difference.	**People in Motion** What does 'people in motion' mean? Discuss, demonstrate and explore. Eg ask children to 'strike a pose' and guess what they are doing (dancing, hockey, tennis, gaming, reading etc). Discuss balance and props and how these influence the human form, eg stretching, bending, pushing, throwing etc. Use art mannequins to strike different poses. Observe closely the proportions of the human body.	**Investigating Pattern** What is pattern? Discuss and look at examples. Patterns in nature. Man-made patterns. **Skills:** Shape, composition, mark-making, detail, neatness, research, observation, stencil-making.

Sport	Girls - Hockey: travelling with ball, sending, receiving, shooting, intro to 7-aside games. Boys - Rugby: apply speed and direction to passing and dodging to create space, outwit opponents and attack and defend as a team. All - Cross-Country Dance: development of themes and use of music. Gym: use of apparatus using rotation Swimming: development of all 4 strokes Climbing	Girls - Netball: travelling, balance, passing and receiving the ball, dodging, teamwork. Boys - Hockey: travelling with ball, sending, receiving, shooting, intro to 7-aside games. Health Related Fitness: speed, stamina and jumping skills Swimming: personal survival, surface dives, underwater swim, collecting objects, sculling	Cricket: catching, throwing, batting, bowling, aiming, fielding Athletics: speed work - 60m, distance work - 200m, jumping, throwing Tennis: serve, volley, forehand, backhand, small games Swimming: diving, races, timed swims, tumble turns, competitions
	Matches with other schools take place throughout the year, from Year 3 upwards.		