St Mary's
Colchester

Year 4

Curriculum Booklet

St Mary's Colchester

Introduction

This booklet is a guide to your daughter's current academic year, giving you an overview of the content of our curriculum at St. Mary's. Our curriculum has been devised to interest and engage your daughter, with the intention to help realise her potential. As with all the best teaching, it may be liable to changes as we respond to the questions, interests and particular needs of the girls, but it will give you a broad idea of the year ahead.

If you have any questions please speak with your daughter's class teacher or Mrs Zoe Wentworth, Assistant Director of Lower School (Academic).

Year 4 Yearly Overview for English

(Your daughter will be assessed against the following criteria)

Reading	Writing
Applies a growing knowledge of root words, prefixes and suffixes (etymology and morphology) - as listed in English appendix 1 of the national curriculum document - both to read aloud and to understand the meaning of new words that are met Listens to and discusses a wide range of fiction, poetry, plays, non-fiction and reference books or textbooks Uses dictionaries to check the meaning of words that have been read Identifies themes and conventions in a wide range of books Reads further exception words, noting the unusual correspondences between spelling and sound and where these occur in the word Checks that the text makes sense to the individual, discussing his understanding and explaining the meaning of words in context Draws inferences such as inferring characters' feelings, thoughts and motives from their actions and justifies inferences with evidence Predicts what might happen from details stated and implied Identifies main ideas drawn from more than one paragraph and summarises these Retrieves and records information from non-fiction	Organises paragraphs around a theme In narratives, creates settings, characters and plot Proof-reads for spelling and punctuation errors Writes from memory simple sentences, dictated by the teacher, that include words and punctuation taught so far Uses standard English forms for verb inflections instead of local spoken forms Uses fronted adverbials Can choose an appropriate pronoun or noun within and across sentences to aid cohesion and avoid repetition Uses inverted commas and other punctuation to indicate direct speech

Year 4 Yearly Overview for Mathematics

(Your daughter will be assessed against the following criteria)

Number and place value Counts in multiples of six, seven, nine, 25 and 1,000 Counts backwards through zero to include negative numbers Orders and compares numbers beyond 1,000 Rounds any number to the nearest 10, 100 or 1,000 **Addition and subtraction** Solves addition and subtraction two-step problems in context, deciding which operations and methods to use and why **Multiplication and division** Recalls multiplication and division facts for multiplication tables up to 12 x 12 **Fractions (including decimals)** Recognises and shows, using diagrams, families of common equivalent fractions Counts up and down in hundredths; recognises that hundredths arise when dividing an object by 100 and dividing tenths by 10 Rounds decimals with one decimal place to the nearest whole number Solves simple measure and money problems involving fractions and decimals to two decimal places	**Measurement** Converts between different units of measure eg kilometre to metre; hour to minute **Geometry: properties of shape** Compares and classifies geometric shapes, including quadrilaterals and triangles, based on their properties and sizes Identifies lines of symmetry in two dimensional shapes presented in different orientations Geometry: position and direction Plots specified points and draws sides to complete a given polygon **Statistics** Solves comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs

Year 4 - Science

Topic / Area of study	Description	The skills the girls will develop through this topic
Animals, including humans States of Matter 	We will learn to describe the simple functions of the basic parts of the human digestive system, will learn to identify different types of teeth and their simple functions and will construct and interpret food chains, identifying producers, predators and prey.	To work scientifically Set up simple practical enquiries and comparative and fair tests Make accurate measurements using standard units, using a range of equipment To understand living things and humans Give reasons for classifying plants and animals based on specific characteristics To investigate materials Compare and group materials together according to whether they are solids, liquids or gases Observe that some materials change state when they are heated or cooled To investigate sound and hearing Identify how sounds are made and recognise that sounds get fainted as the distance from the source increases
States of Matter Sound 	We will explore a variety of everyday materials and develop simple descriptions of the states of matter (comparing and grouping materials together according to whether they are solids, liquids or gases). Moreover, we will use scientific enquiry to discover what happens to a material when it is heated or cooled and measure or research the temperature at which this happens in degrees Celsius. We will also be investigating the water cycle and learn to identify the part played by evaporation and condensation and associate this with temperature or other variables.	
	We will explore and identify the way sound is made through vibration, looking at a range of different musical instruments from around the world and finding out how the pitch and volume of sounds can be changed in a variety of ways. We will learn to recognise that vibrations of sounds travel through a medium to the ear.	
Electricity Living things and their habitats 	We will learn that living things can be grouped in a variety of ways; we will explore and use classification keys for identification purposes and through investigation of the local environment we will learn that environments change causing dangers to living things.	

Year 4 - History

Topic / Area of study	Description	The skills the girls will develop through these topics
Ancient Egypt 	Journeying back to the land of the Pharaohs, we will discover Tutankhamen's ancient tomb, the importance of the River Nile and its role in everyday life, the grisly world of mummification and embalming, the pyramids and the importance of artefacts in understanding the past (including hieroglyphics). We will also take our own trip back in time exploring *Journeys in Ancient Egypt* an exhibition and museum visit at Ipswich Museum.	To use evidence to ask questions and find answers to questions about the past. To use more than one source of evidence for historical enquiry to gain a more accurate understanding of history. To give a broad overview of life in Britain. To describe the characteristic features of the past, including beliefs, ideas, attitudes and experiences of men, women and children. To understand the concept of change over time, representing this, along with evidence, on a timeline. To use historical vocabulary to communicate, including: dates, time period, era, change and chronology.
Victorians 	In the Spring term, we will step back into the nineteenth century to find out who Queen Victoria was and what she was like. We will discover the similarities and differences between life today and then and explore some of the social and technological advances of the age, including Brunel's bridges and the Industrial Revolution. We will also consider the role of the arts and entertainment (from music halls to Punch and Judy puppets).	
Health 	In the Summer term we will look at how the notion of health has changed through the ages. From the discovery of microbes to the first hospital, we will explore the work of some extraordinary people and look at how advances in medical care (such as antiseptics, anesthetics and better nursing standards) helped to reduce death rates from some gruesome diseases and the role that the medical profession has today.	

Year 4 - Geography

Topic / Area of study	Description	The skills the girls will develop through this topic
Africa	Exploring Africa's rich and diverse landscape, we will develop an understanding of the many countries that make up this continent of contrasts. From the Atlas Mountains of the North to the savannah spanning the central region spreading to South Africa and Madagascar, we will explore the various topographical features, locate countries using atlases, maps and digital mapping, identify similarities and differences between the UK and a country in Africa and find out about everyday life. Moreover, we will also use the varied landscapes to inspire writing and art.	To describe key aspects of physical and human geography. To describe geographical similarities and differences between countries. To ask and answer geographical questions about the physical and human characteristics of a location. To use maps, atlases, globes and digital/computer mapping to locate countries and describe features. To use a range of resources to identify the key physical and human features of a location.
East Anglia, Rivers and the Water Cycle	In the Spring term, Year 4 will navigate their way towards an understanding of rivers, their uses, features and effect on the environment. We will study the water cycle, find out how rivers are formed, investigate why rivers are important and what they are used for, river pollution and its effects as well as exploring the local rivers of East Anglia (including the River Stour, River Colne, Great Ouse, Nene etc). We will also compare our local rivers to another region of the world to compare its size and uses.	
Coastal Study	As part of our local geographical study, we will be learn to recognise key coastal features, research and understand different sea defences and consider the impact of coastal erosion. Moreover, our work will look at how coastal features can change over time and help us to become aware of the dangers of coastal erosion and the importance of preserving the environment.	

Year 4 – Additional Subjects

RE
Topics to be covered: Christianity –Churches and what happens inside them Hinduism – Living as a Hindu Buddhism – The Buddha
PSHCEE/Philosophy
Topics to be covered: It's Our World! – The wider community and local democracy/Rights and Responsibilities/Environmental Awareness and Sustainability Say No! – Drugs Education/Feeling Safe/Anti-bullying Money Matters – Understanding finance and money/Shopping and budgeting/Risk and debt/Goal setting and motivation Who Likes Chocolates? – Fairtrade/Globalisation inequalities/Hunger and Poverty/Media and stereotyping People Around Us – Global citizenship/Different identities around the world/Challenging prejudice/Support networks Growing Up! – Differences growing up/Managing change
Computer Science
To give examples of the risks posed by online communications To understand that comments made online that are hurtful are the same as bullying To understand what copyright is To use some of the advanced features of applications and devices in order to communicate ideas, work or messages professionally To devise and construct databases using applications designed for this purpose in areas across the curriculum **Coding** Operators: Use reporter operators Control: Use IF THEN conditions to control events or objects Variables and lists: Use variables to store a value To use functions define, set, change show and hide to control variables
Languages
The main focus within French will be speaking and listening. Other strands which will enrich this are reading and writing. The girls will also develop an awareness of the cultural aspects within French speaking provinces. Topics which will be studied include physical descriptions of people, telling the time, places and directions.
Design and Technology

We will be investigating a working mechanism, the processes needed for completion of movement and evaluating the products before engaging in our own design. We will be exploring different tastes, textures and smells to decide how to season dishes and combine ingredients; adapting and using different recipes. We will be using a range of equipment and materials to compete a textile project, using a developing knowledge of stitches. All topics will involve planning, making and evaluating.
Art and Design
The girls will look at the work of some artists relating to the strands of drawing, painting, textiles and printing. A range of techniques will be explored and the girls will be given the opportunity to experiment with different materials.
Music
To continue to sing from memory with accurate pitch and diction To recognise the notes on the musical stave To evaluate music using musical vocabulary to identify areas of likes and dislikes To compose and perform melodic songs To play notes on an instrument with care so that they are clear
PE
Uphold the spirit of fair play and respect in all competitive situations To be able to maintain possession of a ball To follow the rules of the game and play fairly To refine movements into sequences To swim between 25 and 50 metres unaided To use a range of throwing techniques (such as under arm, over arm)
Forest School
Your daughter will have opportunities to develop her skills and knowledge in the following areas: Tool use, Ropes and Knots, Fires, Dens and Shelters, Tree climbing and Flora and Fauna. Personal, Social and Emotional Development is a constant feature throughout all of the sessions as the girls experience supported risk taking, physical challenges, working as part of a group, problem solving, choice, opportunities for reflection, solitude and discussion of feelings and emotions to promote self-awareness, social awareness and positive mental health.