St Mary Federation
Brancaster, Docking, Sedgeford

KS2 - Years 3, 4, 5 & 6

Years 3 and 4 are an exciting time for your child. It is when your children continue their development and become more independent learners. We encourage the children to take a real interest in their learning and to ask questions to deepen their understanding of a particular topic or area.

In years 5 and 6 we encourage the children to take personal responsibility for their own behaviour and their learning. By the time they leave year 6, we hope that they are well positioned to continue learning at their new High School.

Many of our subjects are taught discretely but we take the opportunity to make cross curricular links wherever possible. In years 3 and 4 we work on a 4 year programme of topics each year, which is outlined on the following pages.

Within this booklet we have also outlined the minimum requirements for the end of each year for Reading, Writing and Maths. These are based on the national curriculum expectations. During your child's lessons we focus on these objectives, however, any additional support you can provide outside of school to enable your child to meet these is greatly valued.

Topic Guide for KS2

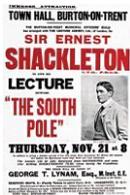## Autumn Year A - September to December 2018 - The Two World Wars

We start this year by finding out about the two world wars. This gives the children to opportunity to understand why these world wars took place and what freedoms were fought for. The children will find out which countries were involved in each war.

We will also look at the contribution our local communities made to the war effort and of the effect of the wars on these communities.

Spring Year A - January to April 2019 - Extreme Earth

In this topic the children will find out about polar expeditions and the men and women involved in these. They will find of about the life of Sir Ernest Shackleton and the tree British expeditions that he led to the Antarctic.

In the second half of term the children will find out all about mountains, earthquakes and volcanoes.

Summer Year A - April to July 2019 - Blue Planet

In this topic we will study the water cycle and the life in our rivers and seas.

We will then turn our attention to environmental pollution such as plastics which pollute the oceans and the effect that this is having on the ecosystem.

The children will also look at alternative energies and some of the ways that we can help to protect our planet.

Autumn Year B - September to December 2019 – Empire Builders

We start this year by finding out about the Roman empire. The children will study how the British Isles was affected by the Roman invasion and look at how their influence is still felt today.
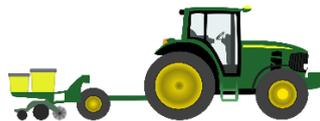
We will then look at the Victorian era and some of the most influential Victorians such as Brunel and Queen Victoria.

Through these topics the children will learn more about British life and develop their skills in studying history and geography.

Spring Year B - January to April 2020 – Food Glorious Food

In this topic the children will find out about our farming and fishing communities and learn where our food comes from and how it gets to us.

They will learn about the importance of a healthy and balanced diet.

Summer Year B - April to July 2020 – The Greeks

In this topic children will be able to investigate some of the mythological creatures from Greek myth.

They will also be able to study the history of the Olympic games and think about the importance of sport to modern life.

End of Year 3 and 4 Reading Expectations

Word Reading:

- **I** can apply knowledge of root words, prefixes and suffixes to read aloud and to understand the meaning of unfamiliar words.
- I can read further exception words, noting the unusual correspondences between spelling and sound.

Comprehension:

- I read a range of fiction, poetry, plays and non-fiction texts.
- I can read books that are structured in different ways.
- I can use a dictionary to check the meaning of words I have read.
- I can retell a range of books and can also identify themes in them.
- I can prepare poems and plays to read aloud and perform.
- I can discuss words and phrases that are interesting.
- I can understand books that I have read by: explaining the meaning of words; by asking questions about the text; by inferring characters' feelings, thoughts and motives; by predicting what may happen next based on what I have already read; by identifying the main ideas in the text and identifying how the language, structure and presentation contribute to meaning.
- I can find and record information from non-fiction texts.
- I can discuss books that I have read and have had read to me.

End of Year 3 and 4 Writing Expectations

Spelling:

- I can spell words with additional prefixes and suffixes and understand how to add them to root words.
- I can recognise and spell homophones.
- I can spell the commonly misspelt words from the Y3/4 word list.
- I can use the possessive apostrophe accurately.
- I can use the first two or three letters of a word to check its spelling in a dictionary.

Handwriting:
- I use the diagonal and horizontal strokes that are needed to join letters.
- I understand which letters should be left un-joined.
- I can improve the legibility, consistency and quality of my handwriting.

Composition:
- I can discuss models or writing, noting its structure, grammatical features and use of vocabulary.
- I can discuss and record my ideas.
- I can compose and rehearse sentences building a rich and varied vocabulary using an increasing range of structures.
- I can organise paragraphs around a theme.
- In Narratives, I can create settings, characters and plot.
- In non-fiction, I can use simple organisational devices such as headings and subheadings.
- I can say how effective my own writing is, and the writing of others', by: suggesting changes to grammar and vocabulary and by proof-reading for spelling and punctuation errors.
- I can read aloud my writing using expression, so the meaning is clear.

Vocabulary, grammar and punctuation:
- I can extend the range of my sentences using more than one clause by using a wider range of conjunctions including when, if, because and although.
- I can use the present perfect form of verbs.
- I can use nouns and pronouns appropriately for clarity and cohesion avoiding repetition.
- I can use conjunctions, adverbs and prepositions to express time and cause.
- I can use fronted adverbials with commas.
- I can use possessive apostrophes.
- I can use accurate speech punctuation.

End of Year 3 Maths Expectations

Number:
- I can compare and order numbers to 1000 and read and write numbers to 1000 in numerals and words.
- I can count from 0 in multiples of 4, 8, 50 and 100.
- I can recognise the value of each digit in a 3-digit number.
- I can solve number and practical problems.
- I can derive and recall multiplication facts for 3, 4 and 8X tables.
- I can add and subtract mentally combinations of 1-digit, 2-digit and 3-digit numbers.
- I can add and subtract numbers with up to 3-digits using formal written methods.
- I can estimate the answer to a calculation and use the inverse operation to check answers.
- I can solve problems, including missing number problems, using number facts, place value and more complex addition and subtraction.
- I can write and calculate mathematical statements for multiplication and division using the 2X, 3X, 4X, 5X, 8X and 10X tables.
- I can calculate 2-digit x 1-digit using mental methods and progressing to formal written methods.
- I can solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems.
- I can solve one and two step number problems
- I understand and can count in tenths and find the fractional value of a given set.
- I can add and subtract fractions from a common denominator.
- I can recognise and use fractions as numbers.
- I can recognise and show, using diagrams, equivalent fractions with small denominators.
- I can solve problems involving fractions.

Measurement and Geometry:
- I can identify right angles and compare other angles stating whether they are greater or smaller than a right angle.
- I can recognise angles as a property of shape or description of a turn.
- I can identify horizontal and vertical lines and pairs of perpendicular and parallel lines.
- I can tell the time to the nearest minute and use specific vocabulary, including seconds, am/pm.
- I can draw 2D shapes and make 3D shapes using modelling materials and recognise 3D shapes in different orientations and describe them.
- I can measure, compare, add and subtract using common metric measures.
- I can add and subtract amounts of money to give change, using both £ and p in practical contexts.
- I can estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight.
- I know the number of seconds in a minute and the number of days in a month and year.
- I can compare durations of events.

Statistics:
- I can solve one and two step problems using information presented in scaled bar charts, pictograms and tables.
- I can interpret and present data using bar charts, pictograms and tables.

End of 4 Maths Expectations

Number:

- I can recall all multiplication facts to 12 X 12.
- I can count in multiples of 6, 7, 9, 25 and 1000.
- I can find 1000 more or less than a given number.
- I can recognise the place value of each digit in a four-digit number.
- I can order and compare numbers beyond 1000.
- I can identify, represent and estimate numbers using different representations.
- I can solve number and practical problems.
- I ca read Roman numerals to 100 (C) and know that over time, the numeral system changed to include the concept of 0 and place value.
- I can round any number to the nearest 10, 100 or 1000 and decimals with one decimal place to the nearest whole number.
- I can count backwards through zero to include negative numbers.
- I can add and subtract with up to 4-digital places using formal written methods of columnar addition and subtraction.
- I can solve two step addition and subtraction problems in context.
- I can estimate and use inverse operations to check answers to a calculation.
- I can divide a 1 or 2 digit number by 10 or 100 identifying the value of the digits in the answer as units, tenths and hundredths.
- I can multiply 2-digit and 3-digit numbers by a 1-digit number using formal written layout.
- I can solve problems involving multiplication.
- I can recognise and use factor pairs in mental calculations.
- I can compare numbers with the same number of decimal places up to 2-decimal places.
- I can recognise and write decimal equivalents of any number of tenths or hundredths.

Measurement, Geometry and Statistics:

- I can convert between different units of measure.
- I can compare and classify geometrical shapes, involving quadrilaterals and triangles, based on their properties and sizes.
- I can identify lines of symmetry in 2D shapes presented in different orientations.
- I can complete a simple symmetric figure with respect to line of symmetry.
- I can measure and calculate the perimeter of a rectilinear figure in cm and m.
- I can find the area of rectilinear shapes by counting squares.
- I can estimate, compare and calculate different measures, including money in pounds and pence.
- I can read, write and convert between analogue and digital 12 and 24 hour times.
- I can solve problems involving converting hours to minutes; minutes to seconds; years to months; weeks to days.
- I know that angles are measured in degrees and can identify acute and obtuse angles.
- I can compare and order angles up to two right angles by size.

Position and Direction:

- I can describe position on a 2D grid as coordinates in the first quadrant.
- I can describe movement between positions as translations of a given unit to the left/right and up/down.
- I can plot specific points and draw sides to complete a give polygon.

Statistics:

- I can solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
- I can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.

End of Year 5 and 6 Reading Expectations

Word Reading:

- **I** can apply knowledge of root words, prefixes and suffixes to read aloud and to understand the meaning of unfamiliar words.

Comprehension:

- I maintain a positive attitude to reading by reading and discussing a wider range of books and text types, including myths, legends and traditional stories and books form other cultures and traditions.
- I can read non- fiction texts and identify the purpose, structure and grammatical features, evaluating how effective they are.
- I can recommend books to my peers.
- I can recite poems by heart.
- I can prepare poems and plays to read aloud and to perform, showing understanding through intonation, tone, volume and action.
- I can check a book makes sense by exploring the meaning of words.
- I can predict what might happen in a book.
- I can summarise main ideas.
- I can discuss and evaluate how authors use language.
- I can distinguish between fact and fiction.
- I can retrieve information form a text.
- I can talk about books I have read and provide justifications for my views.

End of Year 5 and 6 Writing Expectations

Spelling:

- **I** understand the rules for adding prefixes and suffixes.
- I can spell words with silent letters.
- I can distinguish between homophones and other words which are often confused.
- I can spell the commonly misspelt words form the year 5/6 word list.
- I can use the first 3 or 4 letters of a word to check spelling, meaning or both in a dictionary.
- I can use a thesaurus.
- I can use a range of spelling strategies.

Handwriting:

- I can choose the style of handwriting to use when given a choice.
- I can choose the handwriting that is best suited to a specific task.

Composition:

- I can plan my writing by identifying audience and purpose.
- I can note down and develop ideas.
- I can think about how characters are formed.
- I can draft and write pieces of text by choosing the appropriate vocabulary, understanding how my choices can change and improve meaning.
- I can describe setting, character and atmosphere.
- I can summarise longer pieces of text.
- I can use cohesive devises and other organisational techniques.
- I can evaluate and edit my work.

Grammar:

- I can use passive and active voice and the subjunctive form in formal writing.
- I can use expanded noun phrases.
- I can use modal verbs.
- I can use relative clauses.

Punctuation:

- I can use commas and hyphens to avoid ambiguity.
- I can use brackets, dashes and commas to give more information.
- I can use colons to introduce a list.
- I can use semi-colons, colons and dashes to mark clauses.

End of Year 5 Maths Expectations

Number:
- **I** can count forward and backwards in steps of 10 from any given number up to 1,000,000.
- I can read, write and compare numbers to 1,000,000 and determine the value of each digit.
- I can interpret negative numbers in context.
- I can round any number up to 1,000,000 to the nearest 10,100,1000,10000 and 100,000.
- I can solve number and practical problems.
- I can read Roman numerals to 1000 and recognise years written in Roman numerals.
- I can add and subtract whole numbers with more than 4 digits, including using formal written methods.
- I can add and subtract numbers mentally with increasingly large numbers.
- I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.
- I recognise and use thousandths and relate then to tenths, hundredths and decimal equivalents.
- I recognise mixed numbers and improper fractions and can convert from one to the other.
- I can read and write decimal numbers as fractions.
- I recognise the % symbol and understand percent relates to a number of parts per hundred.
- I can write percentages as fractions with the denominator as 100 and as a decimal fraction.
- I can compare and add fractions whose denominators are all multiples of the same number.
- I can add and subtract fractions with the same denominator and denominators that are multiples of the same number.
- I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
- I can read and write decimal numbers as fractions.
- I can identify, name and write equivalent fractions of a given fraction.
- I can multiply and divide numbers mentally drawing on known facts up to 12 X 12.
- I can round decimals with 2dp to the nearest whole number and to 1dp.
- I recognise and use square numbers and cube numbers and can use the notation 2 and 3.
- I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.
- I can multiply numbers up to 4-digit by a 1-digit or 2-digit number using formal written methods including long multiplication for 2-digit numbers.
- I can divide numbers up to 4-digit by a 1-digit number.
- I can solve problems involving multiplication and division where large numbers are used by decomposing them into factors.
- I can solve addition and subtraction multi-step problems in context deciding which operations and methods to use and why.
- I can solve problems involving numbers up to 3dp.

Measurement and Geometry:

- I know that angles are measure in degrees.
- I can estimate and compare acute, obtuse and reflex angles.
- I can draw given angles and measure them in degrees.
- I can convert between different units of metric measures and estimate volume and capacity.
- I can measure and compare the areas of squares and rectangles using standard units.
- I can solve comparison, sum and difference problems using information presented in a line graph.
- I can complete, read and interpret information in tables, using timetables.
- I can solve problems involving converting between units of time.
- I can use all four operations to solve problems including measure using decimal notation, including scaling.
- I can identify 3D shapes including cubes and other cuboids from 2D representations.
- I can use the properties of rectangles to deduce related facts and find missing lengths and angles.
- I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
- I can identify, describe and represent the position of a shape following a reflection or translation using the appropriate language and know that the shape has not changed.

End of Year 6 Maths Expectations

Number:

- **I** can read, write and compare numbers up to 10,000,000 and determine the value of each digit.
- I can use negative numbers in context and calculate intervals across zero.
- I can solve number and practical problems.
- I can round any whole number to a required degree of accuracy and solve problems which require answers to be rounded.
- I can use common factors to simplify fractions.
- I can multiply 1-digit numbers with up to two decimal places by whole numbers.
- I can perform mental calculations including mixed operations.
- I can divide numbers up to 4-digits by a 2-digit whole number using formal written methods of long division and interpret remainders in various ways.
- I can identify common factors, common multiples and prime numbers.
- I can use my knowledge of the order of operations to carry out calculations involving the four operations.
- I can solve problems involving addition, subtraction, multiplication and division.
- I can use estimation to check answers to calculations and determine, in context of a problem, an appropriate degree of accuracy.
- I can use my knowledge of order of operations to carryout calculations involving all four operations.
- I can compare and order fractions including >1.
- I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
- I can multiply simple pairs of proper fractions, writing the answer in its simplest form.
- I can divide proper fractions by whole numbers.
- I can associate a fraction with division and calculate decimal fraction equivalents.
- I can identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places.
- I can multiply one-digit numbers with up to two decimal places by whole numbers.
- I can use written division methods in cases where the answer has up to two decimal places.
- I can recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

Ratio and Proportion:

- I can solve problems involving the relative sizes of two quantities where the missing values can be found using integer multiplication and division facts.
- I can solve problems involving the calculation of percentages.
- I can solve problems involving similar shapes where the scale factor is known and can be found.
- I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

Algebra:

- I can use simple formulae.
- I can express missing number problems algebraically.
- I can find pairs of numbers that satisfy number sentences involving two unknowns.
- I can enumerate all possibilities of combinations of two variables.

Measurement and Geometry:

- I can solve problems involving the calculation and conversion of units of measure using decimal notation up to three decimal places where appropriate.
- I can convert between miles and kilometers.
- I can recognise that shapes with the same area can have different perimeters and visa versa.
- I can recognise when it is possible to use formulae for area and volume of shapes.
- I can recognise, describe and build 3D shapes including their nets.
- I can draw 2D shapes when given dimensions and angles.
- I can compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangle, quadrilateral or regular polygon.
- I can illustrate and name parts of a circle, including radius, diameter and circumference and know that the radius is half the diameter.
- I can read, write and convert between standard units using decimal notation of up to 3 decimal places.
- I can calculate the area of a parallelogram and triangles and calculate, estimate and compare volume of cubes and cuboids using standard units.
- I can interpret and construct pie charts and line graphs and use these to solve problems.
- I can interpret the mean as an average.
- I can describe positions on the full coordinate grid.
- I can draw and translate simple shapes on the coordinate plane and reflect them in the area.