Ratio and proportion

Solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts.

Solve problems involving the calculation of percentages [for example, of measures and such as 15% of 360] and the use of percentages for comparison.

Solve problems involving similar shapes where the scale factor is known or can be found. Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

Algebra

Use simple formulae.

Generate and describe linear number sequences.

Express missing number problems algebraically.

Find pairs of numbers that satisfy an equation with 2 unknowns.

Enumerate possibilities of combinations of 2 variables.

Measurement

Solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate.

Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 decimal places.

Convert between miles and kilometres.

Recognise that shapes with the same areas can have different perimeters and vice versa. Recognise when it is possible to use formulae for area and volume of shapes.

Calculate the area of parallelograms and triangles.

Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units [for example, mm^3 and km^3].

Geometry - properties of shapes

Draw 2-D shapes using given dimensions and angles.

Recognise, describe and build simple 3-D shapes, including making nets.

Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.

Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.

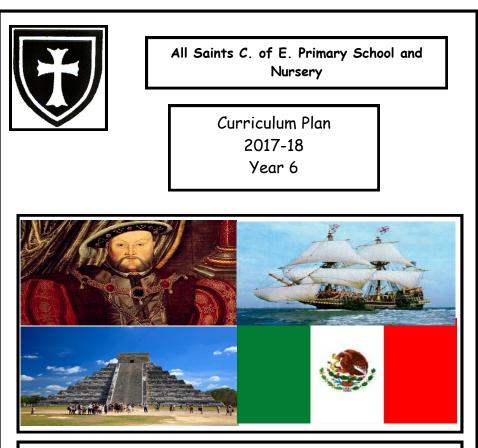
Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.

Geometry - position and direction

Describe positions on the full coordinate grid (all 4 quadrants). Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

Statistics

Interpret and construct pie charts and line graphs and use these to solve problems. Calculate and interpret the mean as an average.



Curriculum Plan

Dear Parent

This curriculum plan is designed to give you information about the main topics and themes which are planned to be taught to your child during the academic year 2017-18. We hope that this will be of assistance to you should you wish, for example, to visit the library or plan visits around these.

Please note that this plan is subject to adaptation if and when necessary.

Class Teacher: Mr Richard Sanders

Curriculum Plan 2017—18 Foundation Subjects

| Subject | Autumn Term | Spring Term | Summer Term |
|-----------------------|--|--|---|
| History | The Tudors— Monarchs and Reformation | | Tudor Explorers and The Mayans |
| Geography | | Mexico | Mexico |
| Design & Technology | Tudor Houses | | Food technology - Mexican Food The Great Egg Race |
| Art | Painting - Landscapes 'A sense of place' | Drawing & Sculpture - 'People in action' | Design & textiles- 'What a Performance' |
| Physical Education | Dance Gymnastics Games | Gymnastics Games | Athletics Games |
| Music | Exploring rounds and Cyclic Patterns – Exploring rhythm and pulse in Gamelan music | Songwriter— Exploring lyrics and melody in The Blues | Year 5/6 Performance |

| Homework Provision: | PE Timetable | |
|--|---|--|
| Homework will be set on Friday and be due in on or before the following Wednesday. | PE Thursday & Friday Kit should be brought to school on Monday and remain in school all the week. Children will need trainers and tracksuit (optional) as we will be outside on Thursdays. | |

National Curriculum

Maths Expectations Year 6

Number - addition, subtraction, multiplication and division

Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.

Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context.

Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context.

Perform mental calculations, including with mixed operations and large numbers.

Identify common factors, common multiples and prime numbers.

Use their knowledge of the order of operations to carry out calculations involving the 4 operations.

Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.

Solve problems involving addition, subtraction, multiplication and division.

Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

Number - Fractions (including decimals and percentages)

Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.

Compare and order fractions, including fractions >1.

Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.

Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, 1/4× 1/2= 1/8].

Divide proper fractions by whole numbers [for example, 1/3÷ 2 = 1/6].

Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8].

Identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places.

Multiply one-digit numbers with up to 2 decimal places by whole numbers.

Use written division methods in cases where the answer has up to 2 decimal places.

Solve problems which require answers to be rounded to specified degrees of accuracy. Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

Writing - Spelling/Handwriting and presentation

Use further prefixes and suffixes and understand the guidance for adding them. Spell some words with 'silent' letters [for example, knight, psalm, solemn]. Continue to distinguish between homophones and other words which are often confused.

Use knowledge of morphology and etymology in spelling and understand that the spelling of some words needs to be learnt specifically.

Use dictionaries to check the spelling and meaning of words, use the first 3 or 4 letters of a word to check spelling, meaning or both of these in a dictionary and use a thesaurus.

Write legibly, fluently and with increasing speed by:

choosing which shape of a letter to use when given choices and deciding whether or not to join specific letters; choosing the writing implement that is best suited for a task.

Writing - composition

<u>Plan their writing by:</u>

identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own;

noting and developing initial ideas, drawing on reading and research where necessary; in writing narratives, considering how authors have developed characters and settings in what pupils have read, listened to or seen performed.

Draft and write by:

selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning;

in narratives, describing settings, characters and atmosphere and integrating dialogue to convey character and advance the action;

précising longer passages;

using a wide range of devices to build cohesion within and across paragraphs; using further organisational and presentational devices to structure text and to guide the reader [for example, headings, bullet points, underlining];

Evaluate and edit by:

assessing the effectiveness of their own and others' writing;

proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning;

ensuring the consistent and correct use of tense throughout a piece of writing; ensuring correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing the appropriate register. Proofread for spelling and punctuation errors.

Perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear.

Reading - word reading

Apply their growing knowledge of root words, prefixes and suffixes (morphology and etymology), both to read aloud and to understand the meaning of new words that they meet.

Reading - comprehension

Maintain positive attitudes to reading and an understanding of what they read by:

continuing to read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or textbooks;

reading books that are structured in different ways and reading for a range of purposes; increasing their familiarity with a wide range of books, including myths, legends and traditional stories, modern fiction, fiction from our literary heritage, and books from other cultures and traditions;

recommending books that they have read to their peers, giving reasons for their choices; identifying and discussing themes and conventions in and across a wide range of writing; making comparisons within and across books;

learning a wider range of poetry by heart;

preparing poems and plays to read aloud and to perform, showing understanding through intonation, tone and volume so that the meaning is clear to an audience.

Understand what they read by:

checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context; asking questions to improve their understanding; drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence; predicting what might happen from details stated and implied; summarising the main ideas drawn from more than 1 paragraph, identifying key details that support the main ideas; identifying how language, structure and presentation contribute to meaning. Discuss and evaluate how authors use language, including figurative language, considering the impact on the reader.

Distinguish between statements of fact and opinion.

Retrieve, record and present information from non-fiction.

Participate in discussions about books that are read to them and those they can read for themselves, building on their own and others' ideas and challenging views courteously. Explain and discuss their understanding of what they have read, including through formal presentations and debates, maintaining a focus on the topic and using notes where necessary provide reasoned justifications for their views.

| Writing - vocabulary, grammar and punctuation | | | | |
|---|--|--|--|--|
| Develop their understanding of the concepts set out in by: recognising vocabulary and structures that are appropriate for formal speech and writing, including subjunctive forms; using passive verbs to affect the presentation of information in a sentence; using the perfect form of verbs to mark relationships of time and cause; using expanded noun phrases to convey complicated information concisely; using modal verbs or adverbs to indicate degrees of possibility; using relative clauses beginning with who, which, where, when, whose, that or with an implied (ie omitted) relative pronoun; learning the grammar for years 5 and 6. | | | | |
| <u>Indicate grammatical and other features by:</u> using commas to clarify meaning or avoid ambiguity in writing; using hyphens to avoid ambiguity; using brackets, dashes or commas to indicate parenthesis; using semicolons, colons or dashes to mark boundaries between independent clauses; using a colon to introduce a list; punctuating bullet points consistently. | | | | |
| Use and understand the grammatical terminology accurately and appropriately in discussing | | | | |

National Curriculum Maths Expectations Year 6

Number - number and place value

their writing and reading.

Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.

Round any whole number to a required degree of accuracy.

Use negative numbers in context, and calculate intervals across 0.

Solve number and practical problems that involve all of the above.

| Subject | Autumn Term | Spring Term | Summer Term |
|---------------------|---|---|---|
| Science | Animals including humans - (Circulatory system, diet, exercise, drugs, lifestyle) | Light Living things and Habitat | Electricity Evolution and inheritance |
| Computing | We are Fundraisers- Apply computing skills to develop a product to sell at Christmas Fair We are Simulators— Program simulations to create effects | We are Games Developers- Create an adventure game | We are Web Developers— Create a website |
| Religious Education | Creation - Creation and science: con- flicting or comple- mentary? Incarnation— was Jesus the Messiah? | Gospel - What would Jesus do? Salvation - What difference does the resurrection make for Christians? | Buddhism— Compar- ing and contrasting differing beliefs |
| French | Autour du Monde— (Around the World) | Ma Ville— (My Town) | Le Carnival des animaux— (The Carnival of Animals) |
| PSHE | Relationships / Health and Well Being | Health and Well Being / Relationships | Living in the Wider World |

Useful information: We will be planning trips to support learning in many topic areas as well as preparing for our end of year performance extravaganza!

SATs week

14th—17th May 2018