

Long Term Overview

Year 5



Autumn 1
'Traders & Invaders'

Autumn 2 & Spring 1: 'Earth & Beyond..'

Spring 2
'Super St Helens'

Summer 1 & Summer 2
'Bem vindo ao Brazil!'

Mathematics

Place Value
Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.
Count forwards and backwards with positive and negative whole numbers, including through zero.
Read, write, (order and compare) numbers to at least 1,000,000 and determine the value of each digit.
Read Roman Numerals to 1,000 (M) and recognise years written in Roman Numerals.
Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 & 100,000.
Solve number problems and practical problems that involve all of the above.
Addition & Subtraction
Use rounding to check answers to a calculation and determine, in the context of a problem, levels of accuracy.
Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).
Add and subtract numbers mentally with increasingly large numbers.
Solve addition and subtraction multi-step problems in contexts, deciding

Multiplication & Division
Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.
Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.
Establish whether a number up to 100 is prime and recall prime numbers up to 19.
Recognise and use square numbers and cube numbers, and the notation for squared (²) and cubed (³).
Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000.
Multiply and divide numbers mentally, drawing upon known facts.
Fractions
Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.
Recognise mixed numbers and improper fractions and convert from one form to the

Multiplication & Division
Multiply number up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers.
Multiply and divide numbers mentally, drawing upon known facts.
Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.
Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes.

Decimals and percentages
Read and write decimal numbers as fractions
Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
Round decimals with 2 decimal places to the nearest whole number and to 1 decimal place.
Read, write, order and compare numbers with up to three decimal places.
Recognise the per cent symbol (%) and understand that per cent relates to "number of parts per 100", and write percentages as a fraction with denominator 100, and as a decimal fraction
Solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and

Properties of Shape
Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
Use the properties of rectangles to deduce related facts and find missing lengths and angles.
Identify 3-D shapes, including cubes and other cuboids, from 2-D representations.
Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.
Draw given angles and measure them in degrees.
Identify:
- angles at a point and whole turn (360°)
- angles at a point on a straight line and ½ a turn (total 180°)
- other multiples of 90°
Position & Direction
Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and

Decimals
Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000.
Solve problems involving number up to three decimal places.
Place Value
Interpret negative numbers in context.
Measurement
(links to Decimal's topic above)
Convert between units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre).
Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.
Use all four operations to solve problems involving measure (e.g. money)

which operations and methods to use and why.

Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.

other and write mathematical statements ≥ 1 as a mixed number.

Compare and order fractions whose denominators are all multiples of the same number. Add and subtract fractions with the same denominator and denominators that are multiples of the same number

Solve problems involving multiplication and division, including scaling by simple fractions and problem-solving simple rates.

Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.

Fractions

Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams

fractions with a denominator of a multiple of 10 or 25.

Perimeter and Area

Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.

Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes.

Statistics

Complete, read and interpret information in tables, including timetables.

Solve comparison, sum and difference problems using information presented in a line graph.

know that the shape has not changed.

Solve problems involving converting between units of time.

Use all four operations to solve problems involving measure using decimal notation including scaling.

Measurement

Estimate volume and capacity

<p>Literacy</p>	<p>Reading: Beowulf: Michael Morpurgo, Narrative Poetry- <i>The Highwayman</i>, Anglo-Saxon/ Viking- related information texts, <i>There's a Viking in my Bed</i>, <i>The Green-Eyed Gods</i></p> <p>Writing: Beowulf: Michael Morpurgo (focus text) Narrative Story endings, settings characters, poetry, figurative language.</p> <p>SPaG: word classes, prefixes, suffixes, prepositions, inverted commas, adjectives, clauses and phrases.</p> <p>Spelling: Recap of mixed spellings from previous years, statutory word list spellings at random, -cious, -tious, -cial, -tial, -ancy, -ency, -ance, -ence, -ent, -ant, -able, -ible, -able, -ably word endings, consolidation.</p> <p>Handwriting: recap basic joins</p>	<p>Reading: Poetry about nature & <i>'A Christmas Carol'</i> - Charles Dickens, topic-related texts (Biomes and the earth), Stories from Other Cultures</p> <p>Writing: Poetry <i>A Christmas Carol</i> (focus text)</p> <p>Descriptive writing.</p> <p>SPaG: capital letters and full stops, apostrophes, types of nouns, synonyms and antonyms, plural nouns, statements, questions and commands, direct and indirect speech.</p> <p>Spelling: -ably, -ibly, vowel suffixes, hyphenated words, consolidation.</p> <p>Handwriting</p>	<p>Reading: <i>'The Iron Man'</i>- Ted Hughes Space Plays, Non-Fiction (topic-related) texts</p> <p>Writing: <i>'The Iron Man'</i>- Ted Hughes (focus text) Newspaper report, direct/indirect speech, interviews.</p> <p>SPaG: adverbs & adverbial phrases, connectives/ conjunctions, commas for ambiguity, verb tenses, homophones, homonyms, homographs</p> <p>Spelling: i before e and exceptions, -ough word endings, silent letters, consolidation.</p> <p>Handwriting</p>	<p>Reading: <i>'The Unforgotten Coat'</i>- Frank Cottrell Boyce (Local Author)</p> <p>Writing: Shakespeare- Hamlet Letters, soliloquys, balanced arguments/discursive texts</p> <p>SPaG: nouns/adjectives into verbs, adjectives and adverbs, punctuation, pronouns, missing verbs, modifiers.</p> <p>Spelling: Plurals, double consonants, tricky words/common exceptions, consolidation.</p> <p>Handwriting</p>	<p>Reading: <i>'The Explorer'</i> – Katherine Rundell, texts from Literacy Shed and topic-related non-chronological reports.</p> <p>Writing: Non-Chronological Reports</p> <p>SPaG: parenthesis-relative clauses, colons for a clause and semi-colons, ellipsis, bullet points, modal verbs.</p> <p>Spelling: homophones, consolidation.</p> <p>Handwriting</p>	<p>Reading: (See previous half-term) Amazon Rainforest texts</p> <p>Writing: Persuasive Letters/Writing.</p> <p>SPaG: review of: inverted commas, commas for ambiguity, homophones, clauses. Levels of formality.</p> <p>Spelling: Application of taught spelling rules in writing/revision of any misconceptions and common errors, consolidation, Y5 statutory word list assessment.</p> <p>Handwriting</p>
<p>Religious Education</p>	<ul style="list-style-type: none"> • Domestic Church/Family: Ourselves • Baptism/Confirmation-Belonging: Life Choices 	<ul style="list-style-type: none"> • Other Religions (Hinduism & Judaism) • Advent/Christmas-Loving: Hope 	<ul style="list-style-type: none"> • Local Church/Community: Mission • Eucharist-Relating: Memorial Sacrifice 	<ul style="list-style-type: none"> • Eucharist-Relating: Memorial Sacrifice • Lent/ Easter-Giving: Sacrifice 	<ul style="list-style-type: none"> • Pentecost-Serving: Transformation • Reconciliation-Inter-relating: Freedom and Responsibility 	<ul style="list-style-type: none"> • Reconciliation-Inter-relating: Freedom and Responsibility • Universal Church: Stewardship

Science

Life Cycles

- describe the differences between life cycles of mammals, amphibians, insects and birds.
- describe the process of reproduction in some plants and animals.

Earth and Space

- describe the movement of the Earth, and other planets, relative to the Sun in the solar system
- describe the movement of the Moon relative to the Earth
- describe the Sun, Earth and Moon as approximately spherical bodies
- use the idea of the Earth's rotation to explain day and night, and the apparent movement of the sun across the sky.

Light

- recognise that light appears to travel in straight lines
- use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye
- explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes
- use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them

Gravity

- explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object

Properties of Materials

- compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.
- understand that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.
- use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.
- give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic
- demonstrate that dissolving, mixing and changes of state are reversible changes.
- explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.

Computing	<ul style="list-style-type: none"> • Word Processing • E-Safety 	<ul style="list-style-type: none"> • Coding 	<ul style="list-style-type: none"> • Databases • E-safety week 	<ul style="list-style-type: none"> • Spreadsheets 	<ul style="list-style-type: none"> • Concept Maps 	<ul style="list-style-type: none"> • 3D modelling • Game Creator
History	<p><u>Anglo-Saxons, Vikings and Scots</u></p> <ul style="list-style-type: none"> • Choose reliable sources of information to find out about the past • Give reasons why changes have occurred • Describe similarities and differences between Anglo Saxon and Viking Britain • Make links between some of the features of past societies e.g. homes in Anglo Saxon and Viking Britain • Understand what Primary and Secondary sources of evidence are and give examples • Use documents and printed sources to collect evidence about the past • Investigate own lines of enquiry by posing questions to answer • Understand that a timeline can be divided into BC and AD and know what BC and AD mean and order significant events, 			<p>Super St Helens! <u>Local History</u></p> <ul style="list-style-type: none"> • St Helens. Prescott and its links to Shakespeare • Choose reliable sources of information to find out about the past • Give reasons why changes have occurred • Use documents and printed sources to collect evidence about the past • Understand that some evidence from the past is opinion or misinformation and that this affects interpretations of history • Begin to develop a sense of empathy 		

	<p>movements and dates on a timeline</p> <ul style="list-style-type: none"> • Describe the main changes in Anglo Saxon and Viking Britain • Understand that some evidence from the past is opinion or misinformation and that this affects interpretations of history • Begin to develop a sense of empathy • Communicate ideas about the past using different genres of writing, • Plan and present a self-directed project about an aspect of Anglo Saxon or Viking Britain <p><u>Black History Month</u> (discrete)</p>			<ul style="list-style-type: none"> • Communicate ideas about the past using different genres of writing, 		
<p>Geography</p>		<p><u>Earth & beyond...</u> World Biomes</p> <ul style="list-style-type: none"> • Identify the world's main biomes • Describe and understand human and physical features within the biomes • Compare and contrast life in the biomes • Identify some of the natural resources found in the biomes 				<p><u>Bem vindo ao Brazil:</u> An in-depth South American country study</p> <ul style="list-style-type: none"> • Name and locate main countries and cities in South America. • Explore fair and unfair distribution of the economy in Brazil. • Explore and compare weather patterns in Brazil to the UK. • Understand geographical similarities and differences through the study of human and physical geography in Brazil. E.g. weather, transport, land use, population and environmental issues. • Revisit the 8 points of a compass ('Fast Five')

		<ul style="list-style-type: none"> Use atlases, maps and globes to identify biomes and vegetation belts 			<ul style="list-style-type: none"> Recap 4- figure grid references and use 6 figure references. Use O.S maps to explore regions in Brazil and compare them with a local area in the UK Use google earth when exploring Brazil. 	
Art	Pop Art- Andy Warhol and Roy Lichtenstein Portraits	Christmas Cards	Walter Mason -Digital Images and 3D Sculptures of the Natural World		Beatriz Milhazes (South American Art)	
Music	The Highwayman (class text): inspiring: <ul style="list-style-type: none"> improvisation composition performance 		Hans Zimmer- 'Earth': <ul style="list-style-type: none"> listening appraising composition 		Brazilian music (samba) <ul style="list-style-type: none"> listening appraising improvisation performance 	
Design Technology		Food Technology: Anglo-Saxon inspired 'Honey Oat Cakes' -Market research 'oat cakes' through research, taste testing and questionnaires. -Identify the health and safety/ hygiene safety rules around cooking -Plan, create, adapt and evaluate a product		3D Sculpture of the Natural World (linked to Walter Mason)		Mechanisms: CAMS (Rainforest)
Physical Education	<ul style="list-style-type: none"> Health-related exercise Boccia 	<ul style="list-style-type: none"> Street Art Game sense invasion 	<ul style="list-style-type: none"> Counter Balance & Counter Tension Handball 	<ul style="list-style-type: none"> Competitions Badminton 	<ul style="list-style-type: none"> Cricket Rounders 	<ul style="list-style-type: none"> Communication Tactics Athletics
PSHE/ 'Happy,	<ul style="list-style-type: none"> Marvellous Me 	<ul style="list-style-type: none"> Working Together (British Values) 	<ul style="list-style-type: none"> Being Responsible 	<ul style="list-style-type: none"> Good to be me! 	<ul style="list-style-type: none"> Relationships 	<ul style="list-style-type: none"> Changes

Healthy Me'. 'Happy, Healthy Me' (Equality Act)	<ul style="list-style-type: none"> • <u>Recognise when someone needs help</u> • Working Together (British Values) • Anti-Bullying Week 	<ul style="list-style-type: none"> • <u>Recognise my freedom</u> • Say no to bullying 	<ul style="list-style-type: none"> • <u>Accept people who are different from me.</u> 	<ul style="list-style-type: none"> • <u>Be who you want to be</u> 		<ul style="list-style-type: none"> • <u>Consider how my life may change as I grow up.</u>
Languages French		Phonetics 1-3 Vegetables		Presenting Myself		Family