

# Long Term Overview Year 5



Autumn 1
<u>'Traders & Invaders'</u>

Autumn 2 &
Spring 1: <u>'Earth & Beyond...'</u>

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

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 multistep 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)

Solve problems involving fractions with a know that the shape has not Solve problems involving which operations and methods to other and write denominator of a changed. converting between units of mathematical statements  $\geq 1$ multiplication and division, use and why. as a mixed number. multiple of 10 or 25. including scaling by simple Solve problems involving Use all four operations to Compare and order fractions fractions and problem-Perimeter and addition, subtraction, solve problems involving whose denominators are all solving simple rates. multiplication and division and Area measure using decimal multiples of the same number. Solve problems involving a combination of these, Measure and calculate the notation including Add and subtract fractions including understanding the addition, subtraction, perimeter of composite scaling. with the same denominator multiplication and meaning of the equals sign. rectilinear shapes in and denominators that are Measurement division and a centimetres and metres. multiples of the same number combination of these, Estimate volume and capacity Calculate and compare including understanding the area of rectangles the meaning of the (including squares), equals sign. and including using Fractions standard units, square centimetres (cm<sup>2</sup>) and Multiply proper square metres (m2) and fractions and mixed estimate the area of numbers by whole irregular shapes. numbers, supported by **Statistics** materials and Complete, read and diagrams interpret information in tables, including timetables. Solve comparison, sum and difference problems using information presented in a line graph.

Literacy	Reading: Beowulf: Michael Morpurgo, Narrative Poetry-The Highwayman, Anglo-Saxon/ Viking- related information texts, There's a Viking in my Bed', 'The Green-Eyed Gods' Writing: Beowulf: Michael Morpurgo (focus text) Narrative Story endings, settings characters, poetry, figurative language. SPaG: word classes, prefixes, suffixes, prepositions, inverted commas, adjectives, clauses and phrases. 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. Handwriting: recap basic joins	Reading: Poetry about nature & 'A Christmas Carol' - Charles Dickens, topic-related texts (Biomes and the earth), Stories from Other Cultures Writing: Poetry A Christmas Carol (focus text) Descriptive writing. SPaG: capital letters and full stops, apostrophes, types of nouns, synonyms and antonyms, plural nouns, statements, questions and commands, direct and indirect speech. Spelling: -ably, -ibly, vowel suffixes, hyphenated words, consolidation. Handwriting	Reading: 'The Iron Man' Ted Hughes Space Plays, Non- Fiction (topic-related) texts Writing: 'The Iron Man' Ted Hughes (focus text) Newspaper report, direct/indirect speech, interviews. SPaG: adverbs & adverbial phrases, connectives/ conjunctions, commas for ambiguity, verb tenses, homophones, homonyms, homographs Spelling: i before e and exceptions, -ough word endings, silent letters, consolidation. Handwriting	Reading: 'The Unforgotten Coat'- Frank Cottrell Boyce (Local Author) Writing: Shakespeare- Hamlet Letters, soliloquys, balanced arguments/discursive texts SPaG: nouns/adjectives into verbs, adjectives and adverbs, punctuation, pronouns, missing verbs, modifiers. Spelling: Plurals, double consonants, tricky words/common exceptions, consolidation.  Handwriting	Reading: 'The Explorer' - Katherine Rundell, texts from Literacy Shed and topic-related non- chronological reports. Writing: Non- Chronological Reports SPaG: parenthesis- relative clauses, colons for a clause and semi- colons, ellipsis, bullet points, modal verbs. Spelling: homophones, consolidation. Handwriting	Reading: (See previous half-term) Amazon Rainforest texts Writing: Persuasive Letters/Writing. SPaG: review of: inverted commas, commas for ambiguity, homophones, clauses. Levels of formality. Spelling: Application of taught spelling rules in writing/revision of any misconceptions and common errors, consolidation, Y5 statutory word list assessment. Handwriting
Religious Education	<ul> <li>Domestic         Church/Family:         Ourselves</li> <li>Baptism/Confirmation-Belonging: Life Choices</li> </ul>	<ul> <li>Other Religions         <ul> <li>(Hinduism &amp; Judaism)</li> </ul> </li> <li>Advent/ChristmasLoving: Hope</li> </ul>	<ul> <li>Local Church/ Community: Mission</li> <li>Eucharist- Relating: Memorial Sacrifice</li> </ul>	<ul> <li>Eucharist- Relating: Memorial Sacrifice</li> <li>Lent/ Easter- Giving: Sacrifice</li> </ul>	<ul> <li>Pentecost- Serving:         <ul> <li>Transformation</li> </ul> </li> <li>Reconciliation- Inter-relating:         <ul> <li>Freedom and</li> <li>Responsibility</li> </ul> </li> </ul>	<ul> <li>Reconciliation- Inter-relating:         <ul> <li>Freedom and</li> <li>Responsibility</li> </ul> </li> <li>Universal         <ul> <li>Church:</li> <li>Stewardship</li> </ul> </li> </ul>

Science	<u>Life Cycles</u>	Properties of
Science	<ul> <li>describe the differences between life cycles of mammals, amphibians, insects and birds.</li> <li>describe the process of reproduction in some plants and animals.</li> <li>Earth and Space</li> <li>describe the movement of the Earth, and other planets, relative to the Sun in the solar system</li> <li>describe the movement of the Moon relative to the Earth</li> <li>describe the Sun, Earth and Moon as approximately spherical bodies</li> <li>use the idea of the Earth's rotation to explain day and night, and the apparent movement of the sun across the sky.</li> <li>Light</li> <li>recognise that light appears to travel in straight lines</li> <li>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</li> <li>explain that we see things because light travels</li> </ul>	Properties of I  compare and group togor materials on the basis of including their hardness, transparency, conductivit thermal), and response the understand that some maked that some maked to form a solution recover a substance from use knowledge of solids, decide how mixtures mixincluding through filtering evaporating.  give reasons, based on explain the suses of everyday material wood and plastic.  demonstrate that dissolve changes of state are reversigned explain that some changes formation of new materiof change is not usually changes associated with action of acid on bicarbox.
	from light sources to our eyes or from light sources to objects and then to our eyes	
	<ul> <li>use the idea that light travels in straight lines to explain why shadows have the same shape</li> </ul>	
	as the objects that cast them	
	<u>Gravity</u>	

explain that unsupported objects fall towards the Earth because of the force of gravity acting

between the Earth and the falling object

#### f Materials

- gether everyday of their properties, ss, solubility, ivity (electrical and to magnets.
- materials will dissolve in on, and describe how to om a solution.
- ls, liquids and gases to night be separated, ring, sieving and
- evidence from ests, for the particular erials, including metals,
- olving, mixing and eversible changes.
- nges result in the erials, and that this kind ly reversible, including th burning and the bonate of soda.

Computing	<ul><li>Word Processing</li><li>E-Safety</li></ul>	• Coding	<ul><li>Databases</li><li>E-safety week</li></ul>	•	Spreadsheets	Concept Maps	•	3D modelling Game Creator
History	Anglo-Saxons, Vikings and Scots  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,			•	Super St Helens! Local History St Helens. Prescot 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			

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	movements and dates on		<ul> <li>Communicate</li> </ul>	
	a timeline		ideas about the	
	<ul> <li>Describe the main</li> </ul>		past using	
	changes in Anglo Saxon		different genres	
	and Viking Britain		of writing,	
	<ul> <li>Understand that some</li> </ul>		, J	
	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,			
	<ul> <li>Plan and present a self-</li> </ul>			
	directed project about an			
	aspect of Anglo Saxon or			
	Viking Britain			
	Black History Month			
	(discrete)			
Geography		Earth & beyond		Bem vindo ao Brazil: An in-depth South
3 1 3		World Biomes		American country study
		<ul> <li>Identify the world's</li> </ul>		<ul> <li>Name and locate main countries and cities in</li> </ul>
		main biomes		South America.
		<ul> <li>Describe and</li> </ul>		<ul> <li>Explore fair and unfair distribution of the</li> </ul>
		understand human		economy in Brazil.
		and physical features		Explore and compare weather patterns in Brazil
		within the biomes		to the UK.
		Compare and		<ul> <li>Understand geographical similarities and</li> </ul>
		contrast life in the		
		biomes		differences through the study of human and
				physical geography in Brazil. E.g. weather,
		Identify some of the		transport, land use, population and
		natural resources		environmental issues.
		found in the biomes		• Revisit the 8 points of a compass ('Fast Five')

		Use atlases, maps and globes to identify biomes and vegetation belts			<ul> <li>Recap 4- figure grid references and use 6 figureferences.</li> <li>Use O.S maps to explore regions in Brazil an compare them with a local area in the UK</li> <li>Use google earth when exploring Brazil.</li> </ul>		
Art	<b>Pop Art-</b> Andy Warhol and Roy Lichtenstein Portraits	<b>Walter Mason</b> -Digital Ir the Naturo Christmas	ıl World		<b>Beatriz Milhazes</b> (South American Art)		
Music	The Highwayman (class text): inspiring: •improvisation •composition • performance		Hans Zimmer- 'Earth':  Ilistening  appraising  composition		Brazilian music (samba)  Iistening  appraising  improvisation performance		
Design Technology	Food Technology: Anglo-Saxon inspired 'Honey Oat Cakes' -Market research 'oat cakes' through research, taste testing and questionnairesIdentify the health and safety/hygiene safety rules around cooking -Plan, create, adapt and evaluate a product			<b>Mechanisms:</b> CAMS (Shakespeare scenes)			
Physical Education	<ul><li>Health-related exercise</li><li>Boccia</li></ul>	<ul><li>Street Art</li><li>Game sense invasion</li></ul>	<ul><li>Counter Balance</li><li>&amp; Counter</li><li>Tension</li><li>Handball</li></ul>	<ul><li>Competitions</li><li>Badminton</li></ul>	<ul><li>Cricket</li><li>Rounders</li></ul>	<ul><li>Communication Tactics</li><li>Athletics</li></ul>	
PSHE/ 'Happy,	Marvellous Me	Working Together (British Values)	Being Responsible	Good to be me!	<ul><li>Relationships</li></ul>	• Changes	

Healthy Me'. 'Happy, Healthy Me' (Equality <u>Act)</u>	•	Recognise when someone needs help Working Together (British Values) Anti-Bullying Week	•	Recognise my freedom Say no to bullying	•	Accept people who are different from me.	•	<u>Be who you want</u> to be	•	Consider how my life may change as I grow up.
<b>Languages</b> French				Phonetics 1-3 Vegetables				Presenting Myself		Family