

Year 5 Maths						
Reads, writes, orders and compares numbers to at least 1,000,000 and determines the value of each digit	Interprets negative numbers in context, counts forwards and backwards with positive and negative whole numbers including through zero	Adds and subtracts whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction)	Numbers mentally with increasingly large numbers (eg 12,462 - 2,300 = 10,162)	Identifies multiples and factors including finding all factor pairs of a number and common factors of two numbers	Solves problems involving multiplication and division including using a knowledge of factors and multiples, squares and cubes	Solves problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates
Compares and orders fractions whose denominators are all multiples of the same number		Reads and writes decimal numbers as fractions eg 0.71 = 71/100		Reads, writes, orders and compares numbers with up to three decimal places		
Solves problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25	Converts between different units of metric measure (eg kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)		Measures and calculates the perimeter of composite rectilinear shapes in centimetres and metres		Calculates and compares the area of rectangles (including squares), and including using standard units, square centimetres (cm <sup>2</sup> ) and square metres (m <sup>2</sup> )	
Draws given angles and measures them in degrees (°)		Distinguishes between regular and irregular polygons based on reasoning about equal sides and angles		Completes, reads and interprets information in tables, including timetables		

Year 5 Reading				
Applies a growing knowledge of root words, prefixes and suffixes (morphology and etymology) - 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	Increases 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		Checks that the book makes sense to the reader, discussing the individual's understanding and exploring the meaning of words in context	Summarises the main ideas drawn from more than one paragraph, identifying key details that support the main ideas
Retrieves, records and presents information from non-fiction		Participates in discussions about books that are read to the child and those that can be read independently		Provides reasoned justifications for their views about a book

Year 5 Writing					
Identifies the audience for, and purpose of, the writing, e.g. formal/ informal texts	Selects the appropriate form and uses other similar writing as models for their own	Proof-reads for spelling and punctuation errors	Ensures the consistent and correct use of tense throughout a piece of writing	Uses further organisational and presentational devices to structure text and to guide the reader (eg headings, bullet points, underlining)	Describes settings, characters and atmosphere with suitable detail, e.g. relative clauses, prepositional phrases, subordination and coordinating conjunctions
Converts nouns or adjectives into verbs using suffixes (eg -ate; -ise; -ify)	Indicates degrees of possibility using adverbs (eg perhaps, surely) or modal verbs (eg might, should, will, must)		Uses devices to build cohesion within a paragraph (eg then, after that, this, firstly)	Uses commas to clarify meaning or avoid ambiguity	Maintains legibility, fluency and speed at an age-appropriate level

**Year 5 Science**

<p><b>Animals, including humans</b> -describe the changes as humans develop to old age</p> <p><b>Earth and Space</b> -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</p>	<p><b>Properties and changes of materials</b> -compare and group together everyday materials based on evidence from comparative and fair tests, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets -know 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, include changes associated with burning and the action of acid on bicarbonate of soda</p>	<p><b>Living things and their habitats</b> -describe the difference in the life cycles of a mammal, an amphibian an insect and a bird describe the life process of reproduction in some plants and animals</p> <p><b>Forces</b> -explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object -identify the effect of air resistance, water resistance and friction, that act between moving surfaces -recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect</p>	<p><b>Working scientifically</b> -plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary -use test results to make predictions to set up further comparative and fair tests -take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate -record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs, report and present findings from enquiries, including conclusions, causal relationships and explanations results, explanations of and degree of trust in results, in oral and written forms such as displays and other presentations -identify scientific evidence that has been used to support or refute ideas or arguments.</p>
---	---	---	--

**Year 5 History**

<p><b>Chronology</b> -Identify significant changes within and across historical periods studied -Understand that continuity and change occurs over time. -Add evidence and dates to timeline to represent this</p>	<p><b>Interpreting and Investigating</b> -Select reliable sources of evidence to answer questions about the past. -Appreciate that there is not always a single answer to historical questions. -Begin to understand the concept of propaganda -Know that people (now and in the past) may represent events in ways that persuade others.</p>	<p><b>Knowledge and Understanding</b> -Describes causes and consequences of the main events, situations and changes in the period studies -Show awareness of social, cultural, religious and ethnic diversities of societies studied in Britain and the wider world. -Identifies links and changes within and across the time periods and localities studied.</p>	<p><b>Topics:</b> -a local history study that investigates a Tudor or Elizabethan site -a non-European society that contrasts with British History, e.g. Benin- West Africa or Mayans</p>
--	---	---	---

**Year 5 Geography**

<p><b>Locational knowledge</b> Locate North America. Locate and name principal cities. Locate countries within Europe. Environmental regions, key physical and human characteristics,</p>	<p><b>Place knowledge</b> -Compare a region in UK with a region in N. America with significant differences and</p>	<p><b>Human and Physical Geography</b> -Describe and understand key aspects of physical geography including coasts, rivers and the water cycle including transpiration; climate zones, biomes and vegetation belt</p>	<p><b>Geographical skills and fieldwork</b> -Build knowledge of UK in the past and present using the eight points of a compass, four-figure</p>	<p><b>Topics:</b> -Improving the environment -Water -North or South</p>
---	--	---	---	---

countries and other major cities. -Identify the position and significance of latitude/longitude and the Greenwich Meridian. Linking with science, time zones, night and day.	similarities	-Describe and understand key aspects of human geography including trade, fair/unfair distribution of resources (Fair-trade)	grid references, symbols and key	America
---	--------------	---	----------------------------------	---------

**Year 5 Design and Technology**

<p><b>Design, make and improve</b></p> <ul style="list-style-type: none"> <li>-Investigate existing products, including drawing them to analyse and understand how they are made.</li> <li>-Plan a sequence of actions to make a product.</li> <li>-Develop more than one design.</li> <li>-Develop prototypes.</li> <li>-Refine work and techniques as work progresses, continually evaluating the product design.</li> <li>-Identify strengths and weaknesses of their design ideas.</li> <li>-Talk about how closely their finished product meets their design criteria and meets the need of the user.</li> </ul>	<p><b>Cooking and nutrition</b></p> <ul style="list-style-type: none"> <li>-Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs).</li> <li>-Measure ingredients using scales.</li> <li>-Prepare ingredients hygienically and using the appropriate utensils by following a recipe.</li> </ul>	<p><b>Construction, mechanics and electronics</b></p> <ul style="list-style-type: none"> <li>-Investigate how to make structures more stable e.g by widening the base.</li> <li>-Understand and use mechanical structures in their products e.g. gears, pulleys, levers and gears.</li> </ul>	<p><b>Materials</b></p> <ul style="list-style-type: none"> <li>-Measure and mark out to the nearest mm.</li> <li>-Use and explore complex pop-ups.</li> <li>-Cut slots and internal shapes.</li> <li>-Create nets.</li> </ul>
---	--	---	---

**Year 5 Art**

<p><b>Drawing</b></p> <p>Use a choice of techniques to depict movement, perspective, shadows and reflections. Use lines to represent movement.</p>	<p><b>Painting</b></p> <p>Sketch (lightly) before painting to combine line and colour. Use the qualities of watercolour and acrylic paints to create visually interesting pieces. Combine colours, tones and tints to enhance the mood of a piece.</p>	<p><b>Collage</b></p> <p>Mix textures (rough and smooth, plain and patterned).</p>	<p><b>Sculpture</b></p> <p>Show life-like qualities and real-life proportions or, if more abstract, provoke different interpretations. Use tools to carve and add shapes, textures and pattern.</p>	<p><b>Print</b></p> <p>Build up a layer of colours.</p>
--	--	--	---	---

**Year 5 Computing**

<p><b>Information Technology</b></p> <ul style="list-style-type: none"> <li>-To type and design an information booklet.</li> <li>-To enter formulae into a spread sheet to solve calculations and model scenarios, including using =SUM() and statistical functions.</li> <li>-To change the format of cells of cells</li> </ul>	<p><b>Digital Literacy</b></p> <ul style="list-style-type: none"> <li>To compare online encyclopaedias for doing Internet research on.</li> <li>To cross-reference search results to help validate information on them.</li> <li>To describe online hazards and how to respond to them safely.</li> <li>To explain the 'Zip it, Block it, Flag it'</li> </ul>	<p><b>Computer Science</b></p> <ul style="list-style-type: none"> <li>- To design and program games that include variables (e.g. for a score counter) and changing object properties (e.g. the speed and direction of a moving car).</li> <li>-To use generate random numbers in code.</li> <li>-To detect and correct errors in programs</li> </ul>	<p><b>Computer Science- theory</b></p> <ul style="list-style-type: none"> <li>-To understand how digital images are stored and displayed on a computer.</li> <li>-To describe the impact of technology on society, including on people's: spiritual, moral, social and cultural development.</li> <li>-To understand what e-commerce is and what its impact is.</li> </ul>
--	---	--	--

<p>using: text alignment, borders and data types.</p> <p>-To create pictures using drawing tools (shapes).</p> <p>-To create a multimedia on-screen presentation over several slides, adding animation and transition effects to enhance it.</p> <p>-To compare ways for manipulating digital images to enhance them.</p>	<p>slogan.</p> <p>-To understand what is meant by the term 'digital footprint' and describe strategies for reducing it.</p> <p>-To know how to stay safe when watching and recording vlogs.</p> <p>-To compare techniques used for manipulating and putting pressure on people online.</p> <p>-To understand how to safely send text messages.</p>	<p>(syntax and logical bugs).</p>	<p>-To find out about the history of computing.</p> <p>-To describe uses of GPS.</p>
---	--	-----------------------------------	--

**Year 5 RE**  
(be able to answer key enquiry questions)

<p><b>Islam</b></p> <p>How do Muslims worship? Why is pilgrimage important to Christians and to Muslims?</p>	<p><b>Islam</b></p> <p>What values are important to Muslims and how do they demonstrate these? How do Muslim families live?</p>	<p><b>Christianity</b></p> <p>What did <u>Jesus</u> teach about love, charity, forgiveness? Why did he teach about these values? How did he show these values? Why is it important to say sorry? How did Jesus demonstrate how he felt about temptation?</p>	<p><b>Christianity</b></p> <p>What impact have other people had on Christians / the <u>church</u> around the world?</p>	<p><b>Christianity</b></p> <p>How do Christians around the world show that they belong to God? How do Christian organisations follow the example set by Jesus?</p>	<p><b>Hinduism</b></p> <p>What is <u>God</u> like for Hindus? How do Hindus <u>worship</u>? How do Hindus celebrate? How is this similar / different to other religions?</p>
--	---	--	---	--	--

**Year 5 PSHE**

<p>Health and wellbeing</p> <p>-about change, including transitions (between Key Stages and schools), loss, separation, divorce and bereavement</p> <p>-how their body will, and emotions may, change as they approach and move through puberty</p> <p>-about taking care of their body, understanding that they have autonomy and the right to protect their body from inappropriate and unwanted contact their body autonomy and rights;</p> <p>-to recognise when and how to ask for help and use basic techniques for resisting pressure to do something dangerous, unhealthy, that makes them uncomfortable, anxious or that they believe to be</p>	<p>Relationships</p> <p>-to begin to understand diversity in families</p> <p>-to judge what kind of physical contact is acceptable or unacceptable and how to respond</p> <p>-the concept of 'keeping something confidential or secret', when we should or should not agree to this and when it is right to 'break a confidence' or 'share a secret'</p>	<p>Living in the wider world</p> <p>-to understand that everyone has human rights, all peoples and all societies and that children have their own special rights set out in the United Nations Declaration of the Rights of the Child</p> <p>-that these universal rights are there to protect everyone and have primacy both over national law and family and community practices</p> <p>-to know that there are some cultural practices which are against British law and universal human rights</p> <p>-that there are different kinds of responsibilities, rights and duties at home, at school, in the community and towards the environment</p>
--	--	---

**Year 5 PE**

<p><b>Games</b></p> <ul style="list-style-type: none"> <li>- Choose and combine techniques within a game (running, throwing, catching, passing, jumping and kicking)</li> <li>- Work alone/ with team mates to gain points/ possession</li> <li>- Strike a bowled/ volleyed ball</li> <li>- Field, defend and attack tactically by anticipating the direction of play</li> <li>- Uphold the spirit of fair play and respect in all competitive situations (e.g. whilst taking part in games such as tag rugby and mini golf)</li> </ul>	<p><b>Dance</b></p> <ul style="list-style-type: none"> <li>- Change speed and levels within a performance</li> <li>- Compose creative/ imaginative dance sequences</li> <li>- Perform expressively and hold a precise/ strong body posture</li> <li>- Develop physical strength and suppleness by practicing moves and stretching.</li> <li>- Plan, create and perform complex sequences</li> <li>- Express different ideas in original and imaginative ways</li> <li>- Use styles from different cultures (e.g. Bollywood and African dances)</li> </ul>	<p><b>Gymnastics</b></p> <ul style="list-style-type: none"> <li>- Plan, perform and repeat sequences</li> <li>- Create complex and well executed sequences that include a full range of movements including:             <ul style="list-style-type: none"> <li>Travelling</li> <li>Balances</li> <li>Swinging</li> <li>Springing</li> <li>Flight</li> <li>Vaults</li> <li>Inversions</li> <li>Rotations</li> <li>Bending, stretching and twisting</li> <li>Gestures</li> <li>Linking skills</li> </ul> </li> <li>- Hold shapes that are strong, fluent and expressive</li> <li>- Vary speed, direction, level and body rotation during floor performances</li> <li>- Practise and refine the gymnastics techniques used in performances (above)</li> <li>- Use equipment to vault and to swing (whilst remaining upright)</li> </ul>	<p><b>Athletics</b></p> <ul style="list-style-type: none"> <li>- Combine sprinting with low hurdles over 60 metres</li> <li>- Throw accurately when hitting a target or covering a distance</li> <li>- Use a range of throwing techniques (under/ over arm)</li> <li>- Run over a longer distance, conserving energy in order to sustain your performance</li> <li>- Show control in take-off and landing whilst jumping</li> <li>- Compete with others and keep track of personal best performances, setting targets for individual improvement</li> </ul>
---	---	---	---

**Year 5 MFL**

<p>I can say and sing the French alphabet; ask how to spell a word; spell out a name in French. I can use numbers and letters to give co-ordinates; use multiples of 10 up to 60; recognise and say some places on the locality. I can follow simple directions; read and understand a short description of a journey. I can build sentences and phrases to make a coherent text. I can understand and give simple directions.</p>	<p>I can say the date and have some knowledge of a French celebration. I can talk about what has been eaten and drunk and express likes, dislikes and preferences. I am able to read and understand a simple recipe for biscuits. Revision of an/en and au/eau</p>	<p>I can recognise and say the names of the 9 planets. I can answer questions about the planets and make sentences to describe the planets. I can make complex sentences in French about the planets and I can prepare a short presentation.</p>	<p>I know the months and seasons in French. I can combine seasons and weather to make longer phrases. I can read and understand and join in a poem. I am able to describe the seasons using colours and antonyms.</p>	<p>I can use colours to give a simple description of a scene. I can use verbs to extend your description and have some understanding of word order. I can put together short sentences showing an understanding of word order. I am able to use new and previously learnt language to create a poem.</p>
--	--	--	---	--