Year 6 Maths						
Rounds any whole number to a required degree of accuracy	Uses negative numbers in context and calculates intervals across zero	Multiplies multi-digit numbers up to four digits by a two-digit whole number using the formal written method of long multiplication	Divides numbers up to four digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context	Solves addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	Uses estimation to check answers to calculations and determines, in the context of a problem, an appropriate degree of accuracy	Uses written division methods in cases where the answer has up to two decimal places
Solves problems which require answers to be rounded to specified degrees of accuracy	Recalls and uses equivalences between simple fractions, decimals and percentages, including in different contexts	Solves problems involving the calculation of percentages e.g. of measures and calculations such as 15 per cent of 360, and the use of percentages for comparison	Solves problems involving unequal sharing and grouping using knowledge of fractions and multiples			
Uses simple formulae	Uses, reads, writes and converts 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 three decimal places	Compares and classifies geometric shapes based on their properties and sizes and finds unknown angles in any triangles, quadrilaterals and regular polygons	Draws and translates simple shapes on the coordinate plane and reflects them in the axes			
Interprets pie charts and line graphs and uses these to solve problems		Calculates and interprets the mean as an average				

Year 6 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 individual and those that can be read independently		Provides reasoned justifications for their views about a book	
Year 6 Writing					
Identifies the audience for, and purpose of, the writing	Selects the appropriate form and uses other similar writing as models for their own	Proof-reads for spelling and punctuation errors. Uses dictionaries to check spellings. Spells most words correctly.	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)	Can describe settings, characters and atmosphere
Uses dictionaries to check the spelling and meaning of words	Can understand and apply the difference between vocabulary typical of informal speech and vocabulary appropriate for formal speech and writing (eg find out - discover; ask for - request; go in - enter)	Uses the passive and modal verbs	Use a range of cohesive devises, including adverbials within and across sentences and paragraphs. Use expanded noun phrases to add detail.	Uses a wide range of clause structures	Uses basic punctuation correctly and -inverted commas -commas for clarity -punctuation for parenthesis -semi-colons -dashes -colons -hypens
Maintains legibility, fluency and speed in handwriting choosing when to join or not					

Year 6 Science					
Animals, including humans -identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood (including the pulse and clotting). -recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. -describe the ways in which nutrients and water are transported within animals, including humans	**Electricity** -associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches -use recognised symbols when representing a simple circuit in a diagram	**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	**Living things and their habitats** -describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals -give reasons for classifying plants and animals based on specific characteristics	**Evolution and inheritance** **-**recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago -recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents -identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution	**Working scientifically** 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.

Year 6 History		
Victorians/ Industrial Revolution (Alternate Each Year) Key concept: Empire and Civilisation/ Multiculturalism Know how to: Secure chronologically knowledge Key questions: How did Britain change whilst Victoria was Queen? Why did the British Empire grow during her reign? How did life change for ordinary people? Why did Britain industrialise the world? How have explorers changed the way we live? Key vocabulary: Reign, reigned, industrial revolution, inventions, poverty	WW2/ Normandy landings (Alternate Each Year) Key concept: Conquest/ Invasion/ Know how to: Enquire/ ask valid questions/ Secure chronologically knowledge Key questions: Why did Britain have to go to war in 1939? How was Britain able to defeat the Germans in WWII? Why did Germany lose the Battle of Britain? Key vocabulary: Socialists, political party, allies, axis, Luftwaffe,	Ancient Greeks Key concept: Civilisations/ society Know how to: Use a range of sources to look for evidence Key questions: How did the Greeks influence the western world? What is the best form of government? What are a citizen's rights and responsibilities? Compare Empires and why they ended? How did philosophers influence the world? Key vocabulary: Government, citizenship, influence, empire, democracy, Tyrant
Year 6 Geography		
Natural resources used in Industrial Revolution Key concept: Trade/ Economy/ Settlement/ migration Key location: Manchester/ Liverpool Know how to: Identify on a map (using 6 figure grid references) natural resources, analyse which resources would have been most in demand. Key questions: What resources were needed and how did they move them from one location to another? How did industrialisation affect people's lives? How did industrialisation change towns and cities? How the UK trade with the wider world/ British Empire? Key vocabulary: urbanisation, rural, cities, factory, mass production,	Coasts- link to WW2 invasion, investigating coastlines around Europe Key concept: Space- interactions between places Key location: France/ Normandy/ Dunkirk Know how to: Identify key physical and human features on maps Key questions: What human/ physical features would have affected invasion during WW2? What are the similarities/ differences between Knutsford/UK and key location? Key vocabulary: peninsula, beaches, estuary, defences, ports, reefs, bunkers, harbour	Mountains- Everest exploration Hillary/ Norgay (book Everest A. Stewart) Key concept: Change/ sustainability Key location: Nepal Know how to: Interpret sources of information (maps, diagrams, globes, aerial photographs), communicate geographical information through maps, graphs and writing Key questions: How does the land use in Nepal affect life for locals and visitors? What is the land used for? How are mountains formed? What is life like on the Everest? What animals live on Everest? Key vocabulary: core, mantle, crust, magma, tectonic, convection, crescent, glaciers, ecosystems, vegetation, coniferous, altitudes

Year 6 Design and Technology

Design, make, evaluate and improve	**Cooking and nutrition**	**Construction, mechanics and electronics**	**Materials**
-Undertake research to inform design process. This may include surveys and interviews. -Consider the views of others when evaluating their own work. -Ensure products have a high quality finish, using art skills where appropriate. -Justify their decisions about materials and methods of construction. -Make suggestions on how their design/product could be improved.	-Combine ingredients appropriately e.g. beating or rubbing. -Measure ingredients to the nearest gram and millilitre and calculate ratios of ingredients to scale up or down from a recipe. -Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed. -Create and refine recipes, including ingredients, methods, cooking times and temperatures.	-Create circuits that employ a number of components (such as LEDs, resistors and transistors). -Use a cam to make an up and down mechanism.	-Cut materials with precision and refine the finish with appropriate tools (such as sanding wood). -Show an understanding of the qualities of materials to choose appropriate tools to cut and shape.

Year 6 Art				
Drawing	**Painting**	**Collage**	**Sculpture**	**Print**
Use a choice of techniques to depict movement, perspective, shadows and reflections. Use lines to represent movement.	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.	Mix textures (rough and smooth, plain and patterned).	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.	Build up a layer of colours.

Year 6 Computing			
Information Technology	**Digital Literacy**	**Computer Science- Programming**	**Computer Science- theory**
-To design an information app that contains multimedia pages linked together using hyperlinks. -To create an on-screen presentation with slide transitions, advanced animation effects and action buttons. -To develop spread sheets skills, writing formulae to solves mathematical problems. -To edit images using layering techniques. –To create and edit a stop motion animation.	-To revise strategies for doing effective Internet research and learn how to evaluate the usefulness of a website. -To discuss reasons for and against sharing material publicly online. -To learn how to safely share images online. -To research localities using a digital map and use advanced tools like route finders. –To describe the safest response to possibly dangerous online scenarios (concept cartoons).	-To create flowcharts showing how steps of algorithms are linked together. -To design and program games that include conditional events, score variables, random number generators and time limits. -To detect and correct errors in programs (syntax and logical bugs).programming language. -To learn how to write code using a text-based language (e.g. Python and/or HTML).	-To describe the services offered by the Internet. -To understand the history of WWII computer code breaking. -To understand how binary numbers work.

Year 6 RE

(be able to answer key enquiry questions)					
Judaism How do Jews live their lives? Why are the ten commandments important to Jews? How did Moses change the lives of Jews?	Judaism How do Jews worship? What special events are important to Jews?	Christianity Where in a church do you see signs of salvation? What does salvation mean to Christians?	Christianity What do Christians think is important in life? How does the Bible influence the values that Christians have and the way they behave? How are these values similar / different to those found in other religions? What values do I think are important?	Christianity How do Christians use symbols to express their faith?	Hinduism How do Hindu scriptures help Hindus live their lives?

Year 6 Relationships and Health Education				
Relationships				
Families and people who care about me -That other's families, either in school or the wider world look different from their family, but that they should respect those difference and know that other children's families are also characterised by love and care for them (see lesson plan in PSHE folder)	**Caring Friendships** -How to recognise who to trust and who not to trust, how to judge when a friendship is making them feel unhappy or uncomfortable, managing conflict, how to manage these situations and how to seek help and advice from others, if needed	**Respectful Relationships** -To recognise bullying and abuse in all its forms (including prejudice-based bullying both in person, online and through social media) -That in school and in wider society they can expect to be treated with respect by others, and that in turn they should show due respect to others, including those in positions of authority	**Online Relationships** -How information and data is shared and used online (see Internet safety and Harms folder) -How to consider the effect of their online actions on others and know how to recognise and display respectful behaviour online and the importance of keeping personal information private (see relationships folder)	**Being Safe** - How to report concerns or abuse, and the vocabulary and confidence needed to do so and where to get advice, e.g. family, school or other sources -How to manage requests for images of themselves or others; what is and is not appropriate to ask for or share; who to talk to if they feel uncomfortable

Physical Health and Mental Wellbeing						
Mental Wellbeing -to recognise that they may experience conflicting emotions and when they might need to listen to, or overcome these (link to transition- see relationships folder) -Where and how to seek support, who in school they should speak to if they are	**Internet Safety and Harms** -to critically examine what is presented to them in social media and why it is important to do so; understand how information contained in social media can misrepresent or mislead; the importance of being	**Physical Health and Fitness** -what positively and negatively affects their physical, mental and emotional health -How and when to seek support including which adults to speak to in school if they are worried about their health	**Healthy Eating** - The characteristics of a poor diet and risks associated with unhealthy eating (including, for example, obesity and tooth decay) and other behaviours (e.g. the impact of alcohol on diet or health)	**Drugs, Alcohol and Tobacco** -which, why and how, commonly available substances and drugs (including alcohol, tobacco and 'energy drinks') can damage their immediate and future health and safety; that some are restricted and some	**Health and Prevention** - The facts and science relating to immunisation and vaccination	**Changing Adolescent Body** - Key facts about puberty and the changing adolescent body, including physical and emotional changes -About menstrual wellbeing including the key facts about the menstrual cycle

worried about their own or someone else's mental wellbeing	careful what they forward to others			are illegal to own, use and give to others		

Year 6 PE			
Games - Choose and combine techniques within a game (running, throwing, catching, passing, jumping and kicking) - Work alone/ with team mates to gain points/ possession - Strike a bowled/ volleyed ball with accuracy -Use forehand and back hand when playing racket games - Choose the most appropriate tactics for a game (e.g. whilst taking part in games such as tag rugby and mini golf) - Lead others when called upon and act as a good role model within a team	**Dance** - Compose creative/ imaginative dance sequences - Perform expressively and hold a precise/ strong body posture - Develop physical strength and suppleness by practicing moves and stretching. - Express different ideas in original and imaginative ways - Plan to perform with high energy, slow grace or other themes and also maintain this throughout a dance piece - Perform complex moves which combine strength and stamina through gymnastics activities (e.g. cartwheels/ handstands) - Use styles from different cultures (e.g. Bollywood and African dances)	**Gymnastics** - Create complex and well executed sequences that include a full range of movements including: Travelling Balances Swinging Springing Flight Vaults Inversions Rotations Bending, stretching and twisting Gestures Linking skills - Hold shapes that are strong, fluent and expressive - Vary speed, direction, level and body rotation during floor performances -Practise and refine the gymnastics techniques used in performances (above) - Use equipment to vault and to swing (whilst remaining upright) - Include in a sequence set pieces, choosing the most appropriate linking elements - Demonstrate good kinaesthetic awareness (placement and alignment of body parts is usually good in well-rehearsed actions.)	**Athletics** - Combine sprinting with low hurdles over 60 metres - Throw accurately when hitting a target or covering a distance -Refine your throwing performance by analysing technique and body shape - Run over a longer distance, conserving energy in order to sustain your performance - Show control in take-off and landing whilst jumping - Compete with others and keep track of personal best performances, setting targets for individual improvement - Choose the best place for running over a variety of distances

Year 6 MFL

I can tell the time on the hour, half hour and quarter hour. I understand the similarities and differences between French and English schools. I can recognise and say the places in a school. To recognise the difference between le/ la and un/une I can say what lessons I do at school. I can read and understand a French school timetable and understand the 24 hr clock in French.	I can recognise the names of places in town. I can say what is and is not in my town using whole sentences and I can talk about my town in the past and present. I can use and recognise numbers 70 to 100 in French. I can say the year in French. I can recognise and use adjectives and antonyms. I can read and understand a French email and show knowledge of sentence construction and word order. I can produce a leaflet for tourists describing my town "Then and now".	I can recognise items from a French menu. I can sing a song in French about a café and pick out the useful phrases for a conversation. I can appreciate some similarities and differences between cultures and culinary traditions. I know some ice-cream flavours in French. I can use the language needed when ordering food.