



Edward Peake
C of E (VC) Middle School

Subject Progression Maps

2020-2021

*"I will instruct you and teach you in the way you should go;
I will counsel you with my loving eye on you"*
Psalm 32:8

Art

Art subject breakdown (Linked to NC Objectives)	KS2		KS3		Further Education Developing further into KS3 and KS4
	Year 5	Year 6	Year 7	Year 8	
Historical and Cultural Development	<ul style="list-style-type: none"> Knowledge of an artist or culture. Describe the key facts of the artist or culture. Be able to understand how the artist or culture links to their project. 	<ul style="list-style-type: none"> Knowledge of an artist or culture and the impact it had in its time. Describe the key facts of the artist or culture and then discuss the positives & negatives. Be able to understand how the artist or culture links to their project. Their opinion of the artist / culture and reasonings. 	<ul style="list-style-type: none"> Knowledge of an artist or culture, identifying the key facts and links. Describe the key facts of the artist or culture and then discuss the positives & negatives. Be able to understand how the artist or culture links to their project. Their opinion of the artist / culture and reasonings. Link to previous artists. 	<ul style="list-style-type: none"> Knowledge of an artist or movement, identifying the key facts and links. Describe the key facts of the artist or movement and then discuss the positives & negatives. Be able to understand how the artist links and how artists have been inspired in history. Their opinion of the artist movements and reasonings. 	<p>AO1 Explore</p> <p>Develop ideas through investigations, demonstrating critical understanding of sources.</p>
Materials, skills and processes	<ul style="list-style-type: none"> Try new materials and equipment suitable for the task Explain their choice of materials, with explanation why. 	<ul style="list-style-type: none"> Try new materials and equipment suitable for the task Be able to build on their skill of using the material 	<ul style="list-style-type: none"> Measurements and enlarging. Using existing knowledge of materials and building on the skill. Be able to explain, adapt 	<ul style="list-style-type: none"> Measurements and enlarging. Using existing knowledge of materials and building on the skill. Be able to explain, adapt 	<p>AO2 – Refine</p> <p>Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes</p>

		<p>applying techniques.</p> <ul style="list-style-type: none"> • Explain their choice of materials and how the choice has an impact on their work. 	<p>and review their materials and processes</p>	<p>and review their materials and processes</p> <ul style="list-style-type: none"> • Becoming more independent in their decisions, challenging their ideas. 	
Drawing & Painting Skills	<ul style="list-style-type: none"> • Use a variety of source material • Be able to use a paint brush correctly and mix colours. • Be able to keep a sketchbook • To show shapes, shading and understanding of design. 	<ul style="list-style-type: none"> • Use a variety of source material • Be able to keep a sketchbook • Be able to use a paint brush correctly and mix colours. • Understand colour mixing and theory. • To show shapes, shading and understanding of design. • Mark making techniques and control of lights and darks. 	<ul style="list-style-type: none"> • To build skills within their material • Be able to keep a sketchbook and show a journey. • To explore printing • To show more technical drawing skills • Introduction of 5 tones, blending and mark making. • Continuation of understanding of colour mixing and theory. 	<ul style="list-style-type: none"> • To build skills within their material • Be able to keep a sketchbook and show a journey of their skills. • To explore painting with more skill. • To challenge their drawing skills and combining them together. • To show more technical drawing skills of 5 tones, blending and mark making. • Continuation of understanding of colour mixing and theory. 	<p>AO3 - Record</p> <p>Record ideas, observations and insights relevant to intentions as work progresses</p>
Presenting, Evaluating and Understanding	<ul style="list-style-type: none"> • Identify the strengths and areas for development in their outcomes 	<ul style="list-style-type: none"> • Identify the strengths and areas for development in their work and make 	<ul style="list-style-type: none"> • Create a response linked to the artist / culture. • Identify links between the 	<ul style="list-style-type: none"> • Create a response linked to the artist / culture. • Identify links between the 	<p>A04 - present</p> <p>Present a personal and meaningful response that realises intentions and demonstrates</p>

	<ul style="list-style-type: none"> • Make links to the materials and techniques. • Evaluate the material or process of their design. • Evaluate their work against their artist. 	<p>independent choices.</p> <ul style="list-style-type: none"> • Make links to the materials and techniques. • Evaluate the material or process of their design. • Evaluate and compare their work against their artist. 	<p>artists and processes used.</p>	<p>artists and processes used.</p> <ul style="list-style-type: none"> • Evaluating their work verbally or written with reflection on how to progress or adapt. 	<p>understanding of visual language</p>
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Computing

	Algorithms	E-Safety	Databases	Word Processing	Hardware and Software	Computer aided design (CAD)
Year 5	Pupils can describe an algorithm. Pupils can create simple algorithms using premade block coding. Pupils can identify and correct basic errors in their coding.	Pupils are able to highlight basic e-safety knowledge such as how to keep safe on the internet, the age restrictions for assorted communication apps and identify suitable organisations that can utilise for help and support.	Pupils are able to create simple spreadsheets and accurately input data. Pupils are able to use assorted formulas to manipulate the data they have inputted	Pupils to be able to accurate type using a standard QWERTY keyboard. Pupils can use shift/Alt to access all main keyboard characters.	Pupils to be able to explain the difference between the terms hardware and software.	Pupils can identify 2D and 3D shapes and the differences between them. Pupils can use a range of tools on selected software to create a range of 3D shapes.
Year 6	Pupils can create more complex algorithms using premade block coding. Pupils can identify and correct errors in their coding. Pupils can use basic HTML coding to create coloured backgrounds.	Pupils are able to highlight basic e-safety knowledge such as how to keep safe on the internet, the age restrictions for assorted communication apps and the work of CEOP and the NSPCC.	Pupils are able create simple spreadsheets and accurately input data. Pupils are also able to add hyperlinks to show extra external information and use assorted formulas to manipulate the data they have inputted. Pupils to be able to recognise that data can be displayed in different ways depending on the purpose of it.	Pupils to be able to accurate type using a standard QWERTY keyboard. Pupils can use shift/Alt to access all main keyboard characters.	Pupils to be able to explain the difference between the terms hardware and software and give examples of internal hardware.	Pupils can identify 2D and 3D shapes and the differences between them. Pupils can use a range of tools on selected software to create a range of 3D shapes Pupils can design suitable sprites to meet a purpose or theme.
Year 7	Pupils can create webpages using HTML coding, pupils	Pupils are able to highlight basic e-safety knowledge	Pupils can create complex spreadsheets on both	Pupils to be able to accurate type using a standard QWERTY	Pupils to be able to confidently explain the difference	Pupils are able to recreate a hand drawn image using

	are able to identify errors in their coding. Pupils are able to plan and create a series of multiple algorithms to work in unison to allow a computer game to function correctly.	such as how to keep safe on the internet, the age restrictions for assorted communication apps. Pupils can identify the importance of keeping personal data private and the impact of a digital footprint.	Excel and Google Sheets and accurately input data into them. Pupils can then effectively use filters to help sort data. Pupils are able to extract appropriate data from databases for use on a variety of ways.	keyboard. Pupils to be able to use keyboard shortcuts effectively. Pupils can use shift/Alt to access all main keyboard characters.	between software and hardware. Pupils to be able to give examples of hardware and explain its role within a computer.	suitable CAD software. Pupils are able to experiment with a range of tools and identify ways to complete complex designs
Year 8	Pupils can use a variety of HTML code to create and design websites for a specific purpose. Pupils are able to add images, videos and assorted other features dependant on the selected topic.	Pupils are able to highlight basic e-safety knowledge such as how to keep safe on the internet, the age restrictions for assorted communication apps. Pupils can identify the importance of keeping personal data private and the impact of a digital footprint.	Pupils can create complex spreadsheets and accurately input data into them. Pupils can then effectively use filters to help sort data. Pupils are able to extract appropriate data from databases for use on a variety of ways. Pupils are able to utilise	Pupils to be able to accurate type using a standard QWERTY keyboard. Pupils to be able to use keyboard shortcuts effectively. Pupils can use shift/Alt to access all main keyboard characters.	Pupils to be able to confidently explain the difference between software and hardware. Pupils to be able to give examples of hardware and explain its role within a computer. Pupils can visually identify the difference main components.	Pupils are able to recreate a hand drawn image using suitable CAD software. Pupils are able to experiment with a range of tools and identify ways to complete complex designs

Design Technology

Design Technology Progression Grid				
	Key Stage 2		Key Stage 3	
	Year 5	Year 6	Year 7	Year 8
Designing: Understanding contexts, users and purposes	<ul style="list-style-type: none"> Work to a design brief Describe the purpose of their products Develop a simple specification to guide their thinking 	In addition to Year 5 <ul style="list-style-type: none"> Explain how particular parts of their products work Indicate the design features of their products that will appeal to intended users Identify the needs, wants, preferences and values of particular individuals and groups Carry out research using interviews, questionnaires and web based resources 	<ul style="list-style-type: none"> Work confidently within a range of relevant domestic, local and industrial contexts, such as the home, health, leisure, culture, engineering, manufacturing, construction, food, energy, agriculture and fashion Consider the influence of a range of lifestyle factors and consumer choices when designing products Take creative risks when making design decisions Develop detailed design specifications to guide their thinking 	In addition to year 7 <ul style="list-style-type: none"> Consider additional factors such as ergonomics, anthropometrics or dietary needs Analyse where human values may conflict and compromise has to be achieved Use research including the study of different cultures, to identify and understand user needs Identify and solve their own design problems
Designing: Generating, developing, modelling and communicating ideas	<ul style="list-style-type: none"> Share and clarify ideas through discussion Model their ideas using prototypes and pattern pieces Use annotated sketches to communicate their ideas 	In addition to year 5 <ul style="list-style-type: none"> Use cross sectional and exploded diagrams to develop and communicate their ideas Use computer aided design to communicate their ideas Generate innovative ideas drawing on research Make design decisions based on time, resources and cost 	<ul style="list-style-type: none"> Use specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations Combine ideas from a variety of sources Use a variety of approaches, for example user-centered design, to generate creative ideas and avoid stereotypical responses Develop and communicate design ideas using annotated sketches 	In addition to year 7 <ul style="list-style-type: none"> Use a variety of approaches, for example biomimicry to generate creative ideas and avoid stereotypical responses Use mathematical modelling to indicate likely performance before using physical materials and components, for instance when developing circuits or gearing systems Give oral and digital presentations and use computer-based tools Use 2D and begin to use 3D CAD packages to model their ideas

			<ul style="list-style-type: none"> Produce 3D models to develop and communicate ideas 	<ul style="list-style-type: none"> Produce models of their ideas using CAM to test out their ideas Decide which design criteria clash and determine which should take priority
Making: Planning	<ul style="list-style-type: none"> Select the tools and equipment suitable for the task Explain their choice of materials and components according to functional properties and aesthetic qualities Produce appropriate lists of tools, equipment and materials that they need Formulate step-by-step plans as a guide to making 	<ul style="list-style-type: none"> In addition to Year 5 Explain their choice of tools and equipment in relation to the skills and techniques they will be using Demonstrate resourcefulness when tackling practical problems 	<ul style="list-style-type: none"> Select appropriately form specialist tools, techniques, processes, equipment and machinery, including computer-aided manufacture Select appropriately from a wider, more complex range of materials, components and ingredients, taking into account their properties such as water resistance and stiffness Produce ordered sequences and schedules for manufacturing products they design, detailing resources required 	<p>In addition to year 7</p> <ul style="list-style-type: none"> Produce costings using spreadsheets for products they design and make
Making: Practical skills and techniques	<ul style="list-style-type: none"> Follow procedures for safety and hygiene Use textiles, food, and electrical components Accurately measure, mark out, cut and shape materials and components Accurately assemble, join and combine materials and components Accurately apply a range of finishing techniques Use techniques that involve a number of steps Demonstrate resourcefulness when tackling practical problems 	<p>In addition to year 5</p> <ul style="list-style-type: none"> Use mechanical components 	<ul style="list-style-type: none"> Follow procedures for safety and hygiene and understand the process of risk assessment Use a wider, more complex range of materials, components and ingredients, taking into account their properties Use a broad range of manufacturing techniques including handcraft skills and machinery to manufacture products precisely Exploit the use of CAD/CAM equipment to manufacture products, increasing 	<p>In addition to year 7</p>

			<p>standards of quality, scale of production and precision</p> <ul style="list-style-type: none"> • Apply a range of finishing techniques, including those from art and design, to a broad range of materials including textiles, metals, polymers and woods • Make use of specialist equipment to mark out materials • Use a broad range of material joining techniques including stitching, mechanical fastenings, heat processes and adhesives • Use CAD/CAM to produce and apply surface finishing techniques, for example using dye sublimation • Investigate and develop skills in modifying the appearance of materials including textiles and other manufactured materials e.g. dying and applique 	
Evaluating: Own ideas and products	<ul style="list-style-type: none"> • Identify the strengths and areas for development in their ideas and products • Consider the views of others, including intended users, to improve their work • Critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make <ul style="list-style-type: none"> ◦ Evaluate their ideas and products against their original design specification 	In addition to year 5	<ul style="list-style-type: none"> • Test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups • Evaluate their products against their original specification and identify ways of improving them • Actively involve others in the testing of their products 	In addition to year 7

Evaluating: Existing products	<ul style="list-style-type: none"> Investigate and analyse: how well products have been designed; how well products have been made; why materials have been chosen; what methods of construction have been used; how well products work; how well products achieve their purposes; how well products meet user needs and wants 	<p>In addition to year 5</p> <ul style="list-style-type: none"> Investigate and analyse: how much products cost to make; how innovative products are; how sustainable the materials in products are; what impact products have beyond their intended purpose 	<ul style="list-style-type: none"> Investigate and analyse new and emerging technologies Investigate and analyse products through disassembly to determine how they are constructed and function Investigate and analyse the positive and negative impact that products can have in the wider world 	
Evaluating: Key events and individuals	<ul style="list-style-type: none"> Know about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products 	<p>In addition to year 5</p>	<ul style="list-style-type: none"> About an increasing range of designers, engineers, chefs, technologists and manufacturers and be able to relate their products to their own designing and making 	<p>In addition to year 7</p>
Technical Knowledge: Making products work	<ul style="list-style-type: none"> How to use learning from science to help design and make products that work How to use learning from mathematics to help design and make products that work That materials have both functional properties and aesthetic qualities That materials can be combined and mixed to create more useful characteristics That mechanical and electrical systems have an input, process and output The correct technical vocabulary for the projects they are undertaking How to reinforce and strengthen a 3D framework That a 3D textiles product can be made from a 	<p>In addition to Year 5</p> <ul style="list-style-type: none"> how mechanical systems such as cams or pulleys or gears create movement How more complex electrical circuits and components can be used to create functional products How to program a computer to monitor changes in the environment and control their products 	<ul style="list-style-type: none"> Use learning from science to help design and make products that work Use learning from mathematics to help design and make products that work Understand the properties of materials, including smart materials, and how they can be used to advantage Understand the performance of structural elements to achieve functioning solutions How to competently use a range of cooking techniques for example, selecting and preparing ingredients; using utensils and electrical equipment How to classify materials by structure e.g. hard 	<p>In addition to year 7</p> <ul style="list-style-type: none"> Understand how more advanced mechanical systems used in their products enable changes in movement and force How to classify materials by structure e.g. ferrous and non-ferrous, thermoplastic and thermosetting plastics How more advanced electrical and electronic systems can be powered and used in their products How to use simple electronic circuits incorporating inputs and outputs

	<p>combination of fabric shapes</p> <ul style="list-style-type: none"> • That a recipe can be adapted by adding or substituting one or more ingredient 		<p>words, soft woods, ferrous and</p> <ul style="list-style-type: none"> • non-ferrous, thermoplastic and thermosetting plastics • About the physical properties of materials e.g. grain, brittleness, flexibility, elasticity, malleability and thermal • About textile fibre sources e.g. natural and synthetic and fabrics e.g. plain and woven • How to select and modify patterns and use in textile construction 	
Cooking and nutrition: Where food comes from	<ul style="list-style-type: none"> • That a recipe can be adapted a by adding or substituting one or more ingredients • That food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world 	<p>In addition to year 5</p> <ul style="list-style-type: none"> • That seasons may affect the food available • How food is processed into ingredients that can be eaten or used in cooking 	<ul style="list-style-type: none"> • That food is produced, processed and sold in different ways, e.g. conventional and organic farming, fair trade • That people choose different types of food and that this may be influenced by availability, season, need, cost, where the food is produced, culture and religion 	<p>In addition to year 7</p>
Cooking and nutrition: Food preparation, cooking and nutrition	<ul style="list-style-type: none"> • How to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source • How to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, and baking • that recipes can be adapted to change the appearance, taste, texture and aroma 	<p>In addition to year 5</p> <ul style="list-style-type: none"> • To know how to use kneading • that different food and drink contain different substances – nutrients, water and fibre –that are needed for health 	<ul style="list-style-type: none"> • How to store prepare and cook food safely and hygienically • How to use date-mark and storage • instructions when storing and using food and drinks • How to select and prepare ingredients • How to use utensils and electrical equipment • How to apply heat in different ways • How to use taste, texture and smell to decide how to 	<p>In addition to year 7</p> <ul style="list-style-type: none"> • The importance of a healthy and varied diet as depicted in The Eatwell plate and Eight tips for healthy eating • That food provides energy and nutrients in different amounts; that they have important functions in the body; and that people require different amounts during their life

			<p>season dishes and combine ingredients</p> <ul style="list-style-type: none">• How to adapt and use their own recipes• How to cook a repertoire of predominantly savoury dishes to feed themselves and others a healthy and varied diet• How to taste and cook a broader range of ingredients and healthy recipes, accounting for a range of needs, wants and values• How to actively minimise food waste such as composting fruit and vegetable peelings and recycling food packaging	
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English

Reading

Strand	Year 5	Year 6
Vocabulary	Vocabulary from texts/wider curriculum and Spelling Shed.	Vocabulary from texts/wider curriculum and Spelling Shed.
Inference	Drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence	To discuss how characters, change and develop through texts by drawing inferences based on indirect clues. To discuss how characters, change and develop through texts by drawing inferences based on indirect clues.
Prediction	Predicting what might happen from details stated and implied	Predicting what might happen from details stated and implied
Explain	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. Explain and discuss their understanding of what they have read, including through formal presentations and debates	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. Explain and discuss their understanding of what they have read, including through formal presentations and debates
Retrieve	Retrieval to aid in explaining, prediction and inference	Retrieval to aid in explaining, prediction and inference
Sequence	Summarising the main ideas drawn from more than one paragraph, identifying key details to support the main ideas	Summarising the main ideas drawn from more than one paragraph, identifying key details to support the main ideas
Range of reading	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 Making comparisons within and across books	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 Making comparisons within and across books
By the end of the year	Pupils will have an understanding of the key skills needed to decode and comprehend a text. They will have developed strategies for answering broad comprehension based questioning and have been exposed to a range of high quality texts.	The overarching aim for English in the national curriculum is to develop a love of literature through widespread reading for enjoyment. Pupils will have the knowledge to decode and understand new vocabulary and appreciate its meaning in the context it was used. Comprehension skills develop through pupil's experience of high-quality discussion with the teacher, as well as from reading and discussion a range of stories, poems and non-fiction.

Strand	Year 7	Year 8
Understanding and Response (Ideas, Evidence, Evaluation) Pupils can:	Clearly explain a range of ideas. Understand less obvious meanings. Use a range of relevant quotations to support ideas.	Explain ideas with thoughtful detail. Show some awareness of patterns, links and/or different interpretations. Use a range of the most apt and precise quotations to support ideas.
Analysis of Language and Structure (Techniques, Terms, Comments) Pupils can:	Consistently identify and comment on a range of writers' choices within texts. Apply a range of accurate terminology at word, sentence and text level when discussing texts. Often offer specific comments about how writer's choices in a text might affect the reader	Consistently identify and comment on a wide range of features, patterns and details within texts. Consistently apply mostly accurate terminology at word, sentence and text level when discussing texts. Consistently offer specific comments about how writer's choices in a text might affect the reader with some alternative ideas offered.
Connections (Context, Comparisons) Pupils can:	Make some specific links between the text and its historical context. Draw out some relevant specific similarities and differences with specific examples.	Develop relevant links between the text and contextual factors/ reactions. Draw out a range of relevant precise comparisons with specific examples.
End of the Year	Pupils will be able to demonstrate an understanding of significant changes to literature throughout the years by beginning to display the skills that will be prevalent at KS4. Analytical paragraphs will be structured using P.E.E. Pupils will start using examples from the text and understanding how context plays a big part in shaping an author's choices.	Pupils will be able to demonstrate a greater understanding of significant changes to literature throughout the years and using close analytical skills to examine this. Pupils will be more familiar with the regular P.E.E paragraph set up and will be beginning to use P.E.T.A.L paragraphs to show better analytical skills. Pupils will be using relevant quotations from the text and will be embedding them into analytical paragraphs.

Writing

Strand	Year 5	Year 6
Phonics and whole word reading	Spell some words with 'silent' letters 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, as listed in Appendix 1	Spell some words with 'silent' letters 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, as listed in Appendix 1
Other word building spelling	Use further prefixes and suffixes and understand the guidance for adding them 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	Use further prefixes and suffixes and understand the guidance for adding them 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
Handwriting	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	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
Context for writing	Identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own In writing narratives, considering how authors have developed characters and settings in what pupils have read, listened to or seen performed	Identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own In writing narratives, considering how authors have developed characters and settings in what pupils have read, listened to or seen performed
Planning writing	Noting and developing initial ideas, drawing on reading and research where necessary	Noting and developing initial ideas, drawing on reading and research where necessary
Drafting writing	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	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
Editing writing	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	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,

	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	distinguishing between the language of speech and writing and choosing the appropriate register Proofread for spelling and punctuation errors
Performing writing	Perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear.	Perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear.
Vocabulary	Use a thesaurus Using expanded noun phrases to convey complicated information concisely Using modal verbs or adverbs to indicate degrees of possibility	Use a thesaurus Using expanded noun phrases to convey complicated information concisely Using modal verbs or adverbs to indicate degrees of possibility
Grammar	Using the perfect form of verbs to mark relationships of time and cause Using relative clauses beginning with who, which, where, when, whose, that or with an implied (ie omitted) relative pronoun Converting nouns or adjectives into verbs Verb prefixes Devices to build cohesion, including adverbials of time, place and number	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 Differences in informal and formal language Synonyms & Antonyms Further cohesive devices such as grammatical connections and adverbials Use of ellipsis
Punctuation	Using commas to clarify meaning or avoid ambiguity in writing Using brackets, dashes or commas to indicate parenthesis	Using hyphens to avoid ambiguity Using semicolons, colons or dashes to mark boundaries between independent clauses Using a colon to introduce a list punctuating bullet points consistently
Grammar terminology	modal verb, relative pronoun, relative clause, parenthesis, bracket, dash, cohesion, ambiguity	subject, object, active, passive, synonym, antonym, ellipsis, hyphen, colon, semi-colon, bullet points
End of the year	By the end of the year, pupils will have written in a variety of genres, improving their vocabulary and punctuation choices. They will further develop their understanding of key grammatical features, corresponding terminology and apply them in their work with more frequency.	The aim for English in the national curriculum is to promote high standards of language and literacy by equipping pupils with a strong toolset to achieve this. Pupils will be able to structure and form piece of independent writing confidently, adjusting the tone for the audience as necessary. They will be able to understand, identify and include specific grammatical terminology in their writing.

	Strand	Year 7	Year 8
Content and organisation	Style and impact	Clearly communicate ideas, developed with some imaginative detail. Demonstrate sound awareness of how to write in a number of different purposes and show some awareness of writing for a particular audience. Some selection of sentences and vocabulary attached to form, purpose and/or audience.	Clearly communicate with imaginative detail. Demonstrate sound awareness of writing for a number of different audiences and styles, both formal and informal. Ideas, tone and language choices are mostly matched to form, audience and purpose.
	Organisation	Organise ideas clearly, likely with a clear beginning and ending. Show a wide range of vocabulary with some complexity in their work, with some effective choices. Consistently use paragraphs. Start to use more complex conjunctions (e.g. subordinating conjunctions).	Organise their writing so that it is well-structured. Consistently use appropriate paragraphs. Use a range of linking techniques appropriately.
Technical accuracy	Sentence structure and punctuation	Construct a variety of sentence structures using more complex connectives (e.g. subordinating conjunctions) Use a range of punctuation mostly with success.	Construct a variety of sentence structures, sometimes for effect. Use a range of punctuation mostly with success and sometimes for effect
	Vocabulary	Show a wide range of vocabulary with some complexity in their work, with some effective choices.	Choose increasingly sophisticated vocabulary to suit the purpose. Tense agreement consistent throughout.
	Spelling	Spell most common vocabulary accurately with some polysyllabic vocabulary secure.	Spell generally accurately, including a range of polysyllabic vocabulary
	End of Year	Pupils should be able to demonstrate they can write accurately, fluently and effectively at a range of text types. Pupils will begin to make choices with the reader in mind.	Pupils should be able to demonstrate they can write with increasing levels of confidence. They should be able to organise their ideas sufficiently and use grammatical features to support coherence and cohesion within a text.

French

By the end of each year pupils can:

Strand	Year 5	Year 6	Year 7	Year 8
Listening	<ul style="list-style-type: none"> • Demonstrate understanding of a range of phrases and simple opinions, spoken clearly. The phrases generally include more than one key bit of information (e.g. a noun and an adjective). May include exchanges with a single question, repeated in each listening item. • Transcribe familiar words. 	<ul style="list-style-type: none"> • Demonstrate understanding of a short sequence of a few related sentences or a dialogue with 2–3 short exchanges. These may include: – simple reasons for opinions – occasional sentences with linked clauses or sub-clauses (e.g. with <i>mais</i> or <i>parce que</i>) – occasional instances of <i>aimer</i>+ infinitive – several short sentences using <i>aimer</i>+ infinitive (with no other structures in the mix). • Transcribe short phrases. 	<ul style="list-style-type: none"> • Demonstrate understanding of the main points and details of short dialogues, passages and descriptions which focus on a single time frame (present, future or past). These should include some sentences with linked clauses or sub-clauses and may also include: – a mixture of infinitive structures (e.g. opinions with infinitives and modals with infinitives) – opinions with more detailed reasons – an even wider range of vocab and verbs (e.g. from more than one topic area). • Transcribe short phrases. 	<ul style="list-style-type: none"> • Demonstrate understanding of the main points and details of passages or dialogues covering three time frames (present, past and future). These should include some sentences with linked clauses or sub-clauses and may also include: – a mixture of infinitive structures (e.g. opinions with infinitives and modals with infinitives) – more discursive language to justify opinions – a wider range of vocab and verbs (e.g. from different topic areas). May also need to infer overall meaning. • Transcribe sentences.
Speaking	<ul style="list-style-type: none"> • Answer a range of simple questions. May ask occasional simple questions that have been learnt lexically. • Give basic information using short sentences. May give simple opinions with <i>c'est ...</i> (Lexical repetition - no 	<ul style="list-style-type: none"> • Ask a few simple questions with support and answer a few different simple questions in the present tense. This may include: – taking part in brief dialogues involving 2–3 exchanges – giving simple opinions – using occasional sentences with linked 	<ul style="list-style-type: none"> • Ask and answer a range of simple questions, sometimes in one conversation; answer a few questions in the present tense based on a picture; take part in a more in-depth transactional roleplay. • Speak or respond to questions referring to a 	<ul style="list-style-type: none"> • Take part in a conversation, picture-based task or role-play or give a presentation which requires reference to three time frames, using some sentences with linked clauses or sub-clauses. This may also include: – using a mixture of infinitive

	<p>manipulation of grammar.)</p> <ul style="list-style-type: none"> • Begin to show awareness of sound patterns. 	<p>clauses or sub-clauses (e.g. with <i>mais</i> or <i>parce que</i>) – using occasional instances of <i>aimer</i>+ infinitive – making simple statements about a picture.</p> <ul style="list-style-type: none"> • At times show an ability to manipulate language to be grammatically correct (e.g. using the correct verb or adjectival endings). 	<p>single time frame (past, present or future). This should include using some complex sentences with linked clauses or sub-clauses and giving opinions with more detailed reasons. This may also include: – using a mixture of infinitive structures in the present tense (e.g. opinions with infinitives and modals with infinitives) – using an even wider range of vocab (e.g. from different topic areas) – using more than one subject pronoun.</p> <ul style="list-style-type: none"> • Begin to speak spontaneously (e.g. by giving an unsolicited opinion). 	<p>structures in the present tense (e.g. opinions with infinitives and modals with infinitives) – using more discursive language to justify opinions – using a wider range of vocab and verbs (e.g. from different topic areas).</p> <ul style="list-style-type: none"> • Demonstrate spontaneity by asking unsolicited questions, and expand answers. • Use increasingly accurate pronunciation and intonation.
Reading	<ul style="list-style-type: none"> • Demonstrate understanding of and read aloud a range of phrases and simple opinions, as well as simple (single) questions with short answers. The phrases generally include more than one key bit of information (e.g. a noun and an adjective). • Translate very short phrases into English. 	<ul style="list-style-type: none"> • Demonstrate understanding of main points and simple opinions in a short sequence of related sentences or a short dialogue. The sentences or dialogue may include: – occasional sentences with linked clauses or sub-clauses (e.g. with <i>mais</i> or <i>parce que</i>) – occasional instances of <i>aimer</i> + infinitive – several short sentences using <i>aimer</i> + infinitive 	<ul style="list-style-type: none"> • Demonstrate understanding of main points and details of short texts, dialogues or descriptions which focus on a single time frame (present, future or past). These should include some sentences with linked clauses or sub-clauses and may also include: – a mixture of infinitive structures (e.g. opinions with infinitives and modals with infinitives) – opinions 	<ul style="list-style-type: none"> • Demonstrate understanding of main points and details in texts and dialogues covering three time frames (present, past and future). These should include some sentences with linked clauses or sub-clauses and may also include: – a mixture of infinitive structures (e.g. opinions with infinitives and modals with infinitives) – more discursive language to

		<p>(with no other structures in the mix). May also need to deduce the occasional word using contextual clues and cognates.</p> <ul style="list-style-type: none"> • Translate into English sentences with the following characteristics: <ul style="list-style-type: none"> – limited topic range – basic sequencers or time expressions or connectives – limited range of pronouns (e.g. <i>je/ il/ elle</i> forms) – limited range of verbs – occasional instances of <i>aimer</i> + infinitive. 	<p>with more detailed reasons – an even wider range of vocab and verbs (e.g. from more than one topic area). Students may also need to work out the meaning of occasional words using contextual clues, cognates and knowledge of grammar. Students may also need to infer overall meaning.</p> <ul style="list-style-type: none"> • Use a bilingual dictionary or glossary to look up unfamiliar words. • Understand short texts written for target-language learners (e.g. songs, simple poems). • Translate into English sentences with the following characteristics: <ul style="list-style-type: none"> – a slightly wider topic range – sequencers, time expressions and connectives – opinions with detailed reasons – a variety of verbs – occasional opinions with infinitives – occasional modals with infinitives – all sentences in a single time frame – past, present or future – some sentences with linked clauses and sub-clauses. 	<p>justify opinions – a wider range of vocab and verbs (e.g. from different topic areas) – some authentic or semi-authentic texts. May also need to work out the meaning of occasional words using contextual clues, cognates and knowledge of grammar. May also need to infer overall meaning.</p> <ul style="list-style-type: none"> • Translate into English sentences or a short paragraph containing some of the following characteristics: <ul style="list-style-type: none"> – sentences covering three time frames (over a range of sentences rather than necessarily just within one sentence) – longer sentences with linked clauses and sub-clauses – opinions with detailed reasons and some discursive language to justify reasons – a variety of opinions and/or modals with infinitives.
Writing	<ul style="list-style-type: none"> • Write individual short phrases, giving basic information and using the 	<ul style="list-style-type: none"> • Write a few sentences relating to a topic or a picture. This may include: 	<ul style="list-style-type: none"> • Write short texts, dialogues or descriptions, focussing on a single 	<ul style="list-style-type: none"> • Write short texts, referring to three time frames (present, past

	<p>present tense of frequently-used verbs. Phrases are produced lexically and do not necessarily show grammatical understanding.</p> <ul style="list-style-type: none"> • Translate short phrases into the target language. (Reproduced lexically – no manipulation of grammar.) Spelling and accents may not be accurate, but the meaning is clear. 	<p>– writing simple questions and short answers – giving simple opinions – using occasional sentences with linked clauses or sub-clauses (e.g. with <i>mais</i> or <i>parce que</i>) – writing short sentences using <i>aimer</i> + infinitive.</p> <ul style="list-style-type: none"> • At times show an ability to manipulate language to be grammatically correct (e.g. using the correct verb or adjectival endings). • Translate short sentences into French, at times showing some ability to manipulate grammar. May include occasional sentences using <i>mais</i> or <i>parce que</i>. May include a set of sentences using <i>aimer</i> + infinitive. • Increasing accuracy in using straightforward language and meaning is clear, but there may be major errors. 	<p>time frame (past, present or future). This should include using some complex sentences with linked clauses or sub-clauses and giving opinions with more detailed reasons. This may also include: – using a mixture of infinitive structures in the present tense (e.g. opinions with infinitives and modals with infinitives) – using an even wider range of vocab (e.g. from different topic areas) – using more than one subject pronoun.</p> <ul style="list-style-type: none"> • Translate sentences in one time frame (past, present or future) into French. These may include: – some sentences with linked clauses or sub-clauses – a set of sentences showing an awareness of a mixture of structures, e.g. verbs in the present tense and opinions with infinitives together – opinions with more detailed reasons – an even wider range of vocab and verbs (e.g. from different topic areas) – more than one subject pronoun. 	<p>and future) and using some sentences with linked clauses or sub-clauses. This may also include: – using a mixture of infinitive structures in the present tense (e.g. opinions with infinitives and modals with infinitives) – using more discursive language to justify opinions – using a wider range of vocab and verbs (e.g. from different topic areas).</p> <ul style="list-style-type: none"> • Translate into the target language sentences that refer to three time frames (within a set of sentences). These should include some sentences with linked clauses or sub-clauses and may include: – more discursive language to justify opinions – a wider range of vocab and verbs (e.g. from different topic areas) – using a mixture of infinitive structures (e.g. opinions with infinitives and modals with infinitives). • Mostly accurate and meaning is clear, but with some minor errors (e.g. spellings, genders, agreements) and an occasional major error
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			<ul style="list-style-type: none"> Generally accurate in using straightforward language and meaning is clear, but there may be errors with verbs. 	(e.g. with verbs and tenses).
Grammar	<p>Understand and use the following grammatical terms:</p> <ul style="list-style-type: none"> Noun, article, adjective, verb, tense Nouns (singular and plural) Regular adjectives (masculine and feminine singular forms only) Subject pronouns: <i>je, tu, il, elle, on</i> Gender and articles: definite and indefinite articles (masculine, feminine and plural) Verbs of opinion in first person singular, followed by a noun (<i>j'aime, j'adore, je n'aime pas, je deteste</i>) The present tense of regular -er verbs (singular forms only) Key high frequency verb forms: <i>c'est, j'ai, je suis</i> Numbers Simple questions using intonation to change a statement into a question The simple negative: <i>ne...pas</i> with present tense verbs Simple connectives (<i>et, mais, aussi, puis</i>) 	<p>In addition to the grammar learnt in Year 5, understand and use the following grammatical terms:</p> <ul style="list-style-type: none"> Regular adjectives: agreement and position (including plurals) Possessive adjectives (<i>mon, ma, mes, ton, ta, tes, son, sa, ses</i>) Interrogatives (e.g. <i>comment, quand, ou, qui</i>) The present tense of key irregular verbs: <i>aller, avoir, être, faire</i> (singular forms only) Verbs followed by <i>a</i> and <i>de plus</i> a noun (e.g. <i>jouer au foot, aller à la piscine, faire du sport</i>) Simple questions using <i>est-ce que</i> and <i>qu'est-ce que</i> 	<p>In addition to the grammar learnt in Key Stage 2, understand and use the following grammatical terms:</p> <ul style="list-style-type: none"> The partitive article (<i>du, de la, de l', des</i>) The modal verbs <i>pouvoir</i> and <i>vouloir</i> Adverbs of frequency (e.g. <i>quelquefois, tous les jours</i>) Use of negative after <i>de</i> The present tense of regular verbs Other connectives (e.g. <i>parce que, ou, alors, donc</i>) Modes of address (<i>tu</i> and <i>vous</i>) The present tense of common irregular verbs Adverbs of place, adverbs of time in the present The near future tense Common simple prepositions (e.g. <i>dans, derrière, sur, sous</i>) The infinitive following verbs of liking 	<p>In addition to the grammar learnt in Year 7, understand and use the following grammatical terms:</p> <ul style="list-style-type: none"> The present tense of common reflexive verbs The perfect tense of regular -er verbs, using <i>avoir</i> <i>Je voudrais</i> + infinitive The perfect tense of common irregular verbs: <i>boire, faire, prendre, voir</i> Time expressions for use with the near future tense (e.g. <i>demain, ce weekend, ce soir, l'année prochaine</i>) The perfect tense with <i>être, aller</i> and other common verbs Two tenses together, the present and near future Time expressions for use with the perfect tense (e.g. <i>hier, le weekend, dernier, l'année dernière</i>) The imperfect tense of <i>avoir</i> and <i>être</i> in common expressions Comparative adjectives (<i>plus...que, moins...que</i>)

	<ul style="list-style-type: none"> • Intensifiers/qualifiers/ Quantifiers (tres, assez, un peu, trop, beaucoup) • Dates • Time (12 hour clock) 			<ul style="list-style-type: none"> • Prepositions followe by de (e.g. a cote de, a droite de, en face de) • Il faut + infinitive • Modale verbs: devoir, pouvoir, vouloir • Superlative adjectives (le/la/les plus/moins..) • Plural possessive adjectives: notre/nos, votre/vos, leur/leurs • Questions using question words and inversions • Three tenses together • The simple future tense
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Geography

Year	Intent <i>The intention of the Geography curriculum is to provide opportunities for children to gain a confident understanding of where places are and the human/ physical processes in action around the world. They will be confident users of key geographic tools such as atlases, maps, data and photography/ imagery. Through rigorous study, they will have a clear understanding of economic, environmental, political and social impacts of events. By the end of study children will be able to make their own observations and judgements of places using their skills of deduction and observation.</i>			Implement <i>How we teach the curriculum? How are lessons organised? What resources are on hand? What activities/ experiences are used to promote independent learning and risk taking? How are staff supported?</i>	Impact <i>How will this curriculum create successful, confident, independent learners? How are pupils prepared for the next stage of their education? How are their horizons broadened?</i>
Year 5	What? Where in the world?	What? Where are our resources?	What? We are Biggleswade	<p>MTPs have clearly sequenced objectives - schemes to incorporate a balance of human and physical study over a 2 year period. MTPs give opportunities for a range of skills such as maps, atlases, data, GIS and written enquiry. Immersive learning is key, through fieldwork or gamification.</p> <p>Lessons follow a clear structure of reflection of previous learning at the start, learning question enquiry in the middle and a moment of reflection at the end.</p> <p>Formative assessments in lessons assess understanding throughout. Summative final task brings all learning together.</p>	<p>Pupil engagement is high - through questioning and work.</p> <p>Children can, with confidence, form their own judgements/ views based on their observations and results.</p> <p>Pupils are prepared for the wider world armed with a knowledge of the human and physical features of places at different scales.</p> <p>Pupils are prepared for the wider world by being observant but also confidence at problem solving.</p> <p>Pupils will be inspired to visit a wider range of places.</p>
	Why? Knowing where places are in the world is fundamental for Geography. This study will develop pupil confidence using an Atlas, as well as reinforce valuable skills such as latitude and longitude. It will also give children a deeper understanding of the seven continents by studying a sample of them and the countries which make up them as well.	Why? They will recognise which products are most popular, understand global supply chains and gain a better understanding of how this directly affects their choices as a consumer. Pupils will also gain an understanding of the term food miles and the uneven distribution of resources globally.	Why? A settlement study, using Biggleswade as an example. Pupils will learn of the origins of settlements, but also the different types of settlement and features of a town or city. There is also an opportunity for children to gain fieldwork experience by going into Biggleswade itself.		
	Why now? <i>This topic will refresh atlas, latitude and longitude, and map reading skills which are crucial for the study of Geography in middle</i>	Why now? <i>Having learnt where places are, children will now get the chance to explore the global trade between places.</i>	Why now? <i>This supports the history topic "How do families teach us history?" by looking at the geography of Biggleswade and how it has changed.</i>		

	<i>school.</i>				
Year 6	What? This is the UK	What? Viva Brazil	What? Amazing Adaptations	<p><i>MTPs have clearly sequenced objectives - schemes to incorporate a balance of human and physical study over a 2 year period. MTP's give opportunities for a range of skills such as maps, atlases, data, GIS and written enquiry. Immersive learning is key, through fieldwork or gamification.</i></p> <p><i>Lessons follow a clear structure of reflection of previous learning at the start, learning question enquiry in the middle and a moment of reflection at the end.</i></p> <p><i>Formative assessments in lessons assess understanding throughout. Summative final task brings all learning together.</i></p>	<p><i>Pupil engagement is high - through questioning and work.</i></p> <p><i>Children can, with confidence, form their own judgements/ views based on their observations and results.</i></p> <p><i>Pupils are prepared for the wider world armed with a knowledge of the human and physical features of places at different scales.</i></p> <p><i>Pupils are prepared for the wider world by being observant but also confidence at problem solving.</i></p> <p><i>Pupils will be inspired to visit a wider range of places.</i></p>
	Why? <i>A study of the human and physical features of the UK. Pupils will be able to locate an array of physical features but also understand the social, economic and political set up of the nation too.</i>	Why? <i>They will get a chance to explore the human and physical features of Brazil but also the social, economic, political and environmental challenges it is facing (for example deforestation, Rio 2016 olympics, favelas) and how these compare with the challenges faced in the U.K.</i>	Why? <i>They will learn about a range of biomes around the world. They will study the locations, explore the climates but also the fauna and flora which live there. There will also be fieldwork to experience out of classroom learning.</i>		
	Why now? <i>Building on existing knowledge of the structure of settlements such as Biggleswade this study explores the human and physical geography of the UK.</i>	Why now? <i>Having studied the human and physical features of the U.K. pupils will now undertake a comparative study with Brazil.</i>	Why now? <i>Having learnt where places are in the world and connections between them in their studies in Year 5, pupils will now gain an understanding of how plants and animals are adapting to different climates.</i>		
Year 7	What? Extreme Atmosphere	What? Where is the money?	What? Unfair World	<p><i>MTPs have clearly sequenced objectives - schemes to incorporate a balance of human and physical study over a 2 year period. MTP's give opportunities for a range of skills such as maps,</i></p>	<p><i>Pupil engagement is high - through questioning and work.</i></p> <p><i>Children can, with confidence, form their own judgements/ views based on their</i></p>
	Why? <i>Pupils will learn what causes different types of weather and will also gain an appreciation for</i>	Why? <i>A study within the UK looking at economic activity, focussing on primary, secondary and</i>	Why? <i>Having understood what triggers the UK economy, pupils will undertake a study which explores global development</i>		

	<p><i>the impacts of extreme weather such as hurricanes, with Hurricane Katrina as an example, and natural hazards caused by extreme weather such as the Australia bushfires of 2019-20.</i></p>	<p><i>tertiary industries. Pupils will be able to justify the location of certain industries using maps and other forms of data, allowing them to explain the human and physical factors which influences these industries.</i></p>	<p><i>(focussing on development indicators) before then identifying the distribution of wealth and the challenges certain populations experience, for example the slums in Kibera.</i></p>	<p><i>atlases, data, GIS, written enquiry, process interactions and impacts, further develop locational knowledge and skills. Fieldwork will also widen pupils horizons.</i></p> <p><i>Lessons follow a clear structure of reflection of previous learning at the start, learning question enquiry in the middle and a moment of reflection at the end.</i></p> <p><i>Formative assessments in lessons assess understanding throughout. Summative final task brings all learning together.</i></p>	<p><i>observations and results.</i></p> <p><i>Pupils are prepared for the wider world armed with a knowledge of the human and physical features of places at different scales; as well as the interactions between places and processes.</i></p> <p><i>Pupils are prepared for the wider world by being observant but also confidence at problem solving.</i></p> <p><i>Pupils will be inspired to visit a wider range of places.</i></p> <p><i>Pupils are secondary ready by being able to complete enquiries using a range of techniques, analyse and interpret data and imagery with confidence.</i></p>
	<p>Why now?</p> <p><i>Our weather is constantly changing! In this study children will understand what is causing these changes, especially within the UK.</i></p>	<p>Why now?</p> <p><i>Having studied global trade at KS2, pupils will now discover how economic activity operates in the UK.</i></p>	<p>Why now?</p> <p><i>Having understood what triggers the UK economy, pupils will undertake a study which explores global development.</i></p>		
Year 8	What? Changing China	What? Restless Earth	What? Fragile Coasts	<p><i>MTPs have clearly sequenced objectives - schemes to incorporate a balance of human and physical study over a 2 year period. MTP's give opportunities for a range of skills such as maps, atlases, data, GIS, written</i></p>	<p><i>Pupil engagement is high - through questioning and work.</i></p> <p><i>Children can, with confidence, form their own judgements/ views based on their</i></p>
	<p>Why? <i>This study will introduce children to the human and physical geography of China, focussing on economic, social and environmental</i></p>	<p>Why? <i>They will understand what happens in plate tectonics and study the economic, social, environmental and political impacts of tectonic disasters</i></p>	<p>Why? <i>This study introduces pupils to the relationship between human and physical activity on the coast - with an overall question "should we manage the coastline?" This</i></p>		

	<i>changes caused by China's economic development. It will also study China's partnership with countries around the world through trade and resource management.</i>	<i>such as Boxing Day Tsunami 2004 and the Hawaii volcano 2018.</i>	<i>includes fieldwork task which will test hypothesis.</i>	<i>enquiry, process interactions and impacts, further develop locational knowledge and skills. Fieldwork will also widen pupils horizons.</i>	<i>observations and results.</i>
	<p>Why now?</p> <p><i>China is quickly becoming a super power; this is a chance to examine the impact of development and trade on China.</i></p>	<p>Why now?</p> <p><i>Having studied atmospheric and coastal processes, and the impacts on human activity, this study will give pupils an appreciation of how tectonic forces are also shaping the planet.</i></p>	<p>Why now?</p> <p><i>As an island we are surrounded by the sea, this topic will give pupils a chance to understand the physical processes which impact our coastline.</i></p>	<p><i>Lessons follow a clear structure of reflection of previous learning at the start, learning question enquiry in the middle and a moment of reflection at the end.</i></p> <p><i>Formative assessments in lessons assess understanding throughout. Summative final task brings all learning together.</i></p>	<p><i>Pupils are prepared for the wider world armed with a knowledge of the human and physical features of places at different scales; as well as the interactions between places and processes.</i></p> <p><i>Pupils are prepared for the wider world by being observant but also confidence at problem solving.</i></p> <p><i>Pupils will be inspired to visit a wider range of places.</i></p> <p><i>Pupils are secondary ready by being able to complete enquiries using a range of techniques, analyse and interpret data and imagery with confidence.</i></p>

History

Year	Intent <i>The intention of the History curriculum is to provide opportunities for children to explore political and religious developments in history at a range of scales; therefore giving every child a broad understanding of how the human world of today has developed the way it has. Independent learning is at the core of the history curriculum where children are actively encouraged to form their own judgements using the evidence available.</i>			Implement <i>How we teach the curriculum? How are lessons organised? What resources are on hand? What activities/ experiences are used to promote independent learning and risk taking? How are staff supported?</i>	Impact <i>How will this curriculum create successful, confident, independent learners? How are pupils prepared for the next stage of their education? How are their horizons broadened?</i>
Year 5	What? What did the ancient world achieve?	What? What has early Islam given modern day?	What? How can families teach us history?	<i>Each lesson has a learning question assigned which is sequenced through the MTP. Lessons follow a clear structure with reflective questions to sequence learning and time to respond to feedback provided.</i> <i>Primary and Secondary sources tailored to pupil abilities.</i> <i>Broad range of activities which cater for different needs. Subject specialist teaching - teacher check ins to support delivery.</i> <i>Formative and summative assessment methods used to ensure a clear understanding of topics.</i>	<i>Pupil engagement is high and they are inspired to find out more.</i> <i>Pupils will have a greater appreciation of what has happened in the past and the impact it has on them.</i> <i>Pupils will be able to reflect on their decisions and the impacts they may have.</i> <i>Pupil feedback is positive in topic questionnaires.</i>
	Why? <i>This is a study of the Ancient Greek and Egyptian civilizations. The study explores the social, economic and political changes experienced by both civilizations but also the impact these achievements have on modern day (how they influence modern day thinking).</i>	Why? <i>They will compare Baghdad and London C.AD 900, but also make links with other cultures that contributed to the development of early Islam. There is a strong emphasis on children investigating issues and solving valid historical questions recognising the nature of the evidence on which their judgements and knowledge are based.</i>	Why? <i>A local history study where children take one of the families which the school houses are named after. From that they will produce a project which outlines the family history, the conditions in Biggleswade and Britain at the time but also the impact that family had not only in Biggleswade but with national events.</i>		
	Why now? <i>This topic introduces the study of History to pupils but also fills the gap of ancient knowledge from lower schools.</i>	Why now? <i>Pupils will continue their learning of the impact of civilizations on modern day.</i>	Why now? <i>Pupils have spent most of the year looking at world history, this topic will allow them to focus on history at a local scale.</i>		

Year 6	What? Elizabethan times: Not just banquets and fun	What? What did the Victorians do for Britain??	What? What role did women play in WW2?	<p>Each lesson has a learning question assigned which is sequenced through the MTP. Lessons follow a clear structure with reflective questions to sequence learning and time to respond to feedback provided.</p> <p>Primary and Secondary sources tailored to pupil abilities.</p> <p>Broad range of activities which cater for different needs. Subject specialist teaching - teacher check ins to support delivery.</p> <p>Formative and summative assessment methods used to ensure a clear understanding of topics.</p>	<p>Pupil engagement is high and they are inspired to find out more.</p> <p>Pupils will have a greater appreciation of what has happened in the past and the impact it has on them.</p> <p>Pupils will be able to reflect on their decisions and the impacts they may have.</p> <p>Pupil feedback is positive in topic questionnaires.</p>
	Why? This study picks up a few hundred years after Robin Hood. It looks at the reign of Mary I and Elizabeth I (the first queens of England). It will focus on the positives and negatives of their reign, but also the changes they introduced which helped in one way or the other the development of the country.	Why? The Victorian era is synonymous for social and industrial developments in the U.K and it's Empire. In this study children will gain an understanding of the lives of rich and poor Britons changed, but also the developments which still bare a legacy in today's world.	Why? Undeniably one of the world's largest conflicts, this study is focussed more on the impact of the war on the homefront. Pupils will witness the challenges experienced by the country at this time, the decisions made (e.g. evacuation) but also how the role of women changed further in society to help with the war efforts; particularly during the Battle of Britain.		
	Why now?	Why now?	Why now?		
	A useful study looking at the first female leaders of the UK and the impact of their reign.	This topic continues the study of successful female leaders by looking at the Victorian era.	This topic closes pupil reflection on the role of women in history by looking at the parts women played in WW2.		
Year 7	What? Contested power and land	What? Empire, expansion and collapse	What? Revolutions in religion	<p>Each lesson has a learning question assigned which is sequenced through the MTP. Lessons follow a clear structure with reflective questions to sequence learning and time to respond to feedback provided.</p> <p>Primary and Secondary sources tailored to pupil abilities. Broad range of activities which cater for different needs. Activities</p>	<p>Pupil engagement is high and they are inspired to find out more.</p> <p>Pupils will have a greater appreciation of what has happened in the past and the impact it has on them.</p> <p>Pupils will be able to reflect on their decisions and the impacts</p>
	Why? In this unit children will gain an understanding of the social and religious changes experienced at the turn of previous millennia. They will learn about the conflicts which arose	Why? Having recognised the growing strength of individuals and religions in 1000CE, pupils will now explore how this growing political and religious strength has allowed	Why? This study oversees a change in Europe where political leaders, now having exercised their power over the people, are now beginning to exercise their power over religion. This study details the beginnings of		

	<p><i>between the growing strength of Christianity and Islam, but also within Europe how some political leaders were already exercising their will and the outcomes of these actions.</i></p>	<p><i>Empires to develop around the world, as well as the development of Britains Empire itself within the U.K. It will also outline some of the hardships faced by these Empires which did cause turmoil and in some cases collapse.</i></p>	<p><i>Protestant Europe, and the consequences of such change in European politics.</i></p> <p><i>On top of the religious changes within Europe there were also economic gains. This study will give children an introduction to the beginnings of European Empires but also the competition faced between nations to gain a political/ empirical foothold over each other - ultimately leading to conflicts such as WW1 in centuries to come.</i></p>	<p><i>also encourage children to extend their enquiry and analytical skills.</i></p> <p><i>Formative and summative assessment methods used to ensure a clear understanding of topics. Summative assessments follow a format which test a range of enquiry skills.</i></p>	<p><i>they may have.</i></p> <p><i>Pupil feedback is positive in topic questionnaires.</i></p> <p><i>KS3 pupils are secondary ready.</i></p>
	<p>Why now?</p> <p><i>This topic introduces children to the religious and political changes which occurred in the 11th century, a theme set to continue in KS3.</i></p>	<p>Why now?</p> <p><i>Having recognised the increase in power of religion and monarchy, this study explores how this developed in the UK and globally.</i></p>	<p>Why now?</p> <p><i>This study outlines the inevitable conflict between religion and power across Europe.</i></p> <p><i>Having recognised the increase in power this a study to show how economics was a direct outcome of political power in Europe.</i></p>		
Year 8	<p>What? Development of state and society in Britain</p>	<p>What? The British Empire</p>	<p>What? Enlightenment in Europe</p>	<p><i>Each lesson has a learning question assigned which is sequenced through the MTP. Lessons follow a clear structure with reflective questions to sequence learning and time to respond to feedback provided.</i></p> <p><i>Primary and Secondary</i></p>	<p><i>Pupil engagement is high and they are inspired to find out more.</i></p> <p><i>Pupils will have a greater appreciation of what has happened in the past and the impact it has on them.</i></p>
	<p>Why? <i>Following on from the religious changes, this study explores the political impacts of these by focussing on the English Civil War, Glorious</i></p>	<p>Why? <i>A powerful example of British superiority, this study explores whether it was exploration, trade or war which caused the Empire to grow, but also</i></p>	<p>Why? <i>With many European countries have established Empires in the 17th and 18th centuries, this study focuses on how this power and wealth was used to benefit Europe. It is also</i></p>		

	<p><i>revolution and Acts of Union. These events saw huge political changes in Britain, including the ever increasing power of the government/ parliament as a voice of the people.</i></p>	<p><i>whether the British stuck to their core belief of: responsible, duty, sympathetic and self-sacrifice. Pupils will evaluate the British rule in India as well as critically reflect on the benefits of Triangular Trade.</i></p>	<p><i>a chance for children to understand the increasing power and confidence of the people which led to events such as the French Revolution and Ireland Homerule.</i></p>	<p><i>sources tailored to pupil abilities.</i></p> <p><i>Broad range of activities which cater for different needs. Activities also encourage children to extend their explanations through enquiry and form critical judgements.</i></p>	<p><i>Pupils will be able to reflect on their decisions and the impacts they may have.</i></p> <p><i>Pupil feedback is positive in topic questionnaires.</i></p>
	<p>Why now?</p> <p><i>Returning to the conflict between power and religion, this topic outlines the stepping stone with the state becoming more powerful.</i></p>	<p>Why now?</p> <p><i>This study outlines the increasing political and economic strength of the UK and it's impact on the world.</i></p>	<p>Why now?</p> <p><i>With political continuing to rise this study looks at two more impacts of power on the people.</i></p>	<p><i>Formative and summative assessment methods used to ensure a clear understanding of topics. Summative assessments follow a format which test a range of enquiry skills; including questions adapted from GCSE. .</i></p>	<p><i>KS3 pupils are secondary ready.</i></p>

Maths

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Place Value: Counting	<ul style="list-style-type: none"> count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number Count numbers to 100 in numerals; count in multiples of twos, fives and tens <p>Autumn 1 Autumn 4 Spring 2 Summer 4</p>	<ul style="list-style-type: none"> count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward <p>Autumn 1</p>	<ul style="list-style-type: none"> count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number <p>Autumn 1 Autumn 3</p>	<ul style="list-style-type: none"> count in multiples of 6, 7, 9, 25 and 1000 count backwards through zero to include negative numbers <p>Autumn 1 Autumn 4</p>	<ul style="list-style-type: none"> 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 <p>Autumn 1</p>	
Place Value: Represent	<ul style="list-style-type: none"> identify and represent numbers using objects and pictorial representations read and write numbers to 100 in numerals read and write numbers from 1 to 20 in numerals and words. <p>Autumn 1 Autumn 4 Spring 2 Summer 4</p>	<ul style="list-style-type: none"> read and write numbers to at least 100 in numerals and in words identify, represent and estimate numbers using different representations, including the number line <p>Autumn 1</p>	<ul style="list-style-type: none"> identify, represent and estimate numbers using different representations read and write numbers up to 1000 in numerals and in words <p>Autumn 1</p>	<ul style="list-style-type: none"> identify, represent and estimate numbers using different representations read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value <p>Autumn 1</p>	<ul style="list-style-type: none"> read, write, (order and compare) numbers to at least 1 000 000 and determine the value of each digit read Roman numerals to 1000 (M) and recognise years written in Roman numerals. <p>Autumn 1</p>	<ul style="list-style-type: none"> read, write, (order and compare) numbers up to 10 000 000 and determine the value of each digit <p>Autumn 1</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Place Value : Use PV and Compare	<ul style="list-style-type: none"> given a number, identify one more and one less <p>Autumn 1 Autumn 4 Spring 2 Summer 4</p>	<ul style="list-style-type: none"> recognise the place value of each digit in a two-digit number (tens, ones) compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs <p>Autumn 1</p>	<ul style="list-style-type: none"> recognise the place value of each digit in a three-digit number (hundreds, tens, ones) compare and order numbers up to 1000 <p>Autumn 1</p>	<ul style="list-style-type: none"> find 1000 more or less than a given number recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) order and compare numbers beyond 1000 <p>Autumn 1</p>	<ul style="list-style-type: none"> (read, write) order and compare numbers to at least 1 000 000 and determine the value of each digit <p>Autumn 1</p>	<ul style="list-style-type: none"> (read, write), order and compare numbers up to 10 000 000 and determine the value of each digit <p>Autumn 1</p>
Place Value: Problems & Rounding		<ul style="list-style-type: none"> use place value and number facts to solve problems. <p>Autumn 1</p>	<ul style="list-style-type: none"> solve number problems and practical problems involving these ideas <p>Autumn 1</p>	<ul style="list-style-type: none"> round any number to the nearest 10, 100 or 1000 solve number and practical problems that involve all of the above and with increasingly large positive numbers <p>Autumn 1</p>	<ul style="list-style-type: none"> interpret negative numbers in context round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 solve number problems and practical problems that involve all of the above <p>Autumn 1</p>	<ul style="list-style-type: none"> round any whole number to a required degree of accuracy use negative numbers in context, and calculate intervals across zero solve number and practical problems that involve all of the above <p>Autumn 1</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Addition & Subtraction: Recall, Represent, Use	<ul style="list-style-type: none"> read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs represent and use number bonds and related subtraction facts within 20 	<ul style="list-style-type: none"> recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems 	<ul style="list-style-type: none"> estimate the answer to a calculation and use inverse operations to check answers 	<ul style="list-style-type: none"> estimate and use inverse operations to check answers to a calculation 	<ul style="list-style-type: none"> use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy 	
	Autumn 2 Spring 1	Autumn 2	Autumn 2	Autumn 2	Autumn 2	

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Addition & Subtraction: Calculations	<ul style="list-style-type: none"> add and subtract one-digit and two-digit numbers to 20, including zero <p>Autumn 2 Spring 1</p>	<ul style="list-style-type: none"> add and subtract numbers using concrete objects, pictorial representations, and mentally, including: <ul style="list-style-type: none"> a two-digit number and ones a two-digit number and tens two two-digit numbers adding three one-digit numbers <p>Autumn 2</p>	<ul style="list-style-type: none"> add and subtract numbers mentally, including: <ul style="list-style-type: none"> a three-digit number and ones a three-digit number and tens a three-digit number and hundreds add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction <p>Autumn 2</p>	<ul style="list-style-type: none"> add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate <p>Autumn 2</p>	<ul style="list-style-type: none"> 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 <p>Autumn 2</p>	<ul style="list-style-type: none"> perform mental calculations, including with mixed operations and large numbers use their knowledge of the order of operations to carry out calculations involving the four operations <p>Autumn 2</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Addition & Subtraction: Solve Problems	<ul style="list-style-type: none"> solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$ <p>Autumn 2 Spring 1</p>	<ul style="list-style-type: none"> solve problems with addition and subtraction: <ul style="list-style-type: none"> ➤ using concrete objects and pictorial representations, including those involving numbers, quantities and measures ➤ applying their increasing knowledge of mental and written methods <p>Autumn 2</p>	<ul style="list-style-type: none"> solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction <p>Autumn 2</p>	<ul style="list-style-type: none"> solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why <p>Autumn 2</p>	<ul style="list-style-type: none"> 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 and a combination of these, including understanding the meaning of the equals sign <p>Autumn 2</p>	<ul style="list-style-type: none"> solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why <p>Autumn 2</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Multiplication & Division: Recall, Represent, Use		<ul style="list-style-type: none"> recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot <p>Autumn 4 Spring 1</p>	<ul style="list-style-type: none"> recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables <p>Autumn 3</p>	<ul style="list-style-type: none"> recall multiplication and division facts for multiplication tables up to 12×12 use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers recognise and use factor pairs and commutativity in mental calculations <p>Autumn 4 Spring 1</p>	<ul style="list-style-type: none"> 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) <p>Autumn 4</p>	<ul style="list-style-type: none"> identify common factors, common multiples and prime numbers use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. <p>Autumn 2</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Multiplication & Division: Calculations		<ul style="list-style-type: none"> calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs <p>Autumn 4 Spring 1</p>	<ul style="list-style-type: none"> write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods <p>Autumn 3 Spring 1</p>	<ul style="list-style-type: none"> multiply two-digit and three-digit numbers by a one-digit number using formal written layout <p>Spring 1</p>	<ul style="list-style-type: none"> multiply numbers 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 multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 <p>Autumn 4 Spring 1 Summer 1</p>	<ul style="list-style-type: none"> 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 <p>Autumn 2</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Multiplication & Division: Solve Problems	<ul style="list-style-type: none"> solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher <p>Summer 1</p>	<ul style="list-style-type: none"> solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts <p>Autumn 4 Spring 1</p>	<ul style="list-style-type: none"> solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects <p>Spring 1</p>	<ul style="list-style-type: none"> solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects <p>Spring 1</p>	<ul style="list-style-type: none"> solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates <p>Autumn 4 Spring 1</p>	<ul style="list-style-type: none"> solve problems involving addition, subtraction, multiplication and division <p>Autumn 2</p>
Multiplication & Division: Combined Operations					<ul style="list-style-type: none"> solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign <p>Spring 1</p>	<ul style="list-style-type: none"> use their knowledge of the order of operations to carry out calculations involving the four operations <p>Autumn 2</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fractions: Recognise and Write	<ul style="list-style-type: none"> recognise, find and name a half as one of two equal parts of an object, shape or quantity recognise, find and name a quarter as one of four equal parts of an object, shape or quantity <p>Summer 2</p>	<ul style="list-style-type: none"> recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity <p>Spring 4</p>	<ul style="list-style-type: none"> count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators <p>Spring 5</p>	<ul style="list-style-type: none"> count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. <p>Spring 3</p>	<ul style="list-style-type: none"> 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 other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$] <p>Spring 2</p>	
Fractions: Compare		<ul style="list-style-type: none"> Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ <p>Spring 4</p>	<ul style="list-style-type: none"> recognise and show, using diagrams, equivalent fractions with small denominators compare and order unit fractions, and fractions with the same denominators <p>Summer 1</p>	<ul style="list-style-type: none"> recognise and show, using diagrams, families of common equivalent fractions <p>Spring 3</p>	<ul style="list-style-type: none"> compare and order fractions whose denominators are all multiples of the same number <p>Spring 2</p>	<ul style="list-style-type: none"> use common factors to simplify fractions; use common multiples to express fractions in the same denomination compare and order fractions, including fractions > 1 <p>Autumn 3</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fractions: Calculations		<ul style="list-style-type: none"> write simple fractions for example, $\frac{1}{2}$ of 6 = 3 	<ul style="list-style-type: none"> add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$] 	<ul style="list-style-type: none"> add and subtract fractions with the same denominator 	<ul style="list-style-type: none"> add and subtract fractions with the same denominator and denominators that are multiples of the same number multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams 	<ul style="list-style-type: none"> 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, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$] divide proper fractions by whole numbers [for example, $\frac{1}{3} \div 2 = \frac{1}{6}$]
		Spring 4	Summer 1	Spring 3	Spring 3	Autumn 3
Fractions: Solve Problems			<ul style="list-style-type: none"> solve problems that involve all of the above 	<ul style="list-style-type: none"> solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number 		
			Spring 5 Summer 1	Spring 3		

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Decimals: Recognise and Write				<ul style="list-style-type: none"> recognise and write decimal equivalents of any number of tenths or hundredths recognise and write decimal equivalents to $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$ <p>Spring 4 Summer 1</p>	<ul style="list-style-type: none"> read and write decimal numbers as fractions [for example, $0.71 = \frac{71}{100}$] recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents <p>Spring 3</p>	<ul style="list-style-type: none"> identify the value of each digit in numbers given to three decimal places <p>Spring 1</p>
Decimals: Compare				<ul style="list-style-type: none"> round decimals with one decimal place to the nearest whole number compare numbers with the same number of decimal places up to two decimal places <p>Summer 1</p>	<ul style="list-style-type: none"> round decimals with two decimal places to the nearest whole number and to one decimal place read, write, order and compare numbers with up to three decimal places <p>Spring 3</p>	

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Decimals: Calculations & Problems				<ul style="list-style-type: none"> find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths <p>Spring 4</p>	<ul style="list-style-type: none"> solve problems involving number up to three decimal places <p>Summer 1</p>	<ul style="list-style-type: none"> multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places multiply one-digit numbers with up to two decimal places by whole numbers use written division methods in cases where the answer has up to two decimal places solve problems which require answers to be rounded to specified degrees of accuracy <p>Spring 1</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fractions, Decimals and Percentages				<ul style="list-style-type: none"> solve simple measure and money problems involving fractions and decimals to two decimal places <p>Spring 3 Spring 4 Summer 1</p>	<ul style="list-style-type: none"> recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25 <p>Spring 3</p>	<ul style="list-style-type: none"> associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$] recall and use equivalences between simple fractions, decimals and percentages, including in different contexts <p>Spring 1 Spring 2</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Ratio and Proportion						<ul style="list-style-type: none"> • solve problems involving the relative sizes of two 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. <p>Spring 6</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Algebra	<ul style="list-style-type: none"> solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$ 	<ul style="list-style-type: none"> recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems 	<ul style="list-style-type: none"> solve problems, including missing number problems 			<ul style="list-style-type: none"> use simple formulae generate and describe linear number sequences express missing number problems algebraically find pairs of numbers that satisfy an equation with two unknowns enumerate possibilities of combinations of two variables. <p>Spring 3</p>

Note – although algebraic notation is not introduced until Y6, algebraic thinking starts much earlier as exemplified by the ‘missing number’ objectives from Y1/2/3

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement: Using Measures	<ul style="list-style-type: none"> compare, describe and solve practical problems for: <ul style="list-style-type: none"> ➤ lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] ➤ mass/weight [for example, heavy/light, heavier than, lighter than] ➤ capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] ➤ time [for example, quicker, slower, earlier, later] measure and begin to record the following: <ul style="list-style-type: none"> ➤ lengths and heights ➤ mass/weight ➤ capacity and volume ➤ time (hours, minutes, seconds) <p>Spring 3 Spring 4 Summer 6</p>	<ul style="list-style-type: none"> choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels compare and order lengths, mass, volume/capacity and record the results using >, < and = <p>Spring 5 Summer 4</p>	<ul style="list-style-type: none"> measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) <p>Spring 4 Summer 4</p>	<ul style="list-style-type: none"> Convert between different units of measure [for example, kilometre to metre; hour to minute] estimate, compare and calculate different measures <p>Autumn 3 Spring 2 Summer 3</p>	<ul style="list-style-type: none"> convert between different 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 [for example, length, mass, volume, money] using decimal notation, including scaling <p>Summer 1 Summer 4 Summer 5</p>	<ul style="list-style-type: none"> solve problems involving the calculation and conversion of units of measure, using decimal notation up to three 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 three decimal places convert between miles and kilometres <p>Spring 4</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement: Money	<ul style="list-style-type: none"> recognise and know the value of different denominations of coins and notes <p>Summer 5</p>	<ul style="list-style-type: none"> recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value find different combinations of coins that equal the same amounts of money solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change <p>Autumn 3</p>	<ul style="list-style-type: none"> add and subtract amounts of money to give change, using both £ and p in practical contexts <p>Spring 2</p>	<ul style="list-style-type: none"> estimate, compare and calculate different measures, including money in pounds and pence <p>Summer 2</p>	<ul style="list-style-type: none"> use all four operations to solve problems involving measure [for example, money] <p>Summer 1</p>	

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement: Time	<ul style="list-style-type: none"> sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] recognise and use language relating to dates, including days of the week, weeks, months and years tell the time to the hour and half past the hour and draw the hands on a clock face to show these times <p>Summer 6</p>	<ul style="list-style-type: none"> compare and sequence intervals of time tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times know the number of minutes in an hour and the number of hours in a day <p>Summer 3</p>	<ul style="list-style-type: none"> tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight know the number of seconds in a minute and the number of days in each month, year and leap year compare durations of events [for example to calculate the time taken by particular events or tasks] <p>Summer 2</p>	<ul style="list-style-type: none"> read, write and convert time between analogue and digital 12- and 24-hour clocks solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days <p>Summer 3</p>	<ul style="list-style-type: none"> solve problems involving converting between units of time <p>Summer 4</p>	<ul style="list-style-type: none"> use, read, write and convert between standard units, converting measurements of time from a smaller unit of measure to a larger unit, and vice versa <p>Year 5 Summer 4</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement: Perimeter, Area, Volume			<ul style="list-style-type: none"> measure the perimeter of simple 2-D shapes <p>Spring 4</p>	<ul style="list-style-type: none"> measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres find the area of rectilinear shapes by counting squares <p>Autumn 3 Spring 2</p>	<ul style="list-style-type: none"> 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 estimate volume [for example, using 1 cm³ blocks to build cuboids (including cubes)] and capacity [for example, using water] <p>Autumn 5 Summer 5</p>	<ul style="list-style-type: none"> 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 (cm³) and cubic metres (m³), and extending to other units [for example, mm³ and km³] <p>Spring 5</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Geometry: 2-D Shapes	<ul style="list-style-type: none"> recognise and name common 2-D shapes [for example, rectangles (including squares), circles and triangles] <p>Autumn 3</p>	<ul style="list-style-type: none"> identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] compare and sort common 2-D shapes and everyday objects <p>Spring 3</p>	<ul style="list-style-type: none"> draw 2-D shapes <p>Summer 3</p>	<ul style="list-style-type: none"> compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes identify lines of symmetry in 2-D shapes presented in different orientations <p>Summer 5</p>	<ul style="list-style-type: none"> 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 <p>Summer 2</p>	<ul style="list-style-type: none"> draw 2-D shapes using given dimensions and angles compare and classify geometric shapes based on their properties and sizes illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius <p>Summer 1</p>
Geometry: 3-D Shapes	<ul style="list-style-type: none"> recognise and name common 3-D shapes [for example, cuboids (including cubes), pyramids and spheres] <p>Autumn 3</p>	<ul style="list-style-type: none"> recognise and name common 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]. compare and sort common 3-D shapes and everyday objects <p>Spring 3</p>	<ul style="list-style-type: none"> make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them <p>Summer 3</p>		<ul style="list-style-type: none"> identify 3-D shapes, including cubes and other cuboids, from 2-D representations <p>Summer 2</p>	<ul style="list-style-type: none"> recognise, describe and build simple 3-D shapes, including making nets <p>Summer 1</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Geometry: Angles & Lines			<ul style="list-style-type: none"> recognise angles as a property of shape or a description of a turn identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle identify horizontal and vertical lines and pairs of perpendicular and parallel lines 	<ul style="list-style-type: none"> identify acute and obtuse angles and compare and order angles up to two right angles by size identify lines of symmetry in 2-D shapes presented in different orientations complete a simple symmetric figure with respect to a specific line of symmetry 	<ul style="list-style-type: none"> know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles draw given angles, and measure them in degrees identify: <ul style="list-style-type: none"> angles at a point and one whole turn (total 360°) angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) other multiples of 90° 	<ul style="list-style-type: none"> find unknown angles in any triangles, quadrilaterals, and regular polygons recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles
			Summer 3	Summer 5	Summer 2	Summer 1

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Geometry: Position & Direction	<ul style="list-style-type: none"> describe position, direction and movement, including whole, half, quarter and three-quarter turns <p>Summer 3</p>	<ul style="list-style-type: none"> order and arrange combinations of mathematical objects in patterns and sequences use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise) <p>Spring 3 Summer 1</p>		<ul style="list-style-type: none"> describe positions on a 2-D grid as coordinates in the first quadrant describe movements between positions as translations of a given unit to the left/right and up/down plot specified points and draw sides to complete a given polygon <p>Summer 6</p>	<ul style="list-style-type: none"> identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed <p>Summer 3</p>	<ul style="list-style-type: none"> describe positions on the full coordinate grid (all four quadrants) draw and translate simple shapes on the coordinate plane, and reflect them in the axes <p>Autumn 4</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Statistics: Present and Interpret		<ul style="list-style-type: none"> interpret and construct simple pictograms, tally charts, block diagrams and simple tables <p>Spring 2</p>	<ul style="list-style-type: none"> interpret and present data using bar charts, pictograms and tables <p>Spring 3</p>	<ul style="list-style-type: none"> interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs <p>Summer 4</p>	<ul style="list-style-type: none"> complete, read and interpret information in tables, including timetables <p>Autumn 3</p>	<ul style="list-style-type: none"> interpret and construct pie charts and line graphs and use these to solve problems <p>Summer 3</p>
Statistics: Solve Problems		<ul style="list-style-type: none"> ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity ask and answer questions about totalling and comparing categorical data <p>Spring 2</p>	<ul style="list-style-type: none"> solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables <p>Spring 3</p>	<ul style="list-style-type: none"> solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs <p>Summer 4</p>	<ul style="list-style-type: none"> solve comparison, sum and difference problems using information presented in a line graph <p>Autumn 3</p>	<ul style="list-style-type: none"> calculate and interpret the mean as an average <p>Summer 3</p>

		Year 7	Year 8	Year 9	Year 10	Year 11
Number: Understand & Represent		Autumn block 4 <ul style="list-style-type: none"> Understand and use place value Compare and order numbers Round to powers of 10 and 1sf Additional Higher content <ul style="list-style-type: none"> Write 1sf numbers in standard form Spring block 2 <ul style="list-style-type: none"> Use factors and multiples Spring block 4 <ul style="list-style-type: none"> Order directed number Summer block 5 <ul style="list-style-type: none"> Prime factorisation HCF and LCM 	Spring block 5 <ul style="list-style-type: none"> Revisit Y7 comparing and ordering Write numbers of any size in standard form Additional Higher content <ul style="list-style-type: none"> Use negative and fractional indices Spring block 6 <ul style="list-style-type: none"> Revisit Y7 rounding Round to given numbers of dp and sf 	Spring block 1 <ul style="list-style-type: none"> Revisit and extend Y7/8 content including: <ul style="list-style-type: none"> ➤ Types of number ➤ Standard form ➤ HCF and LCM Rational and real numbers Summer block 6 <ul style="list-style-type: none"> You could use the revision block to extend Y7/8 content including: <ul style="list-style-type: none"> ➤ Standard form ➤ Prime factorisation 	Summer block 2 <ul style="list-style-type: none"> Revise and extend KS3 content: Rounding and limits of accuracy Higher tier content <ul style="list-style-type: none"> Upper and lower bounds Converting recurring decimals Summer block 3 <ul style="list-style-type: none"> Revise and extend KS3 content including: factors, multiples and primes Summer block 4 <ul style="list-style-type: none"> Revise and extend KS3 content including standard form 	Spring block 5 <ul style="list-style-type: none"> Making ordered lists Higher tier content <ul style="list-style-type: none"> Product rule for counting Spring block 6 <ul style="list-style-type: none"> Proving equivalence of different forms of number Summer block 1 <ul style="list-style-type: none"> Revision
		KS3 National Curriculum			KS4 National Curriculum	
		<ul style="list-style-type: none"> understand and use place value for decimals, measures and integers of any size order positive and negative integers, decimals and fractions; use the number line as a model for ordering of the real numbers; use the symbols =, ≠, <, >, ≤, ≥ use the concepts and vocabulary of prime numbers, factors (or divisors), multiples, common factors, common multiples, highest common factor, lowest common multiple, prime factorisation, including using product notation and the unique factorisation property interpret and compare numbers in standard form $A \times 10^n$, $1 \leq n < 10$ where n is a positive or negative integer or zero round numbers and measures to an appropriate degree of accuracy [for example, to a number of decimal places or significant figures] appreciate the infinite nature of the sets of integers, real and rational numbers. 			In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> apply systematic listing strategies, {including use of the product rule for counting} {change recurring decimals into their corresponding fractions and vice versa} apply and interpret limits of accuracy when rounding or truncating, {including upper and lower bounds} 	

		Year 7	Year 8	Year 9	Year 10	Year 11
Number: Calculations		Spring blocks 1/2 <ul style="list-style-type: none"> Use the four operations with positive integers and decimals Use a calculator Multiply and divide by positive powers of 10 Order of operations Additional Higher content <ul style="list-style-type: none"> Multiply by 0.1 and 0.01 Spring block 4 <ul style="list-style-type: none"> Use the four operations with directed number Spring block 5 <ul style="list-style-type: none"> Add and subtract fractions including mixed numbers Summer block 3 <ul style="list-style-type: none"> Use known facts 	Autumn block 3 <ul style="list-style-type: none"> Multiply and divide fractions Additional Higher content <ul style="list-style-type: none"> Multiply and divide mixed numbers Spring block 6 <ul style="list-style-type: none"> Revisit and extend Y7 work including: <ul style="list-style-type: none"> ➤ Convert between units of time ➤ Order of operations Calculate with money Use estimation Additional Higher content <ul style="list-style-type: none"> Convert metric units of length and area Use error interval notation 	Spring block 1 <ul style="list-style-type: none"> Revisit fraction arithmetic Spring block 3 <ul style="list-style-type: none"> Revisit and extend Y7/8 work in the context of financial mathematics 	Summer block 2 <ul style="list-style-type: none"> Revisit and extend KS3 number work Work with exact answers Higher tier content <ul style="list-style-type: none"> Calculate with surds Summer block 4 <ul style="list-style-type: none"> Work with powers and roots Calculate with standard form Higher tier content <ul style="list-style-type: none"> Calculate with surds 	Spring block 1 <ul style="list-style-type: none"> Revisit and extend KS3 number work Summer block 1 <ul style="list-style-type: none"> Revision
		KS3 National Curriculum			KS4 National Curriculum	
		<ul style="list-style-type: none"> use the four operations, including formal written methods, applied to integers, decimals, proper and improper fractions, and mixed numbers, all both positive and negative use conventional notation for the priority of operations, including brackets, powers, roots use standard units of time recognise and use relationships between operations including inverse operations use integer powers and associated real roots (square, cube and higher), recognise powers of 2, 3, 4, 5 and distinguish between exact representations of roots and their decimal approximations use approximation through rounding to estimate answers and calculate possible resulting errors expressed using inequality notation $a < x \leq b$ use a calculator and other technologies to calculate results accurately and then interpret them appropriately 			In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> {estimate powers and roots of any given positive number} calculate with roots, and with integer {and fractional} indices calculate exactly with fractions, {surds} and multiples of π; {simplify surd expressions involving squares [for example $\sqrt{12} = \sqrt{4 \times 3} = \sqrt{4} \times \sqrt{3} = 2\sqrt{3}$] and rationalise denominators} calculate with numbers in standard form $A \times 10^n$, $1 \leq n < 10$ and n is an integer 	

		Year 7	Year 8	Year 9	Year 10	Year 11
Number: Understand Fractions and Decimals		Autumn block 5 <ul style="list-style-type: none"> Interchange between fractions and decimals below 1 Additional Higher content <ul style="list-style-type: none"> Explore fractions above 1 Spring block 3 <ul style="list-style-type: none"> Find fractions of an amount (up to 1) Additional Higher content <ul style="list-style-type: none"> Solve problems with fractions greater than 1 	Spring block 4 <ul style="list-style-type: none"> Revise and extend Y7 coverage Express one number as a fraction of another Explore calculator and non-calculator methods 	Spring block 1: <ul style="list-style-type: none"> Revise and extend Y7/8 coverage 	Spring block 4 <ul style="list-style-type: none"> Working with ratios and fractions Spring block 5 <ul style="list-style-type: none"> Revise and extend KS3 conversions Spring block 5 <ul style="list-style-type: none"> Revisit converting fractions and decimals 	Spring block 1 <ul style="list-style-type: none"> Review multiplicative change including fractions and decimals Spring block 6 <ul style="list-style-type: none"> Proving equivalence Summer block 1 <ul style="list-style-type: none"> Revision
		KS3 National Curriculum			KS4 National Curriculum	
		<ul style="list-style-type: none"> work interchangeably with terminating decimals and their corresponding fractions (such as 3.5 and $\frac{7}{2}$ or 0.375 and $\frac{3}{8}$) interpret fractions and percentages as operators express one quantity as a fraction of another, where the fraction is less than 1 and greater than 1 			In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> identify and work with fractions in ratio problems 	

		Year 7	Year 8	Year 9	Year 10	Year 11
Number: Percentages		Autumn block 5 <ul style="list-style-type: none"> Interchange between fractions, decimals and percentages up to 100% Additional Higher content <ul style="list-style-type: none"> Explore over 100% Spring block 3 <ul style="list-style-type: none"> Find percentage of amount using mental and calculator methods (up to 100%) Additional Higher content <ul style="list-style-type: none"> Explore over 100% 	Spring block 4 <ul style="list-style-type: none"> Revise and extend Y7 coverage Percentage increase and decrease Using multipliers Express one quantity as a percentage of another, compare two quantities using percentages Work with percentages greater than 100% Additional Higher content <ul style="list-style-type: none"> Finding the original after percentage change 	Spring blocks 2/3 <ul style="list-style-type: none"> Revise and extend Y7/8 coverage Reverse percentages Financial maths Additional Higher content <ul style="list-style-type: none"> Repeated percentage change 	Spring block 5 <ul style="list-style-type: none"> Revise and extend KS3 content Simple and compound interest Finding original values Repeated percentage change Summer block 2 <ul style="list-style-type: none"> Revisit conversions and non-calculator methods 	Spring block 6 <ul style="list-style-type: none"> "Show that" problems with percentages Summer block 1 <ul style="list-style-type: none"> Revision
		KS3 National Curriculum			KS4 National Curriculum	
		<ul style="list-style-type: none"> Define percentage as 'number of parts per hundred', interpret percentage changes as a fraction or a decimal, interpret these multiplicatively, express one quantity as a percentage of another, compare two quantities using percentages, and work with percentages greater than 100% interpret fractions and percentages as operators solve problems involving percentage change, including: percentage increase, decrease and original value problems and simple interest in financial mathematics 			In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> set up, solve and interpret the answers in growth and decay problems, including compound interest 	

	Year 7	Year 8	Year 9	Year 10	Year 11
Algebra: Understand Notation and Substitute	Autumn block 2 <ul style="list-style-type: none"> Function machines Algebraic notation Substitute into expressions Spring block 4 <ul style="list-style-type: none"> Revisit notation and substitution in the context of directed number Spring block 5 Additional Higher content <ul style="list-style-type: none"> Simple algebraic fractions Summer 3 <ul style="list-style-type: none"> Explore related algebraic expressions 	Spring block 1 <ul style="list-style-type: none"> Revise and extend Y7 coverage to include more complex expressions Spring block 3 <ul style="list-style-type: none"> Work with indices Additional Higher content <ul style="list-style-type: none"> Explore powers of powers 	Autumn blocks 1/2/3 <ul style="list-style-type: none"> Revise and extend Y7/8 coverage Summer block 5 <ul style="list-style-type: none"> Revise algebraic representation 	Autumn block 3/4 <ul style="list-style-type: none"> Revise and extend KS3 content Summer block 4 <ul style="list-style-type: none"> Work with powers and roots 	Autumn block 6 <ul style="list-style-type: none"> Substitute in kinematics formulae Functions Higher tier content <ul style="list-style-type: none"> Composite and inverse functions
	KS3 National Curriculum			KS4 National Curriculum	
	<ul style="list-style-type: none"> use and interpret algebraic notation, including: <ul style="list-style-type: none"> ab in place of $a \times b$ $3y$ in place of $y + y + y$ and $3 \times y$ a^2 in place of $a \times a$ ab in place of $a \times b$ $\frac{a}{b}$ in place of $a \div b$ coefficients written as fractions rather than decimals brackets substitute values into formulae expressions, rearrange and simplify expressions understand and use the concepts and vocabulary of expressions, equations, inequalities, terms and factors 			In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> simplifying expressions involving sums, products and powers, including the laws of indices where appropriate, interpret simple expressions as functions with inputs and outputs; {interpret the reverse process as the 'inverse function'; interpret the succession of two functions as a 'composite function'} 	

		Year 7	Year 8	Year 9	Year 10	Year 11
Algebra: Equivalence and Proof		Autumn block 3 <ul style="list-style-type: none"> Understand the difference between equality and equivalence Collecting like terms Spring block 4 <ul style="list-style-type: none"> Revisit collecting like terms in the context of directed number Spring block 5 Additional Higher content <ul style="list-style-type: none"> Simple algebraic fractions Summer 3 <ul style="list-style-type: none"> Explore related algebraic expressions 	Spring block 1 <ul style="list-style-type: none"> Expand over a single bracket Simplify expressions involving brackets Identify and use formulae, expressions, identities and equations Additional Higher content <ul style="list-style-type: none"> Expand a pair of binomials 	Autumn blocks 1/2/3 <ul style="list-style-type: none"> Revise and extend Y7/8 coverage Rearranging to the form $y = mx + c$ Change the subject of a formula Testing algebraic conjectures Expand a pair of binomials Additional Higher content <ul style="list-style-type: none"> Change the subject of a more complex formula Summer block 5 <ul style="list-style-type: none"> Revise algebraic representation 	Autumn block 3 <ul style="list-style-type: none"> Revise and extend KS3 content Higher tier content <ul style="list-style-type: none"> Factorising quadratics of the form $x^2 + bx + c$ Summer block 4 <ul style="list-style-type: none"> Maintain equivalence using the rules of indices 	Autumn block 4 <ul style="list-style-type: none"> Factorising quadratics of the form $x^2 + bx + c$ Higher tier content <ul style="list-style-type: none"> Completing the square Autumn block 5 <ul style="list-style-type: none"> Change the subject of a formula Higher tier content <ul style="list-style-type: none"> Change the subject of a formula where the subject appears more than once Spring block 3 <ul style="list-style-type: none"> Review and extend previous content Higher tier content <ul style="list-style-type: none"> Algebraic proof
		KS3 National Curriculum			KS4 National Curriculum	
		<ul style="list-style-type: none"> simplify and manipulate algebraic expressions to maintain equivalence by: <ul style="list-style-type: none"> ➤ multiplying a single term over a bracket ➤ taking out common factors ➤ expanding products of two or more binomials understand and use the concepts and vocabulary of expressions, equations, inequalities, terms and factors 			In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> know the difference between an equation and an identity; argue mathematically to show algebraic expressions are equivalent, and use algebra to support and construct arguments {and proofs} simplify and manipulate algebraic expressions (including those involving surds {and algebraic fractions}) by: factorising quadratic expressions of the form $x^2 + bx + c$, including the difference of two squares; {factorising quadratic expressions of the form $ax^2 + bx + c$} 	

		Year 7	Year 8	Year 9	Year 10	Year 11
Algebra: Solve Equations and Inequalities		Autumn block 3 <ul style="list-style-type: none"> Form and solve one-step equations Spring block 4 <ul style="list-style-type: none"> Form and solve two-step equations 	Spring block 1 <ul style="list-style-type: none"> Revise and extend Y7 coverage Solve inequalities Form and solve equations with brackets Identify and use formulae, expressions, identities and equations Additional Higher content <ul style="list-style-type: none"> Form and solve equations and inequalities with unknowns on both sides 	Autumn block 2 <ul style="list-style-type: none"> Revise and extend Y7/8 coverage Form and solve equations and inequalities with unknowns on both sides Summer block 5 <ul style="list-style-type: none"> Representing inequalities 	Autumn block 3 <ul style="list-style-type: none"> Revise and extend KS3 content Represent solutions to inequalities on number lines Autumn block 4 <ul style="list-style-type: none"> Form and solve linear simultaneous equations Higher tier content <ul style="list-style-type: none"> Solve quadratic equations and inequalities by factorising Solve simultaneous equations, one linear and one quadratic 	Autumn block 4 <ul style="list-style-type: none"> Form and solve quadratic equations by factorising Higher tier content <ul style="list-style-type: none"> Solve quadratic equations using the formula and completing the square Summer 1 <ul style="list-style-type: none"> Revision
		KS3 National Curriculum			KS4 National Curriculum	
		<ul style="list-style-type: none"> understand and use the concepts and vocabulary of expressions, equations, inequalities, terms and factors simplify and manipulate algebraic expressions to maintain equivalence by collecting like terms understand and use standard mathematical formulae; rearrange formulae to change the subject use algebraic methods to solve linear equations in one variable (including all forms that require rearrangement) 			In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> know the difference between an equation and an identity; solve quadratic equations {including those that require rearrangement} algebraically by factorising, {by completing the square and by using the quadratic formula} identify and interpret roots; deduce roots algebraically {and turning points by completing the square} solve two simultaneous equations in two variables (linear/linear {or linear/quadratic}) algebraically; find approximate solutions using a graph translate simple situations or procedures into algebraic expressions or formulae; derive an equation (or two simultaneous equations), solve the equation(s) and interpret the solution solve linear inequalities in one {or two} variable{s}, {and quadratic inequalities in one variable}; represent the solution set on a number line, {using set notation and on a graph} 	

		Year 7	Year 8	Year 9	Year 10	Year 11
Algebra: Linear Graphs		Autumn block 2 <ul style="list-style-type: none"> Represent functions graphically 	Autumn block 2 <ul style="list-style-type: none"> Conversion graphs Additional Higher content Direct proportion graphs Autumn block 4 <ul style="list-style-type: none"> Using coordinates Plotting graphs: <ul style="list-style-type: none"> $y = k, x = k$ $y = kx$ $y = x + a$ $y = mx + c$ Additional Higher content Exploring gradient Exploring non-linear graphs 	Autumn block 1 <ul style="list-style-type: none"> Revise and extend Y7/8 coverage Simplify, use and interpret $y = mx + c$ Parallel lines Additional Higher content Solve simultaneous equations graphically Explore perpendicular lines Summer block 5 <ul style="list-style-type: none"> Interpret graphs in various forms including piece-wise linear 	Autumn block 3 <ul style="list-style-type: none"> Revise and extend KS3 content Autumn block 4 <ul style="list-style-type: none"> Solve linear simultaneous equations graphically 	Autumn block 1 <ul style="list-style-type: none"> Revise and extend KS3 and Y10 content Higher tier content Perpendicular lines Autumn block 2 <ul style="list-style-type: none"> Higher tier content Equation of the tangent to a circle
		KS3 National Curriculum			KS4 National Curriculum	
		<ul style="list-style-type: none"> model situations or procedures by translating them into algebraic expressions or formulae and by using graphs work with coordinates in all four quadrants recognise, sketch and produce graphs of linear functions of one variable with appropriate scaling, using equations in x and y and the Cartesian plane interpret mathematical relationships both algebraically and graphically reduce a given linear equation in two variables to the standard form $y = mx + c$ calculate and interpret gradients and intercepts of graphs of such linear equations numerically, graphically and algebraically use linear graphs to estimate values of y for given values of x and vice versa and to find approximate solutions of simultaneous linear equations find approximate solutions to contextual problems from given graphs of a variety of functions, including piece-wise linear 			In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> use the form $y = mx + c$ to identify parallel {and perpendicular} lines; find the equation of the line through two given points, or through one point with a given gradient recognise, sketch and interpret graphs of linear functions plot and interpret graphs find approximate solutions using a graph (simultaneous equations) {find the equation of a tangent to a circle at a given point} 	

		Year 7	Year 8	Year 9	Year 10	Year 11
Algebra: Non-linear Graphs		Autumn block 2 <ul style="list-style-type: none"> Represent functions graphically 	Autumn block 4 <ul style="list-style-type: none"> Using coordinates Additional Higher content <ul style="list-style-type: none"> Exploring gradient Exploring non-linear graphs 	Summer block 5 <ul style="list-style-type: none"> Interpret graphs in various forms (including quadratic, piece-wise, exponential, speed/distance/time) 	Autumn block 4 Higher tier content <ul style="list-style-type: none"> Solve linear and quadratic simultaneous equations graphically 	Autumn block 2 <ul style="list-style-type: none"> Roots, quadratic, cubic and reciprocal graphs Higher tier content <ul style="list-style-type: none"> Equations of circles Autumn block 2 <ul style="list-style-type: none"> Real-life graphs including speed/distance/time Spring block 4 Higher tier content <ul style="list-style-type: none"> Trig graphs Transforming graphs
		KS3 National Curriculum				KS4 National Curriculum
		<ul style="list-style-type: none"> model situations or procedures by translating them into algebraic expressions or formulae and by using graphs work with coordinates in all four quadrants recognise, sketch and produce graphs of quadratic functions of one variable with appropriate scaling, using equations in x and y and the Cartesian plane interpret mathematical relationships both algebraically and graphically use quadratic graphs to estimate values of y for given values of x and vice versa find approximate solutions to contextual problems from given graphs of a variety of functions, including piece-wise linear, exponential and reciprocal graphs 				In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> identify and interpret roots, intercepts and turning points of quadratic functions graphically recognise, sketch and interpret graphs of quadratic functions, simple cubic functions, the reciprocal function $y = \frac{1}{x}$ with $x \neq 0$ {the exponential function $y = k^x$ for positive values of k, and the trigonometric functions (with arguments in degrees) for angles of any size} {sketch translations and reflections of the graph of a given function} plot and interpret graphs (including reciprocal graphs {and exponential graphs}) and graphs of non-standard functions in real contexts, to find approximate solutions to problems {calculate or estimate gradients of graphs and areas under graphs (including quadratic and other non-linear graphs), and interpret results in cases such as distance-time graphs, velocity-time graphs and graphs in financial contexts} {recognise and use the equation of a circle with centre at the origin} find approximate solutions using a graph (quadratic equations and simultaneous equations)

	Year 7	Year 8	Year 9	Year 10	Year 11
Algebra: Sequences	Autumn block 1 <ul style="list-style-type: none"> Recognise linear and non-linear sequences Autumn block 2 <ul style="list-style-type: none"> Generate sequences from an algebraic rule 	Spring block 2 <ul style="list-style-type: none"> Revise and extend Y7 coverage to include more complex rules Additional Higher content <ul style="list-style-type: none"> Find the rule for the n^{th} term of a linear sequence 	Autumn block 3 <ul style="list-style-type: none"> Testing conjectures about sequences Summer block 6 You could use the revision block to extend Y7/8 content including: <ul style="list-style-type: none"> ➤ Representing sequences ➤ Find the rule for the n^{th} term of a linear sequence 	Summer block 3 <ul style="list-style-type: none"> Revise and extend KS3 content, including names and types of sequences Higher tier content <ul style="list-style-type: none"> Find the rule for the n^{th} term of a quadratic sequence Sequences with surds 	Spring block 3 <ul style="list-style-type: none"> Review KS3 and Y10 coverage
	KS3 National Curriculum			KS4 National Curriculum	
	<ul style="list-style-type: none"> generate terms of a sequence from either a term-to-term or a position-to-term rule recognise arithmetic sequences and find the n^{th} term recognise geometric sequences and appreciate other sequences that arise 			In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> recognise and use sequences of triangular, square and cube numbers, simple arithmetic progressions, Fibonacci type sequences, quadratic sequences, and simple geometric progressions (r^n where n is an integer, and r is a positive rational number {or a surd}) {and other sequences} deduce expressions to calculate the n^{th} term of linear {and quadratic} sequences 	

	Year 7	Year 8	Year 9	Year 10	Year 11
Ratio, Proportion, Rates of Change: Multiplicative Relationships	Spring block 2 <ul style="list-style-type: none"> Convert metric units Summer block 3 <ul style="list-style-type: none"> Use multiplicative relationships between known facts 	Autumn block 2 <ul style="list-style-type: none"> Understand and use scale factors Scale diagrams and maps Currency conversions Conversion graphs Similar shapes Additional Higher content <ul style="list-style-type: none"> Direct proportion graphs Spring block 6 <ul style="list-style-type: none"> Review and extend Y7 work on metric units Additional Higher content <ul style="list-style-type: none"> Convert area and volume measures 	Autumn block 5 <ul style="list-style-type: none"> Revisit scale drawings Summer block 2 <ul style="list-style-type: none"> Revisit conversion graphs Solve direct proportion problems Inverse proportion Additional Higher content <ul style="list-style-type: none"> Inverse proportion graphs 	Autumn block 1 <ul style="list-style-type: none"> Similar shapes Enlargement Higher tier content <ul style="list-style-type: none"> Area and volume similarity Spring block 2 Higher tier content <ul style="list-style-type: none"> Revisit area and volume similarity with cones etc. Spring block 4 <ul style="list-style-type: none"> Revise and extend KS3 content including: <ul style="list-style-type: none"> Unit pricing ('best buys') Currency conversions Higher tier content <ul style="list-style-type: none"> Revisit area and volume similarity 	Spring block 1 <ul style="list-style-type: none"> Direct and inverse proportion numerically and graphically Pressure and density Higher tier content <ul style="list-style-type: none"> Variation with powers and roots
	KS3 National Curriculum			KS4 National Curriculum	
	<ul style="list-style-type: none"> change freely between related standard units [for example time, length, area, volume/capacity, mass] use scale factors, scale diagrams and maps understand that a multiplicative relationship between two quantities can be expressed as a ratio or a fraction solve problems involving direct and inverse proportion, including graphical and algebraic representations 			In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> compare lengths, areas and volumes using ratio notation and/or scale factors; make links to similarity (including trigonometric ratios) understand that X is inversely proportional to Y is equivalent to X is proportional to $\frac{1}{Y}$ {construct and} interpret equations that describe direct and inverse proportion interpret the gradient of a straight line graph as a rate of change; recognise and interpret graphs that illustrate direct and inverse proportion 	

Ratio, Proportion, Rates of Change: Ratio and Rates	Year 7	Year 8	Year 9	Year 10	Year 11
		Autumn block 1 <ul style="list-style-type: none"> Understand and use ratio notation Divide in a ratio Work out parts and wholes π as a ratio Additional Higher content <ul style="list-style-type: none"> Use the form 1: n Link gradient and ratio 	Spring block 2 <ul style="list-style-type: none"> Revise and extend Y7/8 coverage Additional Higher content <ul style="list-style-type: none"> Repeated percentage change Summer block 3 <ul style="list-style-type: none"> Speed, distance and time Density Compound units Additional Higher content <ul style="list-style-type: none"> Converting compound measures Summer block 2 <ul style="list-style-type: none"> Unit pricing problems 	Spring block 4 <ul style="list-style-type: none"> Ratios and fractions Higher tier content <ul style="list-style-type: none"> Ratios in the context of area and volume Spring block 5 <ul style="list-style-type: none"> Repeated percentage change including compound interest Growth and decay problems Higher tier content <ul style="list-style-type: none"> Iterative processes 	Autumn block 2 Higher tier content <ul style="list-style-type: none"> Gradients of curves Estimate the area under a curve Spring block 1 <ul style="list-style-type: none"> Revisit KS3 and Y10 content Pressure and density
	KS3 National Curriculum			KS4 National Curriculum	
	<ul style="list-style-type: none"> use ratio notation, including reduction to simplest form divide a given quantity into two parts in a given part : part or part : whole ratio; express the division of a quantity into two parts as a ratio relate the language of ratios and the associated calculations to the arithmetic of fractions and to linear functions use compound units such as speed, unit pricing and density to solve problems 			In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> convert between related compound units (speed, rates of pay, prices, density, pressure) in numerical and algebraic contexts {interpret the gradient at a point on a curve as the instantaneous rate of change}; apply the concepts of instantaneous and average rate of change (gradients of tangents and chords) in numerical, algebraic and graphical contexts} set up, solve and interpret the answers in growth and decay problems, including compound interest {and work with general iterative processes} {find approximate solutions to equations numerically using iteration} 	

	Year 7	Year 8	Year 9	Year 10	Year 11
Geometry and Measures: Perimeter, Area and Volume	Spring block 1 <ul style="list-style-type: none"> Solve perimeter problems Spring block 2 <ul style="list-style-type: none"> Areas of rectangles, parallelograms and triangles Additional Higher content <ul style="list-style-type: none"> Area of a trapezium 	Autumn block 1 <ul style="list-style-type: none"> Circumference of a circle Summer block 2 <ul style="list-style-type: none"> Area of a trapezium Area of a circle Area of compound shapes 	Autumn block 4 <ul style="list-style-type: none"> Surface area of cuboids and cylinders Volume of cuboids, cylinders and other prisms Additional Higher content <ul style="list-style-type: none"> Explore volume of cones, spheres and compound shapes Surface area of prisms 	Spring block 2 <ul style="list-style-type: none"> Review area and circumference of a circle Arc length Area of a sector Surface areas and volumes of cylinders, cones and spheres Summer block 2 <ul style="list-style-type: none"> Review KS3 and earlier Y10 content as a context for non-calculator methods 	Autumn block 5 <ul style="list-style-type: none"> Review perimeter, area and volume formulae as a context for rearrangement Volume of a pyramid Summer block 1 <ul style="list-style-type: none"> Revision
	KS3 National Curriculum			KS4 National Curriculum	
	<ul style="list-style-type: none"> derive and apply formulae to calculate and solve problems involving: perimeter and area of triangles, parallelograms, trapezia, volume of cuboids (including cubes) and other prisms (including cylinders) calculate and solve problems involving: perimeters of 2-D shapes (including circles), areas of circles and composite shapes 			In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> calculate arc lengths, angles and areas of sectors of circles calculate surface areas and volumes of spheres, pyramids, cones and composite solids 	

		Year 7	Year 8	Year 9	Year 10	Year 11
Geometry and Measures: Construct and Transform Geometric Figures		Summer block 1 <ul style="list-style-type: none"> Geometric notation Draw lines, angles and simple shapes Parallel and perpendicular lines Name and construct polygons 	Autumn block 2 <ul style="list-style-type: none"> Work with scale factors Summer block 1 <ul style="list-style-type: none"> Revise and extend Y7 notation Summer block 3 <ul style="list-style-type: none"> Recognise line symmetry Reflect shapes in a given line Additional Higher content <ul style="list-style-type: none"> Standard ruler and compass constructions 	Autumn block 5 <ul style="list-style-type: none"> Standard ruler and compass constructions Additional Higher content <ul style="list-style-type: none"> Loci Spring block 5 <ul style="list-style-type: none"> Revise Y7/8 coverage Recognise rotational symmetry Rotate points about a given point Translate shapes and describe translations Additional Higher content <ul style="list-style-type: none"> Perform a series of transformations 	Autumn block 1 <ul style="list-style-type: none"> Similarity and enlargement Higher tier content <ul style="list-style-type: none"> Negative scale factors of enlargement Spring block 2 <ul style="list-style-type: none"> Parts of a circle 	Spring block 4 <ul style="list-style-type: none"> Revisit/extend KS3 and year 10 work Loci Spring block 5 <ul style="list-style-type: none"> Plans and elevations
		KS3 National Curriculum				KS4 National Curriculum
		<ul style="list-style-type: none"> draw and measure line segments and angles in geometric figures, including interpreting scale drawings derive and use the standard ruler and compass constructions (perpendicular bisector of a line segment, constructing a perpendicular to a given line from/at a given point, bisecting a given angle); recognise and use the perpendicular distance from a point to a line as the shortest distance to the line describe, sketch and draw using conventional terms and notations: points, lines, parallel lines, perpendicular lines, right angles, regular polygons, and other polygons that are reflectively and rotationally symmetric identify properties of, and describe the results of, translations, rotations and reflections applied to given figures use the standard conventions for labelling the sides and angles of triangle ABC identify and construct congruent triangles, and construct similar shapes by enlargement, with and without coordinate grids know and use the criteria for congruence of triangles 				In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> interpret and use fractional {and negative} scale factors for enlargements {describe the changes and invariance achieved by combinations of rotations, reflections and translations} construct and interpret plans and elevations of 3D shapes describe translations as 2D vectors

	Year 7	Year 8	Year 9	Year 10	Year 11
Geometry and Measures: Shape Properties	Summer block 1 <ul style="list-style-type: none"> Properties of triangles and quadrilaterals 	Summer blocks 1/2/3 <ul style="list-style-type: none"> Revise and extend Y7 coverage Additional Higher content <ul style="list-style-type: none"> Explore diagonals of quadrilaterals 	Autumn block 3 <ul style="list-style-type: none"> Testing conjectures about shapes Autumn block 4 <ul style="list-style-type: none"> Properties of 3-D shapes 2-D shapes in 3-D shapes 	Autumn block 1 <ul style="list-style-type: none"> Revisit shape names and properties in the context of enlargement Spring block 2 <ul style="list-style-type: none"> Parts of a circle 	Spring block 2 <ul style="list-style-type: none"> Revisit shape properties in the context of reasoning
	KS3 National Curriculum			KS4 National Curriculum	
	<ul style="list-style-type: none"> derive and illustrate properties of triangles, quadrilaterals, circles, and other plane figures [for example, equal lengths and angles] using appropriate language and technologies use the properties of faces, surfaces, edges and vertices of cubes, cuboids, prisms, cylinders, pyramids, cones and spheres to solve problems in 3-D 			In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> identify and apply circle definitions and properties, including: centre, radius, chord, diameter, circumference, tangent, arc, sector and segment 	

		Year 7	Year 8	Year 9	Year 10	Year 11
Geometry and Measures: Angles		Summer block 2 <ul style="list-style-type: none"> Angles at a point Adjacent angles on a straight line Vertically opposite angles Angles in triangles and quadrilaterals Additional Higher content <ul style="list-style-type: none"> Angles in parallel lines Simple angle proofs 	Summer block 1 <ul style="list-style-type: none"> Revise Y7 coverage Angles in parallel lines Interior and exterior angles of polygons Additional Higher content <ul style="list-style-type: none"> Angles formed by diagonals of quadrilaterals 	Spring block 4 <ul style="list-style-type: none"> Revise and extend Y7/8 coverage Chains of reasoning to find angles 	Spring block 1 <ul style="list-style-type: none"> Review and extend KS3 coverage Interpret and use bearings 	Spring block 2 <ul style="list-style-type: none"> Review and extend KS3 and Year 10 coverage
		KS3 National Curriculum				KS4 National Curriculum
		<ul style="list-style-type: none"> apply the properties of angles at a point, angles at a point on a straight line, vertically opposite angles understand and use the relationship between parallel lines and alternate and corresponding angles derive and use the sum of angles in a triangle and use it to deduce the angle sum in any polygon, and to derive properties of regular polygons 				In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> interpret and use bearings

Geometry and Measures: Pythagoras and Trigonometry	Year 7	Year 8	Year 9	Year 10	Year 11
			Spring block 6 <ul style="list-style-type: none"> Understand and use Pythagoras' theorem Show that a triangle is right-angled Additional Higher content <ul style="list-style-type: none"> Use Pythagoras' theorem in 3-D shapes Summer block 1 Additional Higher content <ul style="list-style-type: none"> Explore ratios in right-angled triangles 	Autumn block 2 <ul style="list-style-type: none"> Revise Pythagoras' theorem Use trigonometry to find missing sides and angles in right-angles triangles Exact trig values Higher tier content <ul style="list-style-type: none"> Using the sine and cosine rules Area of a general triangle Spring block 1 <ul style="list-style-type: none"> Revisit Pythagoras and trigonometry in the context of bearings 	Autumn block 6 <ul style="list-style-type: none"> Revisit trigonometry on the context of functions Spring block 2 <ul style="list-style-type: none"> Revisit Pythagoras and trigonometry Spring block 4 Higher tier content <ul style="list-style-type: none"> Revisit trigonometry when exploring trigonometric graphs and transformations of these
	KS3 National Curriculum			KS4 National Curriculum	
	<ul style="list-style-type: none"> use Pythagoras' Theorem and trigonometric ratios in similar triangles to solve problems involving right-angled triangles 			In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> apply Pythagoras' Theorem and trigonometric ratios to find angles and lengths in right-angled triangles {and, where possible, general triangles} in two {and three} dimensional figures know the exact values of $\sin\theta$, $\cos\theta$, $\tan\theta$ for required angles {know and apply the sine rule and cosine rule to find unknown lengths and angles} {know and apply $A = \frac{1}{2}ab \sin C$ to calculate the area, sides or angles of any triangle} 	

Geometry and Measures: Geometric Proof	Year 7	Year 8	Year 9	Year 10	Year 11
	Summer block 2 Additional Higher content <ul style="list-style-type: none"> Simple angle proofs 	Summer block 1 <ul style="list-style-type: none"> Find and prove simple geometric facts 	Autumn block 5 Explore congruency Spring block 4 <ul style="list-style-type: none"> Revise and extend Y7/8 coverage Developing chains of reasoning Additional Higher content <ul style="list-style-type: none"> Develop more complex geometrical proofs Spring block 6 <ul style="list-style-type: none"> Prove a triangle is/isn't right angled Additional Higher content <ul style="list-style-type: none"> Explore proofs of Pythagoras' theorem 	Autumn block 1 <ul style="list-style-type: none"> Revisit proof with angle rules Prove shapes are similar Congruent triangles Proving triangles are congruent Spring block 2 Higher tier content <ul style="list-style-type: none"> Prove and use the first four circle theorems Spring block 3 <ul style="list-style-type: none"> Understand and use vectors Higher tier content <ul style="list-style-type: none"> Geometric proof with vectors 	Spring block 2 <ul style="list-style-type: none"> Revisit KS3 and Y10 proof Higher tier content Prove and use the remaining circle theorems Spring block 6 <ul style="list-style-type: none"> Using correct language in 'show that'/proof questions Higher tier content <ul style="list-style-type: none"> Revisit congruent triangle proofs
	KS3 National Curriculum			KS4 National Curriculum	
	<ul style="list-style-type: none"> apply angle facts, triangle congruence, similarity and properties of quadrilaterals to derive results about angles and sides, including Pythagoras' Theorem, and use known results to obtain simple proofs interpret mathematical relationships both algebraically and geometrically 			In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> {apply and prove the standard circle theorems concerning angles, radii, tangents and chords, and use them to prove related results} apply the concepts of congruence and similarity, including the relationships between lengths, {areas and volumes} in similar figures apply addition and subtraction of vectors, multiplication of vectors by a scalar, and diagrammatic and column representations of vectors; {use vectors to construct geometric arguments and proofs} 	

	Year 7	Year 8	Year 9	Year 10	Year 11
Probability	Summer block 4 <ul style="list-style-type: none"> Use the language of probability Calculate simple probabilities Use the probability scale Sample spaces Understand and use set notation, including Venn diagrams Know the sum of probabilities is 1 Additional Higher content <ul style="list-style-type: none"> Complement of a set 	Autumn block 6 <ul style="list-style-type: none"> Review and extend Y7 coverage Construct sample spaces for more than one event Use sample spaces to find probabilities Use tables and Venn diagrams to find probabilities Additional Higher content <ul style="list-style-type: none"> Use the product rule for finding total number of outcomes 	Summer block 4 <ul style="list-style-type: none"> Review and extend Y7/8 coverage Compare experimental and theoretical probability Use frequency trees to find probabilities Additional Higher content <ul style="list-style-type: none"> Simple tree diagrams 	Spring block 6 <ul style="list-style-type: none"> Review and extend KS3 coverage Effect of sample size on estimated probabilities Use tree diagrams Mutually exclusive and independent events Higher tier content <ul style="list-style-type: none"> Conditional probabilities 	Spring block 5 <ul style="list-style-type: none"> Review using sample spaces and probability rules Summer block 1 <ul style="list-style-type: none"> Revision
	KS3 National Curriculum			KS4 National Curriculum	
	<ul style="list-style-type: none"> record, describe and analyse the frequency of outcomes of simple probability experiments involving randomness, fairness, equally and unequally likely outcomes, using appropriate language and the 0-1 probability scale understand that the probabilities of all possible outcomes sum to 1 enumerate sets and unions/intersections of sets systematically, using tables, grids and Venn diagrams generate theoretical sample spaces for single and combined events with equally likely, mutually exclusive outcomes and use these to calculate theoretical probabilities 			In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> apply the property that the probabilities of an exhaustive set of mutually exclusive events sum to one use a probability model to predict the outcomes of future experiments; understand that empirical unbiased samples tend towards theoretical probability distributions, with increasing sample size calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions {calculate and interpret conditional probabilities through representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams} 	

		Year 7	Year 8	Year 9	Year 10	Year 11
Statistics: Represent and Interpret Data		Spring block 1 <ul style="list-style-type: none"> Solve problems with line charts and bar charts Summer block 1 <ul style="list-style-type: none"> Construct and interpret pie charts 	Autumn block 5 <ul style="list-style-type: none"> Recognise different types of data Construct and interpret frequency tables, grouped and ungrouped, and two-way tables Summer block 4 <ul style="list-style-type: none"> Revise and extend Y7 coverage Collecting data Multiple bar charts Line graphs Misleading graphs 	Summer block 4 <ul style="list-style-type: none"> Revise Y7/8 coverage 	Summer block 1 <ul style="list-style-type: none"> Revise and extend KS3 coverage Comparing distributions using diagrams Frequency polygons Time series Higher tier content <ul style="list-style-type: none"> Cumulative frequency diagrams Box plots Histograms 	Spring block 5 <ul style="list-style-type: none"> Revisit comparing distributions using diagrams Describing a population
		KS3 National Curriculum				KS4 National Curriculum
		<ul style="list-style-type: none"> describe, interpret and compare observed distributions of a single variable through: appropriate graphical representation involving discrete, continuous and grouped data construct and interpret appropriate tables, charts, and diagrams, including frequency tables, bar charts, pie charts, and pictograms for categorical data, and vertical line (or bar) charts for ungrouped and grouped numerical data 				In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> infer properties of populations or distributions from a sample, whilst knowing the limitations of sampling interpret and construct tables and line graphs for time series data {construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use} interpret, analyse and compare the distributions of data sets from univariate empirical distributions through appropriate graphical representation involving discrete, continuous and grouped data, {including box plots} apply statistics to describe a population

		Year 7	Year 8	Year 9	Year 10	Year 11
Statistics: Statistical Measures		Autumn block 4 <ul style="list-style-type: none"> Find the median and the range Spring block 2 <ul style="list-style-type: none"> Find the mean 	Summer block 5 <ul style="list-style-type: none"> Revise and extend Y7 coverage Find the mode Identify outliers Compare distributions using statistical measures Additional Higher content <ul style="list-style-type: none"> Find the mean from a grouped or ungrouped frequency table 	Summer block 6 You could use the revision block to extend Y7/8 content	Summer block 1 <ul style="list-style-type: none"> Revise and extend KS3 coverage Find the modal class Comparing distributions Higher tier content <ul style="list-style-type: none"> Finding the median and quartiles from cumulative frequency diagrams 	Spring block 5 <ul style="list-style-type: none"> Revisit comparing distributions using data Describing a population
		KS3 National Curriculum			KS4 National Curriculum	
		<ul style="list-style-type: none"> describe, interpret and compare observed distributions of a single variable through: appropriate graphical representation involving discrete, continuous and grouped data; and appropriate measures of central tendency (mean, mode, median) and spread (range, consideration of outliers) 			In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> interpret, analyse and compare the distributions of data sets from univariate empirical distributions through appropriate measures of central tendency (including modal class) and spread {including quartiles and inter-quartile range} 	

		Year 7	Year 8	Year 9	Year 10	Year 11
Statistics: Bivariate Data			Autumn block 5 <ul style="list-style-type: none"> Scatter graphs Correlation Lines of best fit 	Summer block 6 You could use the revision block to extend Y7/8 content	Summer block 1 <ul style="list-style-type: none"> Revise and extend KS3 coverage Understand the risks of extrapolation 	Summer block 1 <ul style="list-style-type: none"> Revision
		KS3 National Curriculum			KS4 National Curriculum	
		<ul style="list-style-type: none"> describe simple mathematical relationships between two variables (bivariate data) in observational and experimental contexts and illustrate using scatter graphs 			In addition to consolidating subject content from key stage 3, pupils should be taught to: <ul style="list-style-type: none"> use and interpret scatter graphs of bivariate data; recognise correlation and know that it does not indicate causation; draw estimated lines of best fit; make predictions; interpolate and extrapolate apparent trends whilst knowing the dangers of so doing 	

Music

- play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression

Rhythm	<p>Clap rhythms aloud - copied and from written notation</p> <p>Play a variety of untuned percussion and tuned percussion with correct technique</p> <p>Play short rhythms written in stave notation</p> <p>Perform with a partner or in a small group</p>
Space	<p>Perform a group role from a graphic score as a whole class performance</p> <p>RAP in time to a rhythm as a member of a group or as an individual</p> <p>Perform own composition on keyboard or percussion</p>
Africa	<p>Singing as a member of the class</p> <p>Singing in 2 parts as a member of a group within the class</p> <p>Playing tuned and untuned percussion with control and good technique</p> <p>Playing a part which includes rests</p>
Stories in Music	<p>To sing a variety of songs showing control of pitch and breathing</p> <p>To perform a percussion part to fit a given song, showing good playing technique</p>
Fanfares	<p>Perform a fanfare on the keyboard using different fingers for each note (Right hand only if possible)</p> <p>Perform in time with a backing rhythm on the keyboard</p> <p>Perform fanfare with a partner playing an independent part</p>

- improvise and compose music for a range of purposes using the inter-related dimensions of music

Rhythm	Compose a short 'robotic' piece as a group using given rhythms in quavers, crotchets and minims
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Space	Compose an 'atmospheric piece' with a partner or small group to describe another planet
Africa	To improvise rhythms and short melodic phrases to accompany a song. To improvise music to create an effect from a graphic score.
Stories in Music	Compose a rhythm to be played on percussion instruments to accompany a song
Fanfares	Compose a 4 bar fanfare using F, A, C Compose a march 8 to 16 bars long

- listen with attention to detail and recall sounds with increasing aural memory

Rhythm	Copy clapped rhythms Listening to work partners to know when to play in a group performance
Space	Listen for moods and themes in music from 'The Planet Suite' Listening to a backing rhythm and RAPping int time with it Listening to other groups and know their 'turn' to be able to perform as a class
Orchestra	To become familiar with a range of orchestral instrumental sounds To be able to recognise the timbres of string, brass, woodwind and percussion instruments To be able to identify some instruments from the timbres
Africa	Learning vocal and instrumental parts by copying (and from notations) Appreciating 2 part harmonies and how their part fits

Stories in Music	Listening to music and being able to follow short passages of written notation as the music is played
Fanfares and Marches	Listening assessment identifying a range of instrumental timbres, commenting on the tempo and listening for particular aspects of the music Listening to a backing rhythm and being able to fit their part in time Keeping in time with a partner

- use and understand staff and other musical notations

Rhythm	Introduction of quavers, crotchets and minim rhythms (some semibreves later on) Pupils able to use notation to write their own name rhythms Pupils to use time signatures (2, 3 and 4 crotchet beats in a bar) Pupils able to read simple 2 bar rhythms Pupils to use notation to compose music with
Space	Graphic scores introduced Class reading from graphic score to produce a whole class performance
Africa	Rhythms with some rests introduced. More able pupils read parts from stave notation
Stories in Music	Pupils to be able to follow short extracts of stave notation
Fanfares and Marches	Pupils to write on manuscript and learn F A C E and how to draw a treble clef Pupils to write their fanfare in rhythm first and then in correct positions on the stave

- appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians

Space	'The Planet Suite' Gustav Holst
Orchestra	'Young Person's Guide to the Orchestra' Britten 'Rondo from Abdelazar' Purcell 'Peter and the Wolf' Prokofiev
Africa	'Jambo' - traditional Kenyan song 'Deserts' Varese 'Che Che Koolay' traditional West African Song
Stories in Music	'The Sorcerer's Apprentice' Dukas Excerpts from: Swan Lake - Tchaikovsky Carmen - Bizet
Fanfares and Marches	'Fanfare for the Common Man' Copland 'Imperial March' from 'Star Wars' John Williams

- develop an understanding of the history of music.

Orchestra	Understanding of families of instruments and some brief details about development of the orchestra and some types of instruments (eg when they were 'invented')
Stories in Music	Dates of pieces studied/listened to discussed and put on timeline Historical aspects linked to type of instruments used and the style of the music

Year 6

- play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression

Notation/ Keyboard Skills	Individual and paired performances of musical words on tuned percussion - showing good beater control Using correct keyboard technique to progress through a range of graded pieces Individual, paired and group performances All fingers of right hand for melodies More able pupils to use left hand for single finger or fingered chords to accompany
Songwriting	Songs to be performed in groups showing good ensemble - member of group to take on different responsibilities for singing or playing
Graphic Scores	'A Song From Somewhere Else' - performance in pairs on keyboards showing some changes in dynamics and good keyboard technique
Japanese Music	Singing traditional style song as a class Playing a variety of parts in a class performance showing control and accuracy on cymbals, metallophones, triangles and more able to play recorders, keyboards, guitars or violins Performance of own song accompaniment Performance of graphic score taking a part in a class recording
Rondo and Rounds	Playing from existing rondo music, showing control and good technique Singing a part in a class performance of a 'round'/cannon - in at least 4 parts. Performing a part in own composition of a cannon/round

- improvise and compose music for a range of purposes using the inter-related dimensions of music

Song writing	To compose lyrics, a melody and accompaniment for a charity themed song to include at least 2 verses and a chorus
Graphic Scores	To improvise and compose music in response to 'A Song From Somewhere Else' (Working in pairs)
Japanese Music	To compose a melody and accompaniment for a Japanese style song using the pentatonic scale of C
Rondo and Rounds	To compose a round based on the chord of C, F, G or D - more able to include passing notes

- listen with attention to detail and recall sounds with increasing aural memory

Keyboard	<p>To copy rhythms by clapping</p> <p>To find rhythms that have been listened to in Rhythm Bingo game</p> <p>To listen to melodies based on musical words and be able to reproduce them on an instrument</p> <p>To listen whilst playing for good ensemble</p>
Graphic Scores	<p>To be able to listen to sounds and transfer them to a written form</p> <p>Graphic Score Bingo</p>
Japanese Music	<p>To listen to instrumental timbres and compare them to known instruments</p> <p>To listen for good ensemble when performing as a class</p>
Rondo and Rounds	<p>To learn a sung part in a round from memory</p> <p>To listen to other parts in a round or rondo to know when to play</p>

- use and understand staff and other musical notations

Notation/Keyboard	<p>To learn to understand stave notation and be able to work out notes from middle C to F' in treble clef</p> <p>To be able to write 4 bat melodies in stave notation</p> <p>To read simple melodies in order to play them on the keyboard</p> <p>Some pupils may also be able to play single finger or fingered chords to accompany melodies</p> <p>Stave notation test</p>
Songwriting	<p>To be able to notate some parts of their song and recognise where repeated sections are needed</p> <p>To notate an ostinato pattern used to accompany song</p>
Graphic Scores	<p>To read from graphic notation and follow a score of 'Gnomus' from 'Pictures at an Exhibition'</p> <p>To be able to write simple graphic scores</p> <p>To read graphic notation in Bingo game</p> <p>To record own composition as a graphic score</p>
Japanese Music	<p>To read from graphic and stave notation in order to perform</p> <p>To write own composition in graphic and stave notation</p>
Rondo and Rounds	<p>To read a rondo part in stave notation to be able to perform</p> <p>To write own 'round' composition in stave notation</p>

- appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians

Songwriting	To listen to a variety of charity songs from 'Children in Need' and other charities (e.g. 'Wake me up')
Graphic Scores	'Gnomus' - Mussorgsky
Japanese Music	'Echigo Lion' - traditional Japanese 'Edo Lullaby' - traditional Japanese 'Sakura' - traditional Japanese
Rondo and Rounds	'Rondo' from Abdelazar - Purcell 'Rondo alla Turca' - Mozart

- develop an understanding of the history of music.

Keyboard/ Graphic Scores	Brief history of how and why music is notated on the stave and in other ways
Japanese Music	Linking periods of history from traditional music to European events and composers
Rondo and Rounds	Using examples listened to to think about place of instruments and styles of music in history

Year 6 will also listen to a range of well known music such as: 'The William Tell Overture' - Rossini, 'War of the Worlds' - Jeff Wayne, 'Tocatta and Fugue' - Bach, 'The Hut on Fowl's Legs' - Mussorgsky, 'The Dam Busters' - Coates, Trumpet Concerto - Haydn, 5th Symphony - Beethoven, excerpts from 'The Magic Flute' - Mozart

Year 7

- play and perform confidently in a range of solo and ensemble contexts using their voice, playing instruments musically, fluently and with accuracy and expression

Reggae	To sing a reggae song in ternary form To be able to play a range of parts (chords, riff, off beat pattern) on tuned percussion and/or keyboard showing good technique/fingering To be able to perform an individual role in a group performance of a reggae song
Raga	To play an individual role in a group raga, taking the part of melody, drone or tala using a set raga for that part of the story (this may include some flats - dependent on rag)
Variations	To play a theme and 3 variations as a pair (at least one variation must be a solo. Choice of instrument - but must show good technique (keyboard/tuned percussion)

- improvise and compose; and extend and develop musical ideas by drawing on a range of musical structures, styles, genres and traditions

Reggae	To develop the basic reggae song into a performance adding an introduction and instrumental sections between verses
Raga	Improvised melody, drone and tala within group performance, making use of traditional Indian timbres
Variations	To work out the notes of 'Twinkle Twinkle' in C major by ear To compose a set of 3 variations based on 'Twinkle Twinkle'
IT	To use prerecorded riffs, melodies and rhythms to compose a reggae song of at least 20 bars (4 bar introduction and 16 bars of music), which could then be repeated to make a longer piece of music with an added coda. (currently on mixcraft)

- use staff and other relevant notations appropriately and accurately in a range of musical styles, genres and traditions

Elements	To be able to use appropriate musical vocabulary to describe music: Tempo, Dynamics, Pitch, Duration, Structure, Silence, Texture and Timbre To learn some Italian terms to describe tempo, dynamics and terms to describe some structural elements (forte, piano, allegro, andante, adagio, coda, verse, chorus, introduction, bridge)
Reggae	To read given parts from stave notation, understanding musical directions such as repeat marks and rests
Raga	To read stave notation to find the notes of the rag each group is playing To read the tala and drone notes for each group
Variations	To use stave notation to write out the theme and at least one variation
IT	To use Sibelius to notate one piece of composition from the above topics

- identify and use the inter-related dimensions of music expressively and with increasing sophistication, including use of tonalities, different types of scales and other musical devices

Elements	To be able to use appropriate musical vocabulary to describe music: Tempo, Dynamics, Pitch, Duration, Structure, Silence, Texture and Timbre To learn some Italian terms to describe tempo, dynamics and terms to describe some structural elements (forte, piano, allegro, andante, adagio, coda, verse, chorus, introduction, bridge)
Reggae	Use of G major scale in performance To have a basic understanding of chord accompaniment and how to play fingered chords To be able to follow directions such as repeat marks
Raga	To use a variety of pentatonic rags to improvise melody and drone parts

	To understand that Indian tonalities and 'scales' are different from 'Western' music
Variations	To have a basic understanding of major and minor scales - particularly in relation to C major/minor To be able to write some key signatures if necessary when notating variations
IT	To use a key signature or accidentals on Sibelius when notating work

- listen with increasing discrimination to a wide range of music from great composers and musicians

Reggae	A range of songs from Bob Marley and the Wailers Other reggae influenced groups (e.g. UB40, the Police, Aswad)
Raga	Recordings of traditional Indian music and instruments Performances by Ravi Shankar and Anoushka Shankar (and George Harrison)
Variations	Variations on 'America' Charles Ives 'Enigma Variations' Elgar
Starters	A variety of music to be used as starter activities to encourage the children to be able to describe aspects of the music they listen to (e.g. 'Jai Ho', 'The Chain' - Fleetwood Mac, 'Fanfare for the Common Man' - Copland)

- develop a deepening understanding of the music that they perform and to which they listen, and its history

Reggae	A brief understanding of the history and influences of reggae A brief understanding of the story of Bob Marley and his legacy
Variations	An understanding of Variation form as shown in the examples listened to A brief understanding of the story behind 'Enigma Variations' and Edward Elgar's life

Raga	An understanding that the music we are reproducing is traditional Indian (North Indian) music Some understanding of the types of instrument used and the history behind them (e.g. use of violin due to British Empire)
	Reference to timeline and historical periods on music room wall

Year 8

- play and perform confidently in a range of solo and ensemble contexts using their voice, playing instruments musically, fluently and with accuracy and expression

Rhythm and Rests	To perform an individual rhythmic part (which includes rests) in a group performance To demonstrate good technique when playing a variety of untuned percussion To use visual and vocal cues to aid performance
12 Bar Blues	To perform an independent role in a group performance of a BLues song To play accompanying chords, improvised response and be able to sing the song Some pupils may be able to play the melody or play keyboard parts with both hands
12 Tone Music	To be able to play a chromatic scale To play a tone row and 3 'variations' of their row (e.g. retrograde, inverted, including changes of rhythm and groupings of notes)
Film Music	To perform a soundtrack to a clip of film as a pair or group member, demonstrating techniques such as 'jumpscare', use of chromatic notes, juxtaposition of high and low pitches, use of dynamic contrast, changes of tempo

- improvise and compose; and extend and develop musical ideas by drawing on a range of musical structures, styles, genres and traditions

Rhythm and rests	To compose a rhythmic piece making use of rests, to include all group members (at least 3 different parts)
12 Bar Blues	To improvise responses to the given 'call' in the song using the blues scale To include introductions and possible use of own lyrics to extend the song and produce a group performance
12 Tone Music	To compose own tone row and be able to play it To compose at least 3 'variations' based on the tone row (e.g. retrograde, inverted, including changes of rhythm and groupings of notes)
Film Music	To compose a piece of 'suspense' music to accompany a short clip of film (underscore), reflecting the on screen action
IT	To make use of prerecorded tracks to compose a 12 bar blues song with an introduction and at least 2 verses (currently Mixcraft)

- use staff and other relevant notations appropriately and accurately in a range of musical styles, genres and traditions

Rhythm and Rests	To notate rhythmic parts using notes and rests To compose own rhythmic parts using notes and rests Repeat marks, DC al Fine may also be used
12 Bar Blues	To read from stave notation and given chords
12 Tone Music	To understand and be able to read and write sharps and flats To write out a chromatic scale To notate own tone row and variations

Film Music	To record group/pair composition using a graphic score
IT	To use Sibelius to notate one piece of composition from the above topics

- identify and use the inter-related dimensions of music expressively and with increasing sophistication, including use of tonalities, different types of scales and other musical devices

Rhythm and Rests	To make use of variations of tempo, dynamic etc in performance
12 Bar Blues	To understand a written score of a song and the directions given to produce a performance To write an evaluation of the group performance making use of the elements of music and Italian terms
12 Tone Music	To understand major, minor and chromatic scales and be able to read and write notes as sharps and flats To know that a natural cancels out a sharp or flat
Film Music	To be able to identify different techniques used in existing soundtracks To use a variety of techniques and tonalities to create an effective underscore to a clip of film
Listening starters	To be able to describe a range of recorded music using the elements of music and Italian terms To be able to name and identify different musical genres

- listen with increasing discrimination to a wide range of music from great composers and musicians

12 Bar Blues	Examples from Robert Johnson, Eric Clapton, Taj Mahal, Seasick Steve, Robert Cray, Muddy Waters, BB King Spirituals ('Swing Low Sweet Chariot')
12 Tone Music	Schoenberg examples

Film Music	'Indiana Jones', 'Speed' and 'Star Wars' examples used
Starters	A variety of music to be used as starter activities to encourage the children to be able to describe aspects of the music they listen to (e.g. 'Mr Blue Sky' - Electric Light Orchestra, 'Mars the bringer of War' - Holst - these will change from year to year)

- develop a deepening understanding of the music that they perform and to which they listen, and its history

12 Bar Blues	A brief understanding of the history and influences of blues music A brief understanding of the story of Robert Johnson and his legacy
12 Tone Music	An understanding of 12 Tone Music as shown in the examples listened to A brief understanding of why and how 12 Tone music was 'invented' and the surrounding links with other art forms at the time - e.g. Picasso and cubism
Musical Genres	Work covered as starters - an idea of when different genres started/became popular eg 1950s - Rock and Roll, 1970s - Hip Hop and a little history as to how the arts and European/World culture are linked
	Reference to timeline and historical periods on music room wall

PE

Year Group				Physical Education KS2 TO KS3 Progress Map; Learning and Assessment objectives			
				Knowledge- I know	Understanding- I understand	Lead, Analyse, Evaluate- I can	Performance and Skills- I am able to
5				<ul style="list-style-type: none"> I know and can explain basic rules of most of the key activities. I know that there are different positions within different games. I know the different positions in a team. I know some of the rules in a limited number of activities. I know some basic tactics and begin to use them in a variety of games. 	<ul style="list-style-type: none"> I understand and can talk about how to exercise safely, and how my body feels during and after an activity I understand how to exercise safely and can describe how my body feels during different activities 	<ul style="list-style-type: none"> I can start to describe and comment on my own and others actions. I can talk about differences between my own and others performance and suggest improvements. I can apply suitable actions which are appropriate to the task set. 	<ul style="list-style-type: none"> I am able to choose suitable skills and sometimes perform them with control and balance. I am able to copy, repeat and explore simple skills and actions with basic control and coordination. I am able to start to link these skills and actions that suit activities I am able to move using a range of body parts with some accuracy. I am able to start to link together a range of basic actions and balances.
5	6			<ul style="list-style-type: none"> I know some rules and tactics for game play situations. I know some basic techniques for attacking and defending. 	<ul style="list-style-type: none"> I understand why warming up and cooling down before and after an activity is important. I understand why physical activity is good for health 	<ul style="list-style-type: none"> I can see how my work ability is similar to and different to others. I can use this understanding to improve my performance 	<ul style="list-style-type: none"> I am able to copy, remember and repeat simple actions with some control and coordination. I am able to vary some skills and actions and link these in ways that suit the activity

							<ul style="list-style-type: none"> I am able to warm up and cool down safely. I am able to use the correct skills in certain situations. I am able to perform a range of skills and link some together to form a simple routine.
5 +	6			<ul style="list-style-type: none"> I know some tactics used in game play situations to beat opponents. I am developing ways to use this knowledge to my advantage and to support my teams. I know the names of a few of the muscles and bones in the body. 	<ul style="list-style-type: none"> I understand the basic safety principles in preparing for exercise. I understand and can explain the effects exercise has on the body and how it is valuable to my fitness and health 	<ul style="list-style-type: none"> I can compare and comment on skills and techniques. I can analyse ideas used in my own and others work and use this understanding to improve performance 	<ul style="list-style-type: none"> I am able to use the correct technique in some athletics events I try hard to achieve a personal best in fitness testing exercises. I am able to perform basic passing and receiving skills with good coordination and control I am able to perform a range of gymnastic skills well either on my own or with others
	6			<ul style="list-style-type: none"> I know how to select and combine my skills and techniques and apply them accurately I know how to apply basic tactics and develop their use during competitive situations. I know the names of at least 	<ul style="list-style-type: none"> I understand and can explain how my body reacts during different types of exercise. I understand how to warm up and cool down in ways that suit the activity. I understand and can explain why regular, safe exercise is good 	<ul style="list-style-type: none"> I can analyse and comment on skills and techniques and how they are applied in my own and others' work. I can analyse compositional aspects of performance and suggest ways to improve on my performance. 	<ul style="list-style-type: none"> I am able to use the correct technique in a range of events or activities. I am able to draw on what I know about tactics and apply it in a game situation.

				4 muscles in the body.	for my fitness and mental health..		<ul style="list-style-type: none"> • I am able to demonstrate a good range of skills in a variety of games • I am able to start to link a variety of gymnastic skills into a routine either on my own or with others • I have a sound level of fitness
	6 +	7		<ul style="list-style-type: none"> • I know all of the rules in at least three sports. • I know some technical terms to describe a performance. • I know some of the tactics used in attacking and defending situations. • I know the location of some of the muscles in the body. • I know the name of most of the major bones in the body. 	<ul style="list-style-type: none"> • I understand how different types of exercise contribute to my health and fitness • I understand how to plan a simple exercise program me • I understand the importance of practice to develop as a performer • I understand how and why to use a safe warm up and cool down. 	<ul style="list-style-type: none"> • I can analyse and comment on how skills, techniques and ideas can be used in my own and others work. • I can analyse a performance and suggest ways to improve it. • I can organise and officiate small sided games in different sports 	<ul style="list-style-type: none"> • I am able to perform a range of suitable skills demonstrating speed, control and fluency. I am able to perform in a variety of roles and positions. • I am able to sometimes influence the game linking skills, technique and ideas • I am able to take part in a range of athletic events • I am able to perform more complex movements in gymnastics with the help of others. • I am able to co-operate successfully with others to create

							<p>and perform partner or group work.</p> <ul style="list-style-type: none"> • I am able to compose a more advanced gymnastic sequence and repeat it in the correct order with some fluency. • I have a good level of fitness
		7		<ul style="list-style-type: none"> • I know most of the rules in at least three sports. I know which skills and tactics to combine to gain my team advantage in game situations. I know how to test and measure 4 different components of fitness. • I know the name and location of some of the major muscles and bones of the body. 	<ul style="list-style-type: none"> • I understand the principles of practice and training and apply them effectively. • I understand the benefits of regular planned activity on health and fitness • I can plan my own appropriate exercise and activity programme. • I understand the need for suitable warm-up and cool down for preparation and conditioning. . 	<ul style="list-style-type: none"> • I can officiate small sided games in at least 3 sports • I can organise, coach and/or choreograph confidently using a good level of communication. • I can analyse and comment on my own and others' work either as an individual or as part of a team • I can plan ways to improve my own and others performance 	<ul style="list-style-type: none"> • I am able to perform more complex attacking and defending skills often showing accuracy and control in a number of games • I am able to change and refine the techniques I use to improve my performance and gain my team an advantage in game situations. I am able to perform well in a variety of different positions. • I am able to demonstrate a sound performance in most athletic events. • I am able to perform and link more complex skills in gymnastics showing quality and control. I am able to take part in

							a variety of fitness tests to a good standard.
		7 +	8	<ul style="list-style-type: none"> I know all of the rules in at least four sporting activities. I know how to apply some of the more advanced tactics in a variety of games and can adapt my tactics according to changing situations. I know how to test and measure 5 different components of fitness. I can name all of the major muscles and bones of the body. 	<ul style="list-style-type: none"> I understand the benefits of regular safe and planned physical activity on physical, mental and social well being. I understand and can explain how different types of activity contribute to my fitness and health. I understand how to plan and carry out an exercise programme. I understand the what makes up a balanced diet 	<ul style="list-style-type: none"> I can evaluate my own and others' work using ICT/ Ipad as a tool. I can show that I understand the impact of skills, strategy, tactics and fitness on the quality of performance. I can start to plan ways to improve my own and others' performance. I can suggest ways to monitor improvement. I can organise, coach and choreograph confidently using a very good level of communication. I can officiate to a good standard in at least 1 sport and apply rules fairly and consistently 	<ul style="list-style-type: none"> I am able to use specific techniques consistently and effectively in game play situations. I am able to perform suitable skills with consistent precision, control and fluency. I am able to select and modify skills throughout the game My performances have an influence on those around me. I am able to perform well in a range of athletic events I am able to demonstrate a variety of advanced gymnastic skills and link these effectively into a routine I am able to take part in a variety of fitness tests and produce an above average standard of results.
			8	<ul style="list-style-type: none"> I know the rules and code of conduct in at least six sporting activities. 	<ul style="list-style-type: none"> I understand and can explain the benefits of regular, safe and planned 	<ul style="list-style-type: none"> I can analyse my own and others performance, prioritising aspects for further 	<ul style="list-style-type: none"> I am able to demonstrate a range of advanced skills and techniques

				<ul style="list-style-type: none"> I know a range of advanced tactics and strategies used to outwit opponents within different game situations. I know how to accurately test and measure at least 5 different components of fitness. I know the names and location of all major muscles of the body and can identify which are being used during different activities. 	<p>physical activity on physical, mental and social well being.</p> <ul style="list-style-type: none"> I understand how skills, tactics and fitness affect the quality of performance. I can apply appropriate knowledge and understanding of health and fitness to plan and carry out and monitor an exercise programme. I understand the value of sportsmanship. 	<p>development. I can show that I understand how skills, strategy and tactics or composition and fitness relate to and affect the quality and originality of performance.</p> <ul style="list-style-type: none"> I can organise coach and choreograph confidently using an outstanding level of communication. I can officiate to a high standard in at least 1 sport and apply rules fairly and consistently whilst adhering to the conventions and code of conduct. 	<p>that are evident every time I perform.</p> <ul style="list-style-type: none"> I am able to play in a range of positions and have a positive impact within a variety of games. I am able to select and modify techniques through out the game in response to changing situations. I am able to select and combine advance skills and techniques and consistently show precision, control and fluency in all athletic events. I am able to perform, develop and combine a range of high order actions and ideas showing flair and consistency accuracy in gymnastics. I am able to take part in a variety of fitness tests and produce high results.
			8 +	<ul style="list-style-type: none"> I know the rules and code of conduct in at least seven sporting activities. I know a range of advanced tactics 	<ul style="list-style-type: none"> I understand and can explain in detail the benefits of regular, safe and planned physical activity as well as 	<ul style="list-style-type: none"> I can analyse my own and others performance, prioritising aspects for further development. I can show that I understand how 	<ul style="list-style-type: none"> I have a wide range of advanced and original skills and techniques that are evident every time I perform.

				<p>and strategies used to outwit opponents within different game situations and can use this knowledge to support others.</p> <ul style="list-style-type: none"> • I can name more than one test for most of the components of fitness. • I know the names and location of all the major bones and muscles of the body and can identify muscles and bones that are used during different activities. 	<p>highlight some of the negative impacts sport can have.</p> <ul style="list-style-type: none"> • I understand how skills, tactics and fitness affect the quality of performance. • I can apply appropriate knowledge and understanding of health and fitness in all aspects of my work • I understand the reasons for gamesmanship and deviance in sport. 	<p>skills, strategy and tactics or composition and fitness relate to and affect the quality and originality of performance.</p> <ul style="list-style-type: none"> • I can organise, coach and/or choreograph confidently using an outstanding level of communication. • I can officiate to a high standard in at least 2 sports and apply rules fairly and consistently whilst adhering to the conventions and code of conduct. 	<ul style="list-style-type: none"> • I can perform with confidence and flare in a range of positions and have a major impact within the game. • I am able to select and modify techniques throughout the game in response to changing situations. • I am consistently able to select and combine advanced skills and techniques showing precision, control and fluency in all athletic events. • I am able to perform, develop and combine a wide range of high order actions and ideas showing flair and consistent accuracy in gymnastics. • I am able to take part in a variety of fitness tests and produce exceptionally high results.
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PSHCE

Intent	Implement	Impact
<p>The intention of the PSHCE curriculum is to provide a broad, balanced and knowledge-rich education, which ensures each and every child can fulfil their potential by offering challenging and engaging learning experiences with Christian values at the heart. The schemes of work aim to equip pupils with essential skills for life; it intends to develop the whole child through carefully planned and resourced lessons that develop the knowledge, skills and attributes pupils need to protect and enhance their wellbeing. Through these lessons, pupils will learn how to stay safe and healthy, build and maintain successful relationships and become active citizens, responsibly participating in society around them. Successful PSHCE curriculum coverage is a vital tool in preparing pupils for life in society now and in the future. Lessons in this scheme of work have their foundations in seeing each and everybody's value in society, from appreciation of others in units such as British Values, to promoting strong and positive views of self in Health and Wellbeing. The PSHCE units aim to cover a wide range of the social and emotional aspects of learning, enabling pupils to develop their relationships with others, recognise behaviours in others and allowing pupils to develop their identity and self-esteem as active, confident members of their community and prepare them for the working environment. The themes and topics support social, moral, spiritual and cultural development and provide pupils with protective teaching on essential safeguarding issues, developing their knowledge of when and how they can ask for help.</p>	<p><i>How we teach the curriculum?</i></p> <p><i>How are lessons organised?</i></p> <p><i>What resources are on hand?</i></p> <p><i>What activities/ experiences are used to promote independent learning and risk taking?</i></p> <p><i>How are staff supported?</i></p> <p>The PSHCE scheme of work has 3 main units (Health & Wellbeing; Living in the Wider World; Relationships), where these units are broken down into sub-units, consisting of one lesson a week. Each main unit is focused on for half a term. Each main unit is covered twice a year. This enables pupils to recall and build upon previous learning, exploring the underlying principles of PSHCE education regularly at a depth that is appropriate for the age and stage of the child. Lessons signpost key words, building a rich vocabulary to develop understanding.</p> <p>The PSHCE units are planned to be delivered in a creative manner, using many approaches such as role play, discussion and games with groups of various sizes. These activities enable pupils to build confidence, resilience and a relationship with their PSHCE teacher and peers in order to ask and answer questions in confidence. Resources are provided to support each lesson.</p> <p>Assessment for learning opportunities are built into the beginning and at the end of each new sub-unit to assess pupils' existing knowledge and experience and provides an opportunity for baseline assessment. Some</p>	<p><i>How will this curriculum create successful, confident, independent learners?</i></p> <p><i>How are pupils prepared for the next stage of their education?</i></p> <p><i>How are their horizons broadened?</i></p> <p>The PSHCE schemes of work provides an effective curriculum for wellbeing. Pupils are enabled to develop the vocabulary and confidence needed to clearly articulate their thoughts and feelings in a climate of openness, trust and respect, and know when and how they can seek the support of others. They will apply their understanding of society to their everyday interactions, from the classroom to the wider community of which they are a part. The schemes of work supports the active development of a school culture that prioritises physical and mental health and wellbeing, providing pupils with skills to evaluate and understand their own wellbeing needs, practise self-care and contribute positively to the wellbeing of those around them.</p> <p>Successful PSHCE education can have a positive impact on the whole child, including their academic development and progress, by mitigating any social and emotional barriers to learning and building confidence and self-esteem. PSHCE education also helps disadvantaged and vulnerable pupils achieve to a greater extent by raising aspirations and empowering them with skills to overcome barriers they face.</p> <p>Within the classroom, independent, confident and successful learners are developed through quality first</p>

	<p>lessons also include a baseline assessment. There are suggestions of assessments for each teacher to choose as appropriate for their group of pupils, and each assessment is designed to enable self-evaluation and reflective learning and allows teachers to evaluate and assess progress.</p>	<p>teaching, supporting and challenging activities and a broad and balanced offering. Pupils are prepared for the next stage of their education through sequenced learning with prior learning revisited and built upon. Pupils' horizons are broadened through a Careers programme, recognising and celebrating diversity and multiculturalism and discussion opportunities to support curriculum content covered in lessons.</p> <p>Outside of the classroom, pupils can develop as independent, confident and successful learners by completing appropriate and challenging home learning activities. Being able to access online resources shared within lessons and knowing where and how to get support. Pupils are prepared for the next stage of their education by the school and department having close links with feeder lower schools and upper schools, and staff receiving CPD opportunities on recent changes to the curriculum. Pupils' horizons are broadened by giving them opportunities to contribute to the school community and allowing pupil voice through informal discussions, pupil feedback and questionnaires.</p>
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Intent

Year 5	What? Valuing Differences – Respect & Bullying (R)	What? Healthy Lifestyles – Mental Wellbeing/Keeping Active (H&W)	What? Environment – Careers Money (LitWW)	What? Growing & Changing Keeping Safe – Emergencies & First Aid (H&W)	What? Rights & Responsibilities (LitWW)	What? Healthy Relationships – Staying Safe Feelings & Emotions (R)
	Why? Pupils learn about: mutual respect, being polite and how personal behaviour can affect others;	Why? Pupils learn about: mental health, what it means and how to take care of it; How feelings and	Why? Pupils learn about: What living in a community means; Valuing different contributions that	Why? Pupils learn about: Intensity of feelings; Managing complex feelings; Coping with change and transition;	Why? Pupils learn about: Changing rules and laws; Anti-social behavior; Recognize ways in which the	Why? Pupils learn about: About the role of trust, respect and boundaries in healthy relationships (including friendships and family); How to recognize if a friendship is making them feel

	<p>how to listen and respond to and respond respectfully to people with a range of beliefs, traditions and lifestyles; how to behave respectfully online; about stereotypes and how they influence behaviour; about the impact of bullying and hurtful behaviour, including online; Strategies for responding to bullying and hurtful behavior witnessed or experienced; how to challenge discrimination, seek help and report concerns</p>	<p>emotions are affected at changing, challenging or difficult times; Ways of managing these feelings; How to seek support and advice when needed; Strategies and behaviours that support mental health (sleep, exercise, community groups, clubs, hobbies, family & friends;</p> <p>About the benefits of exercise to mental and physical health; About risks associated with an inactive lifestyle; To identify opportunities for physical activity; About the benefits of the Internet and the importance of balancing time online with other activities; How to stay safe in the sun and reduce the risk of sun burn, heat stroke and skin cancer</p>	<p>people make; Recognize there is a range of different jobs/careers; Stereotypes in the workplace; Influences of people's decisions about a job or career; Skills that will help them carry out jobs in the future (i.e. teamwork, communication, negotiation); Identify the kind of job they may like to do when older;</p> <p>Being a critical consumer; Looking after money, interest, loan; Debt management of money; Ways of paying for things; Attitudes towards saving and spending; People's spending decisions impact on environment and others</p>	<p>Bereavement and grief; Personal identity (ethnicity, family, gender, faith, culture, hobbies, likes/dislikes); Gender identity and biological sex</p> <p>How to respond in an emergency situation; How to deal with increased independence and responsibility; Resisting pressure; Knowing who is responsible for their health and safety; Where to get help and advice</p>	<p>Internet and social media can be used positively and negatively; Assess reliability of online sources; How information and data is shared and used online</p>	<p>uncomfortable or unsafe; How to maintain and respect privacy and boundaries, including online; How to recognize different types of physical contact and what is, or is not, acceptable; About seeking and giving/not giving permission in different situations; How to seek or report concerns about their personal safety or that of others in a range of contexts</p>
	<p>Why now?</p> <p>Pupils have come</p>	<p>Why now?</p> <p>Pupils will start to</p>	<p>Why now?</p> <p>Our school is value-</p>	<p>Why now?</p> <p>Pupils can reflect on</p>	<p>Why now?</p> <p>As pupils mature</p>	<p>Why now?</p> <p>Introducing consent through understanding</p>

	from different lower schools, with different demographic groups and different outlooks. This topic gives an opportunity to be inclusive and work as a class community	gain more independence when entering Middle School and it is an opportunity to raise awareness of choices – food, friendship groups, etc. Recognising what can benefit our mental health, and that physical and mental health are related. Pupils can be more aware of the signs our bodies give us when we are not coping mentally	based and pupils learn about these values during Collective Worship, and PSHCE allows pupils to deepen their understanding and also how to demonstrate these values. Values can be seen as a foundation to their own behaviour Pupils become more aware of the skills needed for a job/career and look more realistically and what they want to do when they are older	how moving to middle school has its challenges and positives. Pupils will build upon previous learning by looking more in depth at diversities, and then start to look at their own identities and values	emotionally and establish relationships with others in class, they can begin to recognise when issues can be resolved by them and how to do this positively	boundaries and that our bodies are our own
<p>MTPs have clearly sequenced objectives.</p> <p>Lessons follow a clear structure of reflection of what we already know and a moment of reflection at the end.</p> <p>Primary and Secondary sources tailored appropriately.</p> <p>Broad range of activities (role-play, discussion, group/pair work, independent tasks, written work) which cater for different needs.</p>				<p>Formative assessments in lessons assess understanding throughout.</p> <p>Summative final task brings all learning together.</p> <p>Pupil engagement is high - through questioning, discussion and tasks.</p> <p>Children can, with confidence, form their own views based on tasks and discussions, and can add to any baseline assessment during reflection at the end of lessons or end of units.</p> <p>Pupils are prepared for the wider world by becoming more confident in social and emotional situations and can build self-esteem.</p> <p>Pupil feedback is positive in questionnaires.</p>		

Year 6	What? Valuing Differences – Managing Change (R)	What? Healthy Lifestyles – Health & Hygiene / Mental Health (H&W)	What? Environment – Personal Identity (LitWW)	What? Feelings & Emotions / Healthy Relationships – Friendships and Staying Safe (R)	What? Rights & responsibilities – Media Literacy (LitWW)	What? Growing & Changing – Puberty & Reproduction / Keeping Safe – Substances (H&W)
	<p>Why?</p> <p>Pupils learn about:</p> <p>how positive friendships can support wellbeing; how friendships change (including context such as moving home or schools); how to manage change in different contexts (including loss and bereavement); accessing appropriate support during times of change; empathy and how people can help to support each other in times of difficulty</p>	<p>Why?</p> <p>Pupils learn about:</p> <p>how choices can affect a healthy lifestyle; what constitutes a healthy diet and how to plan healthy meals; how bacteria and viruses can affect health; hygiene routines to limit the spread of infection; how to take responsibility for personal hygiene during adolescence; how medicines contribute to health, and how to use them responsibly and safely; how to manage allergies including how to respond in an emergency ; about how vaccines and immunisations can prevent some diseases; dealing with emotions,</p>	<p>Why?</p> <p>Pupils learn about:</p> <p>what contributes to who we are (e.g. ethnicity, family, faith, culture, gender, hobbies, likes/dislikes); how individuality and personal qualities make up someone's identity (including that gender identity is part of personal identity and for some people does not correspond with their biological sex); how to recognize positive things about themselves and their achievements; how to set goals to help achieve personal outcomes; how to manage setbacks and perceived failures; how to reframe unhelpful thinking; about new</p>	<p>Why?</p> <p>Pupils learn about:</p> <p>strategies for disputes; what to do if a friendship is making them feel unsafe, including online; opportunities to connect with others, including friends, online; what it means to 'know someone online' and how this differs to knowing someone face to face; why someone may behave differently online, including pretending to be someone they are not; how to manage the risks of communicating online with others not know face-to-face; strategies to respond to harmful behavior, including online; how to report concerns and access help or advice</p>	<p>Why?</p> <p>Pupils learn about:</p> <p>the role of the Internet in everyday life; the positive and negative uses and effects of the Internet and social media; how data is shared and used online, and how information can be targeted; how images and information online can be manipulated or invented; strategies to evaluate reliability of sources and identify misinformation; how and why to choose age-appropriate media including TV, film, games and online content; risk in relation to gambling, including online; how to manage influences in relation to gambling</p>	<p>Why?</p> <p>Pupils learn about:</p> <p>how to manage change – new roles and responsibilities as they grow up; how to manage the physical and emotional changes that happen during puberty; hygiene routines during puberty; adult relationships and the human life cycle; human reproduction; how a baby is made and how it grows</p> <p>risks and effects of legal drugs (cigarettes, e-cigarettes/vaping, alcohol, medicines; impact on health; laws around use of legal drugs; why people choose to use or not use substances; the mixed messages in the media about substances; how to seek help and support organisations; strategies for managing personal safety in the local environment; predict, assess and manage risk in different situations; online safety including sharing images, mobile phone safety; regulations and restrictions (social media, television programmes, films, games and online gaming)</p>

		challenges and change	opportunities and responsibilities that come from increasing independence; how resources are allocated; why some jobs are paid more than others; influences of people's job choices; skills that will help in future careers; kinds of jobs they might like to do; recognize routes into careers			
	Why now? As pupils mature, their interests may change, therefore friendships can change. Pupils learn how to manage change, including puberty in a safe and positive way.	Why now? As pupils begin the stages of puberty, their lifestyles can affect their wellbeing physically and emotionally. Being aware of what choices they can make, can give them more control (especially as they have less control over the changes happening to their bodies during puberty). Building on from Year 5, pupils are able to identify more warning signs of mental health issues and how to	Why now? Pupils become more aware of the wider world and assume greater personal responsibility.	Why now? It builds on the skills that pupils started to acquire in year 5 to develop effective relationships and manage personal safety, including online	Why now? Pupils become more aware of the risks of the Internet, especially when independently researching	Why now? The objectives and tasks offers both explicit and implicit learning opportunities and experiences which reflect pupils' increasing independence and physical and social awareness. Helps pupils to cope with the changes at puberty.

		seek support.				
<p>MTPs have clearly sequenced objectives.</p> <p>Lessons follow a clear structure of reflection of what we already know and a moment of reflection at the end.</p> <p>Primary and Secondary sources tailored appropriately.</p> <p>Broad range of activities (role-play, discussion, group/pair work, independent tasks, written work) which cater for different needs.</p>				<p>Formative assessments in lessons assess understanding throughout.</p> <p>Summative final task brings all learning together.</p> <p>Pupil engagement is high - through questioning, discussion and tasks.</p> <p>Children can, with confidence, form their own views based on tasks and discussions, and can add to any baseline assessment during reflection at the end of lessons or end of units.</p> <p>Pupils are prepared for the wider world by becoming more confident in social and emotional situations and can build self-esteem.</p> <p>Pupil feedback is positive in questionnaires.</p>		
Year 7	What? Valuing Differences – Friendships & Diversity (R)	What? Healthy Lifestyles (H&W)	What? Environment – Careers (LitWW)	What? Growing & Changing – Substances / Keeping Safe (H&W)	What? Rights & Responsibilities / Money – Economic Wellbeing (LitWW)	What? Healthy Relationships – Relationships (R) Growing & Changing – Puberty / Contraception & Reproduction (H&W)
	Why? Pupils learn about: how to develop self-worth and confidence to support decision making; to manage influences on beliefs	Why? Pupils learn about: how to manage influences on healthy lifestyle choices including diet and physical activity; the	Why? Pupils learn about: how to be enterprising; different types of career and work patterns; how to identify abilities	Why? Pupils learn about: substance use and misuse, including laws relating to this; the effects of alcohol, tobacco, nicotine and	Why? Pupils learn about: reviewing strengths, interests, skills, qualities and values and how to develop them; setting realistic but	Why? Pupils learn about different types of relationships and the qualities and behaviours associated with positive relationships; media stereotypes and their effect pm relationship expectations; how to manage expectations for romantic relationships; how to manage strong

	<p>and decisions; strategies for managing group-think and persuasion; gender identity, transphobia and gender-based discrimination, homophobia and biphobia, racism and religious discrimination; and disability discrimination through discussion of equality; strategies to challenge prejudice-based bullying and discrimination; how to access support services in relation to inclusion or discrimination</p>	<p>link between sleep and wellbeing; how to maintain healthy sleep habits; how to balance time between school work, leisure, exercise and time spent outdoors and online; how to manage influences on, and maintain, good oral hygiene and dental health; strategies to manage stress, puberty and the physical and mental changes that are a part of growing up; how to access health services</p>	<p>and qualities required for different careers; young people's employment rights; ethical and unethical business practices and consumerism</p>	<p>e-cigarettes; attitudes and social norms regarding substances; dependence, including the over-consumption of caffeine-based energy drinks; how to safely use over the counter and prescription medications; how to manage peer influence in relation to substance abuse; strategies to manage personal safety in situations, including online; assessing and reducing the risk in relation to health, wellbeing and personal safety</p>	<p>ambitious goals; safely manage personal information and images online; financial choices including saving, spending and budgeting; attitudes and values in relation to finance, including debt and payday loans; how to manage influences over financial decisions; how to manage emotions in relation to finance; to recognize risk and financial exploitation and access help and advice</p>	<p>feelings in relationships; how to identify unhealthy relationships and seek support when necessary; the concept of consent; how to seek and give/not give consent in a variety of contexts</p> <p>consolidation and reinforcement of KS2 puberty, human reproduction, pregnancy and the physical and emotional changes of adolescence</p> <p>explore how puberty enables reproduction</p>
	<p>Why now?</p> <p>Pupils are encouraged to manage diverse relationships and the increasing influence of peers and media.</p>	<p>Why now?</p> <p>Pupils' independence will increase, so they are aware of how they can manage their own physical and mental health by addressing factors within their lifestyle, including time spent online.</p>	<p>Why now?</p> <p>Pupils will learn the skills which will equip them for opportunities and challenges of life. They begin to identify possible career choices</p>	<p>Why now?</p> <p>Pupils build upon Healthy Lifestyles from Autumn 2 by recognising that substances are negative coping mechanisms when dealing with mental health, and that substances can also affect the physical health of a person.</p>	<p>Why now?</p> <p>Pupils review their strengths, interests, skills, qualities and values in relation to what they need to develop in order to achieve the career they are pursuing.</p>	<p>Why now?</p> <p>Pupils build upon different types of relationships, recognising that romantic relationships may be forming. Pupils begin to understand the concept of consent</p>

<p>MTPs have clearly sequenced objectives.</p> <p>Lessons follow a clear structure of reflection of what we already know and a moment of reflection at the end.</p> <p>Primary and Secondary sources tailored appropriately.</p> <p>Broad range of activities (role-play, discussion, group/pair work, independent tasks, written work) which cater for different needs.</p>							<p>Formative assessments in lessons assess understanding throughout.</p> <p>Summative final task brings all learning together.</p> <p>Pupil engagement is high - through questioning, discussion and tasks.</p> <p>Children can, with confidence, form their own views based on tasks and discussions, and can add to any baseline assessment during reflection at the end of lessons or end of units.</p> <p>Pupils are prepared for the wider world by becoming more confident in social and emotional situations and can build self-esteem.</p> <p>Pupil feedback is positive in questionnaires.</p>
Year 8	What? Valuing Differences – Friendships & Managing Influences / Feelings & Emotions (R)	What? Healthy Lifestyles – Mental Health & Wellbeing (H&W)	What? Environment / Money – Careers & Tenner Challenge (LitWW)	What? Keeping Safe – First Aid (H&W)	What? Rights & Responsibilities – Moving Forward (LitWW)	What? Healthy Relationships (R)	
	<p>Why?</p> <p>Pupils learn about: how to manage group friendships; how to manage social influences, peer pressure and the desire for peer approval in a range of contexts, including in relation to</p>	<p>Why?</p> <p>Pupils learn about: attitudes to mental health and how to challenge stigma and misconceptions; ways to promote and maintain emotional wellbeing; how to build resilience and reframe</p>	<p>Why?</p> <p>Pupils learn about: how to identify their life and career aspirations; how to identify personal strengths and skills for employment; how to challenge stereotypes and expectations that</p>	<p>Why?</p> <p>Pupils learn about: how to manage personal safety, including when out, travelling, at home and online; how to respond in an emergency situation; how to perform basic first aid, including CPR; when</p>	<p>Why?</p> <p>Pupils learn about: how to review personal strengths and targets; how to identify opportunities to develop strengths and skills; how to set realistic yet ambitious goals for the future; options available in</p>	<p>Why?</p> <p>Pupils learn about: relationship norms and expectations; forming new partnerships and developing relationships; the impact of stereotypes on expectations of gender roles, behaviour and intimacy; gender identity and sexual orientation; the choice to delay sex and the right to enjoy intimacy without sex; effective communication strategies and consent in intimate</p>	

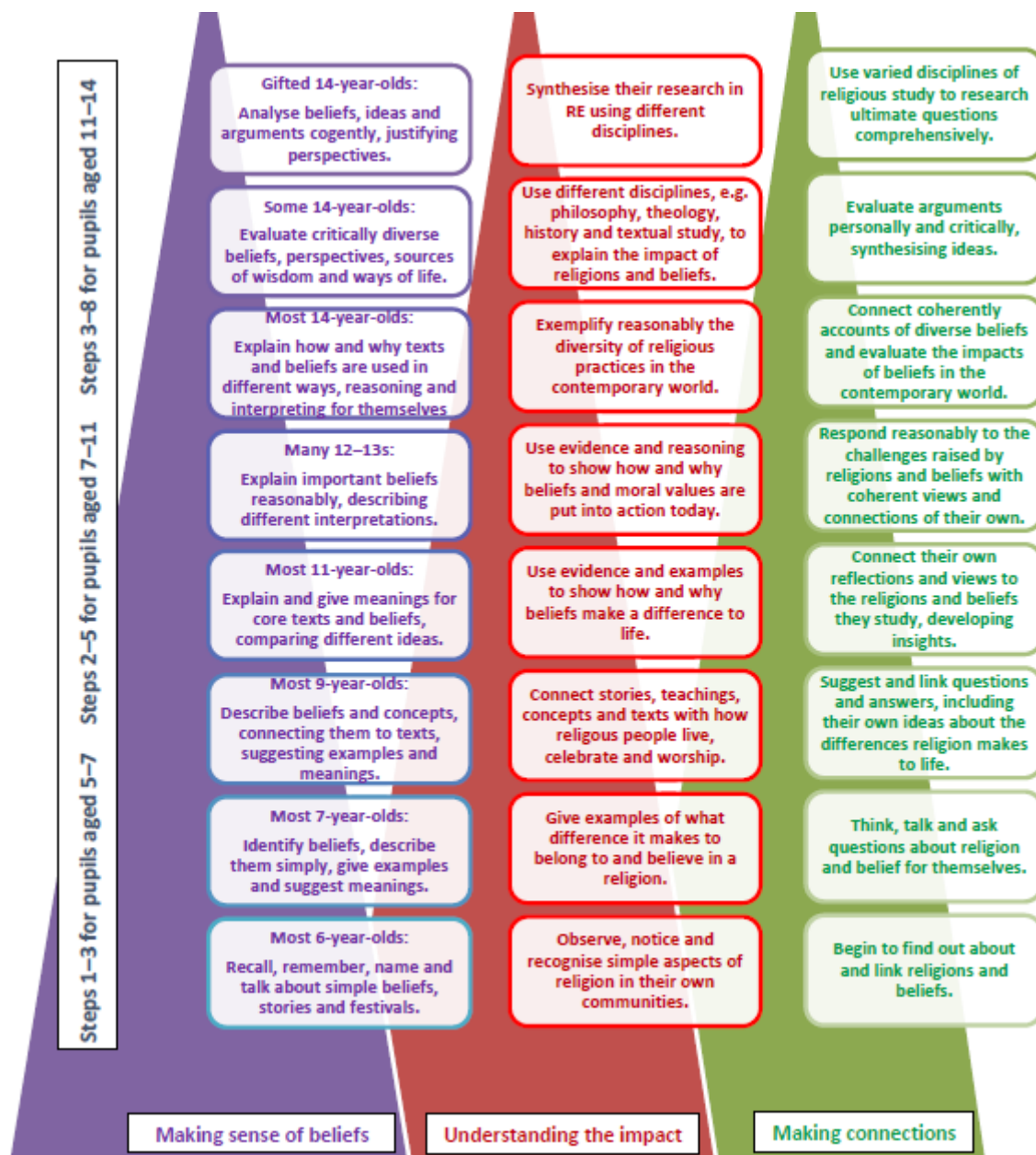
	substance use and anti-social behavior; how to manage personal safety in social situations; how to access support and advice in relation to friendship and peer influence issues; why young people may join gangs and the consequences of gang behavior; how to access support in relation to gangs; exit strategies for pressurized situations	disappointments and setbacks; the impact of social media on mental health and emotional wellbeing; strategies to develop digital resilience; managing influences, including the media, on body image; unhealthy coping strategies, including self-harm and eating disorders; healthy ways to manage difficult feelings, challenging circumstances, stress and anxiety; why, when and how to access support for themselves or others	limit aspirations; routes into different careers; how to evaluate progression routes; how a person's online presence can affect employability; how to manage online presence including on social networking sites; how to manage emotions in relation to future employment	and how to safely use defibrillators	senior school; how to manage change and transition, including feelings	situations; the law in relation to relationships, sex, consent (including sharing of sexual images), FGM and forced marriage; contraception, its role in preventing pregnancy and sexually transmitted infections; how condoms and the pill are used safely; the HPV vaccination programme; FGM and forced marriage, and how to access help and support
	Why now?	Why now?	Why now?	Why now?	Why now?	Why now?
	Pupils are moving towards a more independent role and learn strategies to manage peer pressure and the challenges of adolescence.	Pupils learn about healthy and unhealthy coping strategies, building on their understanding of mental health, warning signs, triggers and the use of substances.	Pupils are allowed to be more confident in addressing the challenges of life and are able to make a full and active contribution to society.	As pupils become more independent, they learn the skills to manage personal safety, including when out and travelling.	Pupils acknowledge and address the changes that they may experience, beginning with transition to high school.	Pupils learn about sexual health, parenthood and the consequences of pregnancy so they are aware of the positives and negatives. The concept of consent is built upon to include relationships.
MTPs have clearly sequenced objectives.				Formative assessments in lessons assess understanding throughout.		

<p>Lessons follow a clear structure of reflection of what we already know and a moment of reflection at the end.</p> <p>Primary and Secondary sources tailored appropriately.</p> <p>Broad range of activities (role-play, discussion, group/pair work, independent tasks, written work) which cater for different needs.</p>	<p>Summative final task brings all learning together.</p> <p>Pupil engagement is high - through questioning, discussion and tasks.</p> <p>Children can, with confidence, form their own views based on tasks and discussions, and can add to any baseline assessment during reflection at the end of lessons or end of units.</p> <p>Pupils are prepared for the wider world by becoming more confident in social and emotional situations and can build self-esteem.</p> <p>Pupil feedback is positive in questionnaires.</p>
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Teaching and learning approach	End of KS1, aged 7 <i>Pupils can ...</i>	End of lower KS2, aged 9 <i>Pupils can ...</i>	End of KS2, aged 11 <i>Pupils can ...</i>	End of KS3, aged 14 <i>Pupils can ...</i>
<p>Element 1: Making sense of beliefs</p> <p>Identifying and making sense of core religious and non-religious beliefs and concepts; understanding what these beliefs mean within their traditions; recognising how and why sources of authority (such as texts) are used, expressed and interpreted in different ways; and developing skills of interpretation.</p>	<ul style="list-style-type: none"> identify some core beliefs and concepts studied and give a simple description of what they mean 	<ul style="list-style-type: none"> identify and describe the core beliefs and concepts studied 	<ul style="list-style-type: none"> identify and explain the core beliefs and concepts studied, using examples from texts/sources of authority in religions 	<ul style="list-style-type: none"> give reasoned explanations of how and why the selected core beliefs and concepts are important within the religions studied
	<ul style="list-style-type: none"> give examples of how stories show what people believe (e.g. the meaning behind a festival) 	<ul style="list-style-type: none"> make clear links between texts/sources of wisdom and authority and the core concepts studied 	<ul style="list-style-type: none"> describe examples of ways in which people use texts/sources of wisdom and authority to make sense of core beliefs and concepts 	<ul style="list-style-type: none"> taking account of context(s), explain how and why people use and make sense of texts/sources of wisdom and authority differently
	<ul style="list-style-type: none"> give clear, simple accounts of what stories and other texts mean to believers 	<ul style="list-style-type: none"> offer informed suggestions about what texts/sources of wisdom and authority can mean, and give examples of what these sources mean to believers 	<ul style="list-style-type: none"> give meanings for texts/sources of wisdom and authority studied, comparing these ideas with some ways in which believers interpret texts/sources of authority 	<ul style="list-style-type: none"> in the light of their learning, explain how appropriate different interpretations of texts/sources of wisdom and authority are, including their own ideas

Teaching and learning approach	End of KS1 <i>Pupils can ...</i>	End of lower KS2 <i>Pupils can ...</i>	End of KS2 <i>Pupils can ...</i>	End of KS3 <i>Pupils can ...</i>
<p>Element 2: Understanding the impact</p> <p>Examining how and why people put their beliefs into practice in diverse ways, within their everyday lives, within their communities and in the wider world, appreciating and appraising different ways of life and ways of expressing meaning.</p>	<ul style="list-style-type: none"> give examples of how people use stories, texts and teachings to guide their beliefs and actions 	<ul style="list-style-type: none"> make simple links between stories, teachings and concepts studied and how people live, individually and in communities describe how people show their beliefs in how they worship and in the ways they live 	<ul style="list-style-type: none"> make clear connections between what people believe and how they live, individually and in communities 	<ul style="list-style-type: none"> give reasons and examples to account for how and why people put their beliefs into practice in different ways, individually and in various communities (e.g. denominations, times or cultures; faith or other communities)
	<ul style="list-style-type: none"> give examples of ways in which believers put their beliefs into practice 	<ul style="list-style-type: none"> identify some differences in how people put their beliefs into practice 	<ul style="list-style-type: none"> using evidence and examples, show how and why people put their beliefs into practice in different ways, e.g. in different communities, denominations or cultures 	<ul style="list-style-type: none"> show how beliefs guide people in making moral and religious decisions, applying these ideas to situations in the world today

Teaching and learning approach	End of KS1 <i>Pupils can ...</i>	End of lower KS2 <i>Pupils can ...</i>	End of KS2 <i>Pupils can ...</i>	End of KS3 <i>Pupils can ...</i>
<p>Element 3: Making connections</p> <p>Evaluating, reflecting on and connecting the key concepts and questions studied, so that pupils can challenge the ideas studied, and consider how these ideas might challenge their own thinking; and discerning possible connections between the ideas and pupils' own lives and ways of understanding the world, expressing critical responses and personal reflections.</p>	<ul style="list-style-type: none"> think, talk and ask questions about whether the ideas they have been studying have something to say to them 	<ul style="list-style-type: none"> raise important questions and suggest answers about how far the beliefs and practices studied might make a difference to how pupils think and live make links between some of the beliefs and practices studied and life in the world today, expressing some ideas of their own clearly 	<ul style="list-style-type: none"> make connections between the beliefs and practices studied, evaluating and explaining their importance to different people (e.g. believers and atheists) reflect on and articulate lessons people might gain from the beliefs/practices studied, including their own responses, recognising that others may think differently 	<ul style="list-style-type: none"> give coherent accounts of the significance and implications of the beliefs and practices studied in the world today evaluate how far the beliefs and practices studied help pupils themselves, and others, to make sense of the world
	<ul style="list-style-type: none"> give a good reason for the views they have and the connections they make 	<ul style="list-style-type: none"> give good reasons for the views they have and the connections they make 	<ul style="list-style-type: none"> consider and weigh up how ideas studied in this unit relate to their own experiences and experiences of the world today, developing insights of their own and giving good reasons for the views they have and the connections they make 	<ul style="list-style-type: none"> respond to the challenges raised by questions of belief and practice, both in the world today and in their own lives, offering reasons and justifications for their responses



Science

Topic	Year 5	Year 6	Year 7	Year 8
Plants/ Ecosystems	Describe the life process of reproduction in some plants and animals. (Y5 - 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 microorganisms, plants and animals. (Y6 - Living things and their habitats) Give reasons for classifying plants and animals based on specific characteristics. (Y6 - Living things and their habitats)	Relationships in the environment. How plants are adapted to reproduce.	Describe the reactants in, and products of, photosynthesis as well as a summary of the process How leaves adapt for photosynthesis Plant minerals Chemosynthesis Aerobic respiration Anaerobic respiration Food chains and webs Ecosystems
Living things and their habitats	Describe the differences 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.	Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals. Give reasons for classifying plants and animals based on specific characteristics. Recognise that living things produce offspring of the same kind, but normally offspring vary and are	Reproduction in plants, including flower structure, wind and insect pollination, fertilisation, seed and fruit formation and dispersal, including quantitative investigation of some dispersal mechanisms. Differences between species	

		<p>not identical to their parents. (Y6 - Evolution and inheritance)</p> <p>Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. (Y6 - Evolution and inheritance)</p>		
Animals including humans	<p>Describe the changes as humans develop to old age.</p> <p>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. (Y5 - Living things and their habitats)</p> <p>Describe the life process of reproduction in some plants and animals. (Y5 - Living things and their habitats)</p>	<p>Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.</p> <p>Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.</p> <p>Describe the ways in which nutrients and water are transported within animals, including humans.</p> <p>Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals. (Y6 - Living things and their habitats)</p> <ul style="list-style-type: none"> • Give reasons for classifying plants and animals based on specific characteristics. (Y6 - Living things and their habitats) 	<p>Reproduction in humans (as an example of a mammal), including the structure and function of the male and female reproductive systems, menstrual cycle (without details of hormones), gametes, fertilisation, gestation and birth, to include the effect of maternal lifestyle on the foetus through the placenta. The consequences of imbalances in the diet, including obesity, starvation and deficiency diseases.</p> <p>The effects of recreational drugs (including substance misuse) on behaviour, health and life processes. The structure and functions of the gas exchange system in humans, including adaptations to function.</p> <p>The mechanism of breathing to move air in and out of the lungs.</p> <p>The impact of exercise, asthma and smoking on the human gas exchange system.</p>	
Evolution and inheritance	Describe the life process of reproduction in some plants and	Recognise that living things have changed over time and that fossils provide information about living		Heredity as the process by which genetic information is transmitted from one generation to the next.

	<p>animals. (Living things and their habitats - Y5)</p>	<p>things that inhabited the Earth millions of years ago.</p> <p>Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.</p> <p>Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p>		<p>A simple model of chromosomes, genes and DNA in heredity, including the part played by Watson, Crick, Wilkins and Franklin in the development of the DNA model.</p> <p>The variation between species and between individuals of the same species means some organisms compete more successfully, which can drive natural selection.</p> <p>Changes in the environment may leave individuals within a species, and some entire species, less well adapted to compete successfully and reproduce, which in turn may lead to extinction.</p>
Seasonal changes	<ul style="list-style-type: none"> Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky. (Y5 - Earth and space) 		The seasons and the Earth's tilt, day length at different times of year, in different hemispheres	
Materials	<p>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.</p> <p>Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.</p> <p>Use knowledge of solids, liquids and gases to decide how mixtures might</p>		<p>Chemical reactions as the rearrangement of atoms.</p> <p>Representing chemical reactions using formulae and using equations. Combustion, thermal decomposition, oxidation and displacement reactions.</p> <p>Defining acids and alkalis in terms of neutralisation reactions.</p> <p>The pH scale for measuring acidity/alkalinity; and indicators.</p>	<p>-the order of metals and carbon in the reactivity series</p> <p>-the use of carbon in obtaining metals from metal oxides</p> <p>properties of ceramics, polymers and composites (qualitative)</p> <p>- all will write word equations and some will write and then balance symbol equations.</p>

	<p>be separated, including through filtering, sieving and evaporating.</p> <p>Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.</p> <p>Demonstrate that dissolving, mixing and changes of state are reversible changes.</p> <p>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.</p>			
Rocks		<p>Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. (Y6 - Evolution and inheritance)</p>	<p>The composition of the Earth. The structure of the Earth The rock cycle and the formation of igneous, sedimentary and metamorphic rocks.</p>	<p>The composition of the Earth. The structure of the Earth The rock cycle and the formation of igneous, sedimentary and metamorphic rocks.</p>
Light/waves		<p>Recognise that light appears to travel in straight lines.</p> <p>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.</p> <p>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.</p>	<p>What sound is</p> <p>How sound behaves</p> <p>What light is</p> <p>How light behaves</p>	<p>Waves and energy</p> <p>Modelling waves</p> <p>Effect of waves.</p>

		Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.		
Forces	<p>Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</p> <p>Identify the effects of air resistance, water resistance and friction that act between moving surfaces.</p> <p>Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p>		<p>Forces as pushes or pulls, arising from the interaction between two objects. Using force arrows in diagrams, adding forces in one dimension, balanced and unbalanced forces. Resultant force</p> <p>Speed & Acceleration</p> <p>Forces: associated with deforming objects; stretching and squashing – springs; with rubbing and friction between surfaces, with pushing things out of the way; resistance to motion of air and water. Forces measured in Newtons, measurements of stretch or compression as force is changed.</p>	Moment as the turning effect of a force.
Sound/ Waves			<p>What sound is</p> <p>How sound behaves</p> <p>What light is</p> <p>How light behaves</p>	<p>Waves and energy</p> <p>Modelling waves</p> <p>Effect of waves.</p>
Electricity/ Magnetism		<p>Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.</p> <p>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.</p>	<p>Explaining electric circuits</p> <p>Current</p> <p>Potential difference</p> <p>Electrostatic force.</p>	<p>Electric current, measured in amperes, in circuits, series and parallel circuits, currents add where branches meet and current as flow of charge.</p> <p>Potential difference, measured in volts, battery and bulb ratings; resistance, measured in ohms, as the ratio of potential difference (p.d.) to current. Differences in</p>

		Use recognised symbols when representing a simple circuit in a diagram		<p>resistance between conducting and insulating components (quantitative).</p> <p>Static electricity.</p> <p>Magnetic fields by plotting with compass, representation by field lines. Earth's magnetism, compass and navigation.</p>
Earth and Space	<p>Describe the movement of the Earth, and other planets, relative to the Sun in the solar system</p> <p>Describe the movement of the Moon relative to the Earth</p> <p>Describe the Sun, Earth and Moon as spherical bodies</p> <p>Explain day and night and the apparent movement of the sun across the sky through use of the idea of Earth's rotation</p>		<p>The rock cycle</p> <p>The Earth in the Universe</p> <p>The movement of objects in space.</p>	<p>Our Sun as a star, other stars in our galaxy, other galaxies.</p> <p>The seasons and the Earth's tilt, day length at different times of year, in different hemispheres.</p> <p>The light year as a unit of astronomical distance</p>

Working Scientifically

Upper Key Stage 2

Upper Key Stage 2
Use their science experiences to explore ideas and raise different kinds of questions
Talk about how scientific ideas have developed over time
Select and plan the most appropriate type of scientific enquiry to use to answer scientific questions
Recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why
Use and develop keys and other information records to identify, classify and describe living things and materials, and identify patterns that might be found in the natural environment
Recognise which secondary sources will be most useful to research their ideas and begin to separate opinion from fact
Choose the most appropriate equipment to make measurements with increasing precision and explain how to use it accurately Take repeat measurements where appropriate
Make their own decisions about what observations to make, what measurements to use and how long to make them for
Decide how to record data and results of increasing complexity from a choice of familiar approaches: scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
Look for different causal relationships in their data and identify evidence that refutes or supports their ideas
Identify scientific evidence that has been used to support or refute ideas or arguments
Use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas Use oral and written forms such as displays and other presentations to report conclusions, causal relationships and explanations of degree of trust in results
Use their results to make predictions and identify when further observations, comparative and fair tests might be needed

Working Scientifically

Key Stage 3

Key Stage 3
Ask questions and develop a line of enquiry based on observations of the real world, alongside prior knowledge and experience
Understand that scientific methods and theories develop as earlier explanations are modified to take account of new evidence and ideas, together with the importance of publishing results and peer review
Select, plan and carry out the most appropriate types of scientific enquiries to test predictions, including identifying independent, dependent and control variables, where appropriate
Make predictions using scientific knowledge and understanding
Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work, paying attention to health and safety Evaluate the reliability of methods and suggest possible improvements Evaluate risks Pay attention to objectivity and concern for accuracy, precision, repeatability and reproducibility.
Apply sampling techniques Apply mathematical concepts and calculate results Use and derive simple equations and carry out appropriate calculations Undertake basic data analysis including simple statistical techniques
Understand and use SI units and IUPAC (International Union of Pure and Applied Chemistry) chemical nomenclature Make and record observations and measurements using a range of methods for different investigations Present observations and data using appropriate methods, including tables and graphs
Interpret observations and data, including identifying patterns and using observations, measurements and data to draw conclusions
Present reasoned explanations, including explaining data in relation to predictions and hypotheses Evaluate data, showing awareness of potential sources of random and systematic error
Identify further questions arising from their results