

World Class Curriculum Framework 2019-20



World Class Curriculum

Areas of Learning

Languages

English and MFL

Science and Technology

Science, Design Technology and Computing

The Arts

Music and Art & Design

Humanities

RE, History and Geography

Physical Education

Physical Education

Life Skills

RSE

Appendix 1

Curriculum Enrichment, Learning Environment, Engagement Activities, Outdoor Learning

Appendix 2

Languages

Appendix 3

Mathematics

World Class Curriculum

National Curriculum Programmes of Study

Key Stage 1 (Year 1-2)



Lower Key Stage 2 (Year 3-4)



Upper Key Stage 2 (Year 5-6)



Key Stage 2 (Year 3-6)



World Class Curriculum

Languages

- Reading: Comprehension
- Writing: Composition
- Speaking & Listening

Languages Reading: Comprehension	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none"> to appreciate a wide range of texts at a level beyond their independent reading ability to link what they read to their own experiences to discuss the sequence of events in books and how items of information are related to become familiar with key stories, retelling them and considering their characteristics to recite some poems by heart with intonation to discuss word meanings, linking new meanings to those already known to check that the text makes sense to them as they read, and correct inaccurate reading to predict what might happen next based on details stated and implied to participate in discussion about a text by taking turns and listening to others and building on these ideas and challenging views politely to explain understanding of texts they hear to discuss their favourite words and phrases to understand familiar and unfamiliar texts by drawing on knowledge, background information and key vocabulary to infer, based on what is being said and done to answer and ask questions about a text to using dictionaries to check word meanings to increase familiarity with a wide range of books, including fairy stories, myths and legends, modern fiction, fiction from our cultures and traditions and retell these orally to identify themes and conventions in a wide range of books and writing to perform poems and play scripts, showing understanding through intonation, volume and action so the meaning is clear to an audience to discuss words and phrases that capture the reader's interest and imagination to recognise some different forms of poetry to discuss their understanding of a text/book and explain the meaning of words in context to improve understanding through questioning to draw inferences such as characters' feelings and motives and justify these with evidence to identify and summarise the main ideas drawn from more than 1 paragraph identifying key details that support the main ideas to identify how language, structure, and presentation contribute to meaning to retrieve, record and present information from non-fiction to read books that are structured in different ways and read for a range of purposes to review books giving reasons for their choices to make comparisons within and across books to learn a wider range of poetry by heart to evaluate authors' use of language, including figurative language, considering its impact to distinguish between fact and opinion to explain and discuss what they have read, including through presentations and note taking provide reasoned justifications for their views 	<p>Literacy (Reading) 40-60 months</p> <ul style="list-style-type: none"> I enjoy an increasing range of books I know that information can be retrieved from books and computers <p>Early Learning Goal</p> <ul style="list-style-type: none"> I can read and understand simple sentences I demonstrate understanding when talking with others about what they have read. <p>Exceeding statements</p> <ul style="list-style-type: none"> I can describe the main events in the simple stories I have read 	<ul style="list-style-type: none"> I appreciate and give my views on texts beyond my independent reading level I can relate what I read to my own experiences I can retell familiar stories by heart I can recite some poems by heart and use intonation for effect I can talk about word meanings, linking new meanings to those I already know I can check my reading and correct myself I can talk about what might happen next I can make inferences, based on what is being said and done I can contribute to discussions about texts I read or that I hear I can discuss my favourite words and phrases I use a range of strategies to understand familiar and unfamiliar texts I can recall basic information about a text, like names of characters I can ask questions to improve my understanding of a text I can find parts of a text that interest me, like favourite characters and events I can explain the function of basic text features I can recall basic information about a text, like names of characters and main ingredients I can find information about characters and facts quite quickly I understand and can explain how texts are organised I can identify where imaginative vocabulary has been used for effect I can give reasons for liking or not liking a text I can talk about the basic features of different text types, like stories and information texts I know that some texts are set in different times and places 	<ul style="list-style-type: none"> I can identify the most obvious points in a text I can take part in discussions about texts by taking turns and listening to others I am familiar with a wide range of texts, including fairy tales, myths and legends I can retell a range of stories orally I can discuss words or phrases that capture the reader's interest and imagination I can use a dictionary to check the meaning of words I have read I can discuss my understanding of a text and explain the meaning of words in context I can quote or refer to the text to help me explain my opinion or in answering a question I can make an inference based on a single piece of information I can interpret phrases to establish meaning I can give my own view of a situation in a text I can summarise the main ideas of a text with more than one paragraph I can describe basic features of organisation I can explain how chapters, titles and paragraphs are used to order and build up ideas I can identify and explain the use of expressive and descriptive language in texts I can comment on the main purpose of a text I can participate in discussions about texts, building on ideas and challenging views politely I can recognise different forms of poetry I can prepare poems and playscripts for performance I can retrieve and record information from non-fiction texts I am aware that texts have different contexts, like historical settings or cultural background I can locate and record key information from a non-fiction text 	<ul style="list-style-type: none"> I can identify and summarise the relevant points of a whole text I can use a range of quotes or references to support my opinion I make inferences based on evidence from different points in a text I can comment on structure eg: 'he describes the accident, then why the child was in the road.' I can explain the use of organisational features I can explain a writer's language choice I comment on the writer's choice of language or structure I can identify the main purpose of a text I am aware of the writer's viewpoint I give basic explanations of how a text may have an effect on the reader I can identify and explain the use of figurative language in texts I can make simple connections within and between texts I can identify features common to different texts and comment on these eg: <i>characters, settings, layout</i> I can participate in discussions, building on my own and others' ideas, using presentations and my own notes I can distinguish between statements of fact and opinion I can recite a wide range of poetry by heart I make simple observations about how the context informs language choices eg: <i>vocabulary for a scientific report</i> I can present information from non-fiction texts I can prepare poems and playscripts to perform, showing understanding through intonation, tone, volume and action I can provide reasoned justifications for my views 	<ul style="list-style-type: none"> I can read particular whole books I read short stories, poems and plays with a wide coverage of genres I read texts from different historical periods, forms and authors I read high-quality English literature, including prose, poetry and drama I read from the works of Shakespeare I choose and read books independently for challenge, interest and enjoyment I reread books encountered earlier to increase familiarity with them and provide a basis for making comparisons I learn new vocabulary, relating it explicitly to known vocabulary and understanding it with the help of context and dictionaries I make inferences and refer to evidence in the text I know the purpose, audience and context of the writing and draw on this knowledge to support comprehension I check my understanding to make sure that what they have read makes sense I know how language, including figurative language, vocabulary choice, grammar, text structure and organisational features, presents meaning I recognise a range of poetic conventions and understanding how these have been used I study setting, plot, and characterisation, and the effects of these I understand how the work of dramatists is communicated effectively through performance and how alternative staging allows for different interpretations of a play I make critical comparisons across texts I study a range of authors, including at least 2 authors in depth each year 	

Languages Writing: Composition	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none"> to compose a sentence orally before writing it to sequence sentences to form short narratives to reread written work to check that it makes sense and that verb use is accurate to discuss what they have written with the teacher or other pupils to read their writing aloud with appropriate intonation to make the meaning clear to write narratives about personal experiences and those of others (real and fictional) to write poetry to write for different purposes to plan what they are going to write about to evaluate their writing with the teacher/peers to reread to check for errors in spelling, grammar and punctuation to use writing similar to that which they are planning to write in order to understand and learn from its structure, vocabulary and grammar to discuss, record and develop initial ideas and draw on research to rehearse sentences orally (including dialogue), building a varied and rich vocabulary and an increasing range of sentence structures to organise ideas using paragraphs to create settings, characters, plot, dialogue and atmosphere in narratives to convey character and advance the action to use simple organisational devices in non-narrative texts [for example, headings, subtitles, bullet points, underlining] to assess the effectiveness of their own and others' writing and suggest improvements to propose changes to grammar, vocabulary and punctuation to improve consistency, enhance effects and clarify meaning to proofread for spelling and punctuation errors to read my writing aloud to a group or the class, using appropriate intonation, tone and volume to identify the audience and purpose of the writing, selecting the appropriate form as models for their own writing to consider how authors have developed characters and settings in narratives to select appropriate grammar and vocabulary, understanding how choices can change and enhance meaning to précis longer passages to use a wide range of devices to build cohesion within and across paragraphs to propose changes to vocabulary, grammar and punctuation to to ensure consistent use of tense throughout a piece of writing to ensure correct subject and verb agreement when using singular and plural, distinguish between the language of speech and writing to proofread for spelling and punctuation errors 	<p>Literacy (Writing) 40-60 months</p> <ul style="list-style-type: none"> I give meaning to the marks I make as I draw, write and paint I begin to break the flow of speech into words I can continue a rhyming string I can hear and say the initial sound in words I can segment the sounds in simple words and blend them together I can link sounds to letters, naming and sounding the letters of the alphabet I use some clearly identifiable letters to communicate meaning, representing some sounds correctly and in sequence I can write my own name and other things such as labels and captions I attempt to write short sentences in meaningful contexts <p>Early Learning Goal</p> <ul style="list-style-type: none"> I use my phonic knowledge to write words in ways which match their spoken sounds I can write some irregular common words I can write simple sentences which can be read by myself and others <p>Exceeding statements</p> <ul style="list-style-type: none"> I can use key features of narrative in my own writing <p>EAD (Being imaginative) Early Learning Goal</p> <ul style="list-style-type: none"> I represent my own ideas, thoughts and feelings through role play and stories. 	<ul style="list-style-type: none"> I can say a sentence out loud before writing it down I can sequence sentences to form a short narrative I reread what I have written to check it makes sense I can talk about what I have written with my teacher and my peers I can read my writing aloud to my teachers and my peers I can use some descriptive language like size and colour I can use a common way to start or end a piece of work eg; once upon a time, one day I can write short narratives about personal experiences and real and fictional situations I can write poetry I reread my work to check for correct verb tenses I read aloud, using intonation to make the meaning clear I can write for different purposes and make this clear I use features of a certain text type I plan what I am going to write about I evaluate my writing with my teacher and my peers I reread my work to check for errors in spelling, grammar and punctuation I can sometimes show a sequence of ideas using numbers, time related words or headings I am starting to use good openings and/or closings to my texts I can group related ideas together in my sentences I can start sentences without always using a name or pronoun I can use some good words to interest the reader I have started to use paragraphs to order my ideas I can use adverbs and connectives to link ideas within a text 	<ul style="list-style-type: none"> I can discuss and record my own ideas as I plan I can use examples of existing writing to help me plan the structure, vocabulary and grammar in my own work I can use paragraphs to organise ideas I create settings, characters and plot in narratives I can use features of non-narrative texts like headings and subtitles I can use adjectives and adverbs to give more information about my writing I can give clear viewpoints in my writing I make it clear what I am writing about by using the features of the genre I can write in a style appropriate to the reader I can organise ideas with related points placed next to each other I open and close my pieces of writing appropriately My ideas are often in sequence and in a logical order I can use familiar connectives to link ideas within a text I can vary the tense and verb forms and am usually accurate I can assess the effectiveness of my own and others' work I can proof read my work for spelling and punctuation errors I can read my own writing aloud to a group or the whole class, controlling intonation, tone and volume I can edit my work to improve consistency and effect I rehearse sentences out loud to help me choose rich vocabulary I can use complex sentences with confidence 	<ul style="list-style-type: none"> I can choose relevant ideas and appropriate content I can develop my ideas in detail, using research where necessary I can establish and maintain a viewpoint in my writing, often by writing in role I create dialogue and atmosphere in narratives to convey character and build pace I can discuss how other authors have developed characters and settings I can use an increasing range of features of non-narrative texts like bullet points and underlining I can suggest improvements for my own and others' work I write with a clear awareness of the audience and purpose of my writing I clearly use the key features of the selected form My ideas are clearly organised by linking related points or by time sequence The opening and closing of my writing is linked I can organise my writing in a cohesive, logical sequence I use paragraphs to help organise content with a main idea supported by following sentences I can use a range of connectives to join ideas within a paragraph I write sentences with varying lengths, structures or subjects I can use some subordinating connectives like if, when and because I can précis longer passages I proofread my work for errors, including the consistent and correct use of tense I select and edit punctuation, grammar and vocabulary to change and enhance meaning I can move accurately between tense and verb form I can distinguish between the language of speech and writing 	<ul style="list-style-type: none"> I can write for a wide range of purposes and audiences I can write consistently and effectively across all genres I can summarise and organise material, and support ideas and arguments with any necessary factual detail I can apply my knowledge of vocabulary, grammar and text structure to my writing and select the appropriate form I can draw on knowledge of literary and rhetorical devices to enhance the impact of their writing I can plan, draft, edit and proofread my work effectively. I consider how my writing reflects the audiences and purposes for which it was intended I can amend the vocabulary, grammar and structure of my writing to improve its coherence and overall effectiveness I pay attention to accurate grammar, punctuation and spelling I apply the spelling patterns and rules set out in the Key Stage 2 programmes of study 	

Languages Speaking and Listening	Skills					Teaching and learning
	EYFS (40-60 months)	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none"> to listen and respond appropriately to adults and their peers to ask relevant questions to extend their understanding and knowledge to use relevant strategies to build their vocabulary to articulate and justify answers, arguments and opinions to give well-structured descriptions, explanations and narratives for different purposes, including for expressing feelings to maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comments to use spoken language to develop understanding through speculating, hypothesising, imagining and exploring ideas to speak audibly and fluently with an increasing command of Standard English to participate in discussions, presentations, performances, role play/improvisations and debates to gain, maintain and monitor the interest of the listener(s) to consider and evaluate different viewpoints, attending to and building on the contributions of others to select and use appropriate registers for effective communication <p><i>*statements specific to all year groups</i></p>	<p>CL (Listening and Attention)</p> <p>40-60 months</p> <ul style="list-style-type: none"> I maintain attention, concentrate and sit quietly during appropriate activity I have two channelled attention – I can listen and do for a short span <p>Early Learning Goal</p> <ul style="list-style-type: none"> I listen attentively in a range of situations I listen to stories, accurately anticipating key events and respond with relevant comments, questions or actions I give my attention to what others say and respond appropriately while engaged in another activity <p>Exceeding statements</p> <ul style="list-style-type: none"> I listen to instructions and follow them accurately, asking for clarification if necessary I listen attentively with sustained concentration to follow a story without pictures or props I can listen in a larger group, for example, at assembly <p>CL (Speaking)</p> <p>40-60 months</p> <ul style="list-style-type: none"> I extend my vocabulary, especially by grouping and naming, exploring the meaning and sounds of new words I use language to imagine and recreate roles and experiences in play situations I can link statements and stick to a main them or intention I use talk to organise, sequence and clarify thinking, ideas and events I can introduce a storyline into a play <p>Early Learning Goal</p> <ul style="list-style-type: none"> I can express myself effectively, showing awareness of the listeners' needs I can use past, present and future forms accurately when talking about events I can develop my own narratives and explanations by connecting idea <p>Exceeding statements</p> <ul style="list-style-type: none"> I show some awareness of the listener by making changes to language and non-verbal features I recount experiences and imagine possibilities, often connecting ideas I use a range of vocabulary in imaginative ways to add information, express ideas or explain actions/ events <p>CL (Understanding)</p> <p>40-60 months</p> <ul style="list-style-type: none"> I respond to instructions involving a two-part sequence I understand humour eg; joke I am able to follow a story without pictures or props I listen and respond to ideas expressed by others in conversation or discussion <p>Early Learning Goal</p> <ul style="list-style-type: none"> I follow instructions involving several ideas or actions I answer 'how' and 'why' questions about my experiences and in response to stories or events <p>Exceeding statements</p> <ul style="list-style-type: none"> After listening to stories, I can express views about events or characters in the story and answer questions about why things happened I can carry out instructions which contain several parts in a sequence 	<ul style="list-style-type: none"> I can talk and listen in some different situations I am able to communicate and explore ideas verbally I generally understand the main points of a discussion I can show that I have listened carefully by the comments I make and the questions I ask I can sometimes change the way I speak to suit the audience I know what standard English is and when it should be used I can develop ideas through a discussion I can organise talk to help the listener understand I can adapt language to suit the audience I can make relevant comments to a speaker I can take different roles within a group I can adapt talk, gestures and movement to create a role or scenario I can express meaning in different ways and describe why it is effective 	<ul style="list-style-type: none"> I can talk and listen in a range of situations When I speak, I think about my audience and make sure that what I am saying is appropriate I can develop my ideas as I am speaking I ask relevant questions based on what I hear I give relevant details I structure talk to show attention to the listener I vary vocabulary and grammar to suit the context I display a clear understanding of content by joining in, agreeing or disagreeing I can take on various roles within a group I decide on speech, language and choices of movement in roles and scenarios I vary my language choices and talk I explain how others do this effectively 	<ul style="list-style-type: none"> I talk and listen confidently in many different situations, including some formal situations I think carefully about who I am speaking to When I speak, I am able to engage my listener I listen very carefully and ask questions to help develop their ideas I often use standard English in formal situations I elaborate on main points and ideas to give extra meaning I shape talk in a deliberately engaging way I adapt vocabulary, gestures and movement in ways well matched to the audience I recognise significant details I recognise implicit meanings I sustain roles within a group I explain the features of language use that make it effective 	<ul style="list-style-type: none"> I change the way I talk in a wide variety of different situations so that what I say is always appropriate My vocabulary and expression is varied and lively when I speak I take an active part in discussions and can assume different roles I show a sensitive understanding of others' ideas I use standard English fluently in formal situations I am confident speaking in all situations, even those that are new to me I use vocabulary precisely and creatively to interest my listeners I organise my speech so as to communicate clearly I make significant contributions to discussions and am able to evaluate other peoples' ideas I use standard English confidently in situations that require it 	

World Class Curriculum

Science and Technology

- Biology
- Chemistry
- Physics
- Working Scientifically
- Design Technology
- Computing

Science & Technology Biology	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<p>Living things and their habitats</p> <ul style="list-style-type: none"> to compare the differences between things that are living, dead, and things that have never been alive to identify that most living things live in habitats to which they are suited to identify and name a variety of plants and animals to describe how animals obtain their food from plants and other animals to recognise that living things can be grouped to explore and use classification keys to help group, identify and name a variety of living things to recognise that environments can change and that this can sometimes pose dangers to living things to compare the life cycles of different animals to describe reproduction in plants and animals to give reasons for classifying plants and animals <p>Plants</p> <ul style="list-style-type: none"> to identify a variety of wild and garden plants to describe the basic structure of flowering plants/tree to observe and describe how seeds grow to find out and describe how plants need water, light and a suitable temperature to grow to name and describe functions of flowering plants to explore the requirements of plants for life to investigate how water is transported in plants to explore the part that flowers play in the life cycle <p>Animals, including humans</p> <ul style="list-style-type: none"> to identify and name a variety of animals including fish, amphibians, reptiles, birds and mammals to identify and name a variety of common animals that are carnivores, herbivores and omnivores to describe/compare the structure of some animals to identify and name the basic parts of the human body and say which is associated with each sense to notice that animals have offspring which grow to explain the basic needs of animals for survival to describe the importance of exercise, eating the right amounts of different types of food, and hygiene to identify that animals need the right nutrition and that this comes from what they eat to identify that some animals have skeletons and muscles for support, protection and movement to describe the main parts of the digestive system to explore the different types of teeth in humans to construct and interpret a variety of food chains to describe changes as humans develop to old age to explain the human circulatory system in detail and impact of diet, exercise, drugs and lifestyle to describe how nutrients are transported in the body <p>Evolution and inheritance</p> <ul style="list-style-type: none"> to recognise that living things change over time and that fossils provide information about this to identify how animals and plants are adapted to suit their environment in different ways 	<p><i>PD (Health and Self Care)</i></p> <p>40-60 months</p> <ul style="list-style-type: none"> I eat a healthy range of foodstuffs and understand the need for variety in food I understand that good practices with regard to exercise, eating, sleeping and hygiene can contribute to good health <p>Early Learning Goal</p> <ul style="list-style-type: none"> I know the importance for good health of physical exercise and a healthy diet I talk about ways to keep healthy and safe <p>Exceeding statements</p> <ul style="list-style-type: none"> I know about, and can make healthy choices in relation to, healthy eating and drinking <p><i>UW (The World)</i></p> <p>40-60 months</p> <ul style="list-style-type: none"> I look closely at similarities, differences, patterns and change <p>Early Learning Goal</p> <ul style="list-style-type: none"> I know about similarities and differences in relation to places and living things I can talk about features of my own immediate environment and how environments might vary from one to another I make observations of animals and plants and explain why some things occur, and talk about changes <p>Exceeding statements</p> <ul style="list-style-type: none"> I know that the environment and living things are influenced by human activity 	<p>Living things and their habitats</p> <ul style="list-style-type: none"> I can describe how habitats provide for the basic needs of different animals and plants and how they depend on each other I know that living things reproduce I can identify and name a variety of plants and animals, including microhabitats I can use a simple food chain <p>Plants</p> <ul style="list-style-type: none"> I know the name of common wild and garden plants, including trees I can name the parts of a flowering plant I can describe the conditions necessary for plant growth I can describe how seeds grow into mature plants <p>Animals, including humans</p> <ul style="list-style-type: none"> I can name common animals that are carnivores, herbivores and omnivores I can describe the importance for humans of exercise, healthy eating and good hygiene I can describe and compare the structure of a variety of animals I notice that animals have offspring which grow into adults 	<p>Living things and their habitats</p> <ul style="list-style-type: none"> I can group living things in a variety of ways I recognise that environments can change and that this can pose dangers to living things I use classification keys to group, identify and name a variety of living things in their environment <p>Plants</p> <ul style="list-style-type: none"> I can describe the function of the parts of a flowering plant (roots, stem, leaf, stamen, carpel) I can explore the requirements for plant growth (air, light, water, nutrients from soil, room) <p>Animals, including humans</p> <ul style="list-style-type: none"> I know that animals cannot make food and get their nutrition from what they eat I know that some animals have skeletons and muscles for support protection and movement I can describe the simple function and basic parts of the human digestive system I can identify the different types of teeth in humans and their basic functions I can create and interpret simple food chains and name the producer, predator and prey <p>Evolution and inheritance</p> <ul style="list-style-type: none"> I recognise that fossils provide information about living things that inhabited the Earth millions of years ago 	<p>Living things and their habitats</p> <ul style="list-style-type: none"> I can group living things according to common observable characteristics, including microorganisms, plants and animals I can describe the differences in the life cycles of a mammal, a bird, an amphibian and an insect I can describe the process of reproduction in some plants and animals <p>Plants</p> <ul style="list-style-type: none"> I can explain how water and nutrients are transported in plants I can explain the processes of fertilisation, pollination and seed dispersal <p>Animals, including humans</p> <ul style="list-style-type: none"> I know that animals need the right amount of nutrition to stay healthy I can describe changes as humans develop to old age I can name the main parts of the human circulatory system I recognise the impact of diet, exercise, drugs and lifestyle on the way the body functions I can create and interpret complex food chains and name the producers, predators and prey I can explain how changing variables within a food chain might affect the habitat <p>Evolution and inheritance</p> <ul style="list-style-type: none"> I can identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution 	<p>Living things and their habitats</p> <ul style="list-style-type: none"> I can describe similarities between plant and animal cells I can describe the functions of different parts of animal and plant cells I can describe the role of diffusion in the movement of materials in and between cells <p>Plants</p> <ul style="list-style-type: none"> I can explain the process of photosynthesis I can explain the process of reproduction in plants, including pollination, fertilisation, seed formation and seed dispersal <p>Animals, including humans</p> <ul style="list-style-type: none"> I can explain, in detail, the components of a healthy diet I can calculate energy requirements in a healthy diet I can describe consequences of poor diet, including obesity, starvation and deficiency diseases I can describe the process of digestion, including the role of enzymes and bacteria I can describe the respiratory system in humans I can describe the structure and main functions of the human skeleton I can explain the function of muscles I can describe the impact of exercise, asthma and smoking on the human respiratory system I can explain the process of reproduction in humans I can describe the effect of maternal lifestyle on the foetus I can describe the effects of recreational drugs on behaviour, health and life processes 	

Science & Technology Chemistry	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<p>Everyday materials</p> <ul style="list-style-type: none"> to distinguish between an object and the material from which it is made to identify and name a variety of everyday materials, including wood, plastic, glass, metal and water to describe the properties of a variety of materials to compare and group a variety of materials on the basis of their simple physical properties to identify and compare the suitability of a variety of everyday materials for particular uses to find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching <p>Rocks</p> <ul style="list-style-type: none"> to compare and group different kinds of rocks on the basis of appearance and simple physical properties to describe in simple terms how fossils are formed when things that have lived are trapped within rock to recognise that soils are made from rocks and organic matter <p>States of matter</p> <ul style="list-style-type: none"> to compare and group solids, liquids and gases to observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) to identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature <p>Properties and changes of materials</p> <ul style="list-style-type: none"> to compare and group together everyday materials on the basis of their properties, including hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets to know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution to use knowledge of solids, liquids and gases to separate mixtures, including through filtering, sieving and evaporating to give reasons, based on evidence from comparative and fair tests, for uses of everyday materials, including metals, wood and plastic to demonstrate that dissolving, mixing and changes of state are reversible changes to 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>UW (The World) 40-60 months</p> <ul style="list-style-type: none"> I look closely at similarities, differences, patterns and change <p>Early Learning Goal</p> <ul style="list-style-type: none"> I know about similarities and differences in relation to objects and materials <p>Exceeding statements</p> <ul style="list-style-type: none"> I know the properties of some materials and can suggest some of the purposes they are used for 	<p>Everyday materials</p> <ul style="list-style-type: none"> I can describe an object including the material it is made from I can name a variety of common materials I can talk about the properties of different materials I can compare materials and sort them into groups, explaining my reasons. I compare the suitability of materials for particular uses I can describe the changes to some materials by squashing, bending, twisting and stretching. I can describe ways to sort materials <i>e.g. gas/liquid/solid</i>. I can recognise that some changes can be reversed (reversible) and others cannot (non-reversible) I can identify magnetic materials and state what they have in common 	<p>Rocks</p> <ul style="list-style-type: none"> I can group rocks according to their appearance and simple physical properties I can describe in simple terms how fossils are formed (living things trapped between rocks) I know that soils are made from rocks and organic matter <p>States of matter</p> <ul style="list-style-type: none"> I can classify and describe materials according to whether they are solids, liquids or gases I can say how some materials change state when they are heated or cooled I can measure or research the temperature at which a specific material changes state I know how evaporation and condensation play a part in the water cycle I know how the rate of evaporation in the water cycle is linked to temperature I describe the differences between the properties of different materials. I can make predictions about whether changes are reversible or not. I know how to separate some simple mixtures <i>e.g. filtering, sieving, evaporation</i> 	<p>Properties and changes of materials</p> <ul style="list-style-type: none"> I can group materials according to their properties I can name some materials that will dissolve in liquid to form a solution I can describe how to get back a material from a solution I can describe how mixtures could be separated I can give scientific reasons for the uses of everyday materials I can demonstrate reversible changes I can discuss some irreversible changes I can describe some properties of metal. I can describe the properties of a range of solids. I can explain the relationship between liquids, solids and gases. I can identify a range of contexts in which condensation and evaporation take place. I know how to separate a range of mixtures 	<p>Properties and changes of materials</p> <ul style="list-style-type: none"> I can discuss simple techniques for separating mixtures: filtration, evaporation, distillation and chromatography I can use the pH scale to measure acid and alkali I can represent simple chemical reactions using equations <p>Materials</p> <ul style="list-style-type: none"> I can describe properties of ceramics, polymers and composites I can describe each of the processes of melting, freezing, evaporation, sublimation, condensation and dissolving I can describe detailed similarities and differences between solids, liquids and gases I can explain the differences between chemical and physical changes I can describe the differences in the arrangement and motion of particles explaining changes of state, shape and the anomaly of ice-water transition I can identify the chemical symbols for some elements <p>Earth and atmosphere</p> <ul style="list-style-type: none"> I can talk about the composition of the Earth I can describe the structure of the Earth I can describe the rock cycle and the formation of igneous, sedimentary and metamorphic rocks 	

Science & Technology Physics	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<p>Earth and Space</p> <ul style="list-style-type: none"> to observe and describe weather associated with the seasons and how day length varies to describe the movement of the Earth and other planets relative to the sun in the solar system to describe the movement of the moon and Earth to describe the sun, Earth and moon as spherical to explain the process of day and night to explain that objects fall to Earth due to gravity <p>Light</p> <ul style="list-style-type: none"> to recognise that they need light in order to see things to notice that light is reflected from surfaces to recognise that light from the sun can be dangerous to recognise that shadows are formed when the light from a light source is blocked by a solid object to find patterns in the way that size of shadows change to recognise that light travels in straight lines to explain that we see things because light travels from light sources to our eyes (or via reflections) to explain why shadows have the same shape as the objects that cast them <p>Sound</p> <ul style="list-style-type: none"> to identify how sounds are made, associating some of them with something vibrating to recognise that vibrations from sounds travel through a medium to the ear to find patterns between the pitch of a sound and features of the object that produced it to find patterns between the volume of a sound and the strength of the vibrations that produced it to recognise that sounds get fainter as the distance from the sound source increases <p>Electricity</p> <ul style="list-style-type: none"> to identify common appliances that run on electricity to construct a simple circuit, naming its basic parts to identify whether a circuit is complete to recognise some common conductors and insulators, and associate metals with being good conductors to associate lamp brightness or volume of a buzzer with the number/voltage of cells in the circuit to use recognised symbols in a simple circuit diagram <p>Forces and magnets</p> <ul style="list-style-type: none"> to compare how things move on different surfaces to notice that some forces need contact between 2 objects, but magnetic forces can act at a distance to observe how magnets attract or repel each other to compare and group together materials on the basis of whether they are attracted to a magnet to describe magnets as having 2 poles to predict whether 2 magnets will attract or repel to explain effects of air/water resistance and friction to recognise that some mechanisms allow a smaller force to have a greater effect 	<p><i>UW (The World)</i></p> <p>40-60 months</p> <ul style="list-style-type: none"> I look closely at similarities, differences, patterns and change <p>Early Learning Goal</p> <ul style="list-style-type: none"> I know about similarities and differences in relation to objects and materials <p>Exceeding statements</p> <ul style="list-style-type: none"> I am familiar with basic scientific concepts such as floating and sinking 	<p>Earth and space</p> <ul style="list-style-type: none"> observe and describe weather associated with the seasons and how day length varies <p>Light</p> <ul style="list-style-type: none"> I can compare the brightness of different light sources. I recognise that light is needed to see things and that dark is the absence of light <p>Electricity</p> <ul style="list-style-type: none"> I can sort everyday appliances into those that light up, heat, up, produce sounds or moves. I can make a circuit using a bulb, battery and wires <p>Forces</p> <ul style="list-style-type: none"> I compare how things move on different surfaces I recognise that magnets will attract or repel some materials and not others I can compares the way an object moves <i>e.g. faster, slower, changes in direction.</i> <p>Sound</p> <ul style="list-style-type: none"> I can compare loud and soft, high and low sounds. I recognise that sounds are caused by vibrations 	<p>Light</p> <ul style="list-style-type: none"> I recognise that light is necessary to see things I notice that light is reflected from some surfaces I recognise that light from the sun can be dangerous and that there are ways to protect eyes I recognise that shadows are formed when light is blocked by a solid object I can explain how shadow length changes according to the position of light source (including the position of the sun) <p>Sound</p> <ul style="list-style-type: none"> I recognise that vibrations from sounds travel through a medium to the ear I can suggest how a range of sounds are made. I recognise that sounds get fainter as the distance from the sound source increases <p>Electricity</p> <ul style="list-style-type: none"> I can make a simple series electrical circuit and name the basic parts of cells, wires, bulbs, switches and buzzers identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery I can use a simple switch in a circuit that opens and closes and identify whether or not a lamp lights in a simple series circuit I can name some common conductors and insulators and know that metals are good conductors <p>Forces and magnets</p> <ul style="list-style-type: none"> I recognise that some forces need contact between 2 objects, but magnetic forces can act at a distance I can group a variety of everyday materials according to their magnetic properties I can describe magnets as having 2 poles I can predict whether 2 magnets will attract or repel each other, depending on which poles are facing I can describe some of the factors which increase/reduce how fast or slow things move. 	<p>Earth and Space</p> <ul style="list-style-type: none"> I can describe the movement of the Earth and other planets relative to the sun I can describe the movement of the moon and the Earth I can describe the sun, Earth and moon as spherical I can explain the process of day and night I can explain that objects fall to Earth due to gravity <p>Sound</p> <ul style="list-style-type: none"> I can explain how differences in vibrations are linked to loudness and pitch <p>Light</p> <ul style="list-style-type: none"> I recognise that light travels in straight lines I can explain that we see things because light travels from light sources to our eyes (or via reflections) I can describe the way the Sun's (and shadows) position changes through the day I can explain that shadows have the same shape as the objects that cast them <p>Electricity</p> <ul style="list-style-type: none"> I understand the difference between electrical conductors and insulators I understand how lamp brightness and buzzer volume is affected by the voltage in a circuit I use recognised symbols in a simple circuit diagram <p>Forces and magnets</p> <ul style="list-style-type: none"> I can explain the effects of air and water resistance and friction I recognise that some mechanisms allow a smaller force to have a greater effect I can describe the effects of a variety of forces <i>e.g. magnetism, friction and gravity.</i> I can describe how friction affects the movement of objects 	<p>Earth and Space</p> <ul style="list-style-type: none"> I can research and explain gravitational differences between planets and stars, the Moon and the Sun I can explain why Earth has seasons and variations in day length at different times of the year I can describe the light year as a unit of astronomical distance <p>Sound</p> <ul style="list-style-type: none"> I recognise that sound needs a medium to travel I can explain how sound is produced by vibrations of objects I can explore the auditory range of humans and animals. <p>Light</p> <ul style="list-style-type: none"> I can explore the transmission of light through materials I can use a different models, such as a pinhole camera, convex lens, the human eye to describe the movement of light I can explore the use of prisms and comment of the different frequencies of light <p>Energy</p> <ul style="list-style-type: none"> I can compare energy values of different foods from labels I compare power ratings of appliances in watts (W, kW) I can compare domestic fuel bills, fuel use and costs <p>Forces and magnets</p> <ul style="list-style-type: none"> I can use the relationship with distance and time to calculate speed I can explain that forces are pushes or pulls, arising from the interaction between two objects I can use force arrows in diagrams, adding forces in one dimension, balanced and unbalanced forces I can measure forces in newtons I can explain the non-contact forces of gravity, magnetism and static electricity. I understand how the direction and size of a force can alter movement I can describe magnetic poles I can describe the Earth's magnetism <p>Electricity</p> <ul style="list-style-type: none"> I can measure electric current in series and parallel circuits I can measure difference in resistance between conducting and insulating components 	

Science & Technology Working Scientifically	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none"> to ask simple questions and recognising that they can be answered in different ways to observe closely, using simple equipment to perform simple tests to identify and classifying to use their observations and ideas to suggest answers to questions to gather and record data to help in answering questions to ask relevant questions and use different types of scientific enquiries to answer them to set up simple practical enquiries, comparative and fair tests to make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers to gather, record, classify and present data in a variety of ways to help in answering questions to record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables to report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions to use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions to identify differences, similarities or changes related to simple scientific ideas and processes to use straightforward scientific evidence to answer questions or to support their findings. to plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary to take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate to record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs to use test results to make predictions to set up further comparative and fair tests to report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations to identify scientific evidence that has been used to support or refute ideas or arguments 	<p>UW (Technologies)</p> <p>Early Learning Goal</p> <ul style="list-style-type: none"> I can select and use technology for particular purposes <p>UW (The World)</p> <p>Exceeding statements</p> <ul style="list-style-type: none"> I am familiar with basic scientific concepts such as experimentation <p>PD (Moving and handling)</p> <p>40-60 months</p> <ul style="list-style-type: none"> I show understanding of how to transport and store equipment safely I practise some appropriate safety measures without direct supervision <p>Early Learning Goal</p> <ul style="list-style-type: none"> I handle equipment and tools effectively 	<ul style="list-style-type: none"> I can make suggestions about how to find things out e.g. What test could you do? I find information from books or other printed sources. I can make suggestions about what I think might happen I can use some scientific vocabulary to explain my observations I can use simple equipment eg; magnifying glass I can use simple tables where appropriate e.g. blocks graphs, pictograms I compare observations using scientific vocabulary. I say whether what happened was what I expected. 	<ul style="list-style-type: none"> I can collect data to answer my questions I can put forward my own ideas about how to answer a question I can make simple predictions I can carry out a fair test and explain why it is fair. I use scientific vocabulary to describe my observations. I can make measurements and observations using simple equipment to complete a simple graph or chart I give reasons for my observations. I can provide explanations for patterns e.g. identify pattern on graph I can suggest ways of improving my work 	<ul style="list-style-type: none"> I recognise that scientific ideas are based on evidence. I decide on the most appropriate approach to an investigation I can select appropriate equipment. I can describe how to vary one factor while keeping others the same. I can make accurate predictions I select information to help me plan I make observations using materials and equipment that are right for the task I can use and interpret tables and bar charts I plot points to make line graphs. I use my data to interpret patterns in my data. I use the convention of ‘er’ words to describe results I relate my conclusions to the hypothesis and results. I use appropriate scientific language. I suggest improvements to my work and give reasons. 	<ul style="list-style-type: none"> I describe how experimental evidence and creative thinking combine to provide a scientific explanation I select from a range of sources of information I can identify key factors to be considered in a fair test. I make predictions based on my scientific knowledge and understanding. I select apparatus and plan to use it effectively. I use the computer to collect data (data logging). I record observations and measurements systematically. I present (where appropriate) data as line graphs. I use appropriate scientific language and conventions to communicate data. I repeat observations and measurements and offer explanations for any differences I draw conclusions that are consistent with the evidence and relate these to scientific knowledge. I make practical suggestions about how my working methods can be improved. 	

Science & Technology Design Technology	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<p>Design</p> <ul style="list-style-type: none"> to use research to design purposeful, functional, appealing, innovative products for themselves, others and particular audiences based on design criteria to generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups, annotated sketches, cross sectional and exploded diagrams, prototypes and, where appropriate, information and communication technology <p>Make</p> <ul style="list-style-type: none"> to select from and use a wide range of tools and equipment to perform practical tasks accurately to select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics, functional properties and aesthetic qualities to build structures, exploring how they can be made stronger, stiffer and more stable to apply their understanding of how to strengthen, stiffen and reinforce more complex structures to explore and use mechanisms [for example, levers, sliders, wheels and axles] in their products to understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] to understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] to apply their understanding of computing to program, monitor and control their products <p>Evaluate</p> <ul style="list-style-type: none"> to explore, evaluate, investigate and analyse a range of existing products to evaluate their ideas and products against their own design criteria and consider the views of others to improve their work to understand how key events and individuals in design and technology have helped shape the world <p>Cooking</p> <ul style="list-style-type: none"> to use and apply the basic principles of a healthy and varied diet to prepare dishes to understand where food comes from to prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques to understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed 	<p><i>EAD (Exploring and using media...)</i></p> <p>40-60 months</p> <ul style="list-style-type: none"> I can manipulate materials to achieve a planned effect I construct with a purpose in mind, using a variety of resources I can use simple tools and techniques competently and appropriately I can select appropriate resources and adapt my work where necessary I can select tools and techniques needed to shape, assemble and join materials I am using I understand that different media can be combined to create new effects <p>Early Learning Goal</p> <ul style="list-style-type: none"> I can safely use and explore a variety of materials, tools and techniques <p>Exceeding statements</p> <ul style="list-style-type: none"> I develop my own ideas through selecting and using materials and working on processes that interest me Through my explorations, I find out and make decisions about how media and materials can be combined and changed <p><i>EAD (Being imaginative)</i></p> <p>Early Learning Goal</p> <ul style="list-style-type: none"> I use what I have learnt about media and materials in original ways, thinking about their uses and purposes I represent my own idea, thoughts and feelings through design and technology <p>Exceeding statements</p> <ul style="list-style-type: none"> I talk about the ideas and processes which have led me to make designs and products I can talk about the features of my own and others' work, recognising the differences between them and the strengths of others <p><i>UW (Technologies)</i></p> <p>Early Learning Goal</p> <ul style="list-style-type: none"> I recognise that a range of technology is used in places such as homes and schools I select and use technology for particular purposes <p>Exceeding statements</p> <ul style="list-style-type: none"> I find out about and use a range of everyday technology I select appropriate applications that support an identified need <p><i>PD (Moving and handling)</i></p> <p>40-60 months</p> <ul style="list-style-type: none"> I use simple tools to effect changes to materials I handle tools, objects, construction and malleable materials safely and with increasing control I show a preference for a dominant hand <p>Early Learning Goal</p> <ul style="list-style-type: none"> I handle equipment and tools effectively 	<p>Design</p> <ul style="list-style-type: none"> I use my knowledge of materials and components to design products I can design products for myself I base my designs on simple design criteria I present my ideas using words, pictures and models. I use ICT to communicate my ideas <p>Make</p> <ul style="list-style-type: none"> I select the appropriate tools and equipment from a limited range I make accurate measurements I select from and use a wide range of materials and components in my products I can describe properties of the materials that I use I combine materials so that the joins are strong I can make a product which does the job it was made for I can make a product that uses movement I build simple structures, exploring how they can be made stronger I cut materials with some accuracy I use my art skills to add detail to my products <p>Evaluate</p> <ul style="list-style-type: none"> I can evaluate a range of existing products I can describe what I have done well I suggest things I could do in the future. <p>Cooking</p> <ul style="list-style-type: none"> I prepare food safely and hygienically I can describe where different foods come from I use my knowledge of food to plan a healthy meal 	<p>Design</p> <ul style="list-style-type: none"> I use research to help me design products I can design products for myself and another identified audience I base my designs on a range of design criteria I make realistic plans to achieve my aims. I think ahead about my work and plan ahead I present my ideas using annotated sketches and models <p>Make</p> <ul style="list-style-type: none"> I select from a range of tools and equipment I measure accurately using a range of equipment (mm, cm, g, Kg) I select materials according to their functional properties I apply my knowledge to strengthen complex structures I can apply my knowledge to strengthen and reinforce complex structures I can make a product that uses mechanisms (wheels, levers, sliders) I work in a safe and hygienic way. I use sharp scissors accurately to cut materials My designs evolve as work proceeds I use my art skills to apply texture or design to my product. I select the most appropriate techniques to make my product. I have made a product that uses electrical components. My product has a good finish so that a user will find it both useful and attractive. <p>Evaluate</p> <ul style="list-style-type: none"> I can investigate and analyse a range of products I can identify where my evaluations have led to improvements <p>Cooking</p> <ul style="list-style-type: none"> I can use a selection of ingredients to meet an identified need 	<p>Design</p> <ul style="list-style-type: none"> I use research to design purposeful, functional and appealing products I can design products for a wide audience I take the views of users' into account when designing my products. I produce clear step-by-step plans I present my ideas using exploded diagrams <p>Make</p> <ul style="list-style-type: none"> I select from a wide range of tools and equipment I measure accurately from a range of scales I select materials according to their aesthetic qualities I can make a product that uses complex mechanisms (pulleys, cams, gears) My work incorporates the views of intended users' I apply a high quality finish to my products I have chosen components that can be controlled by switches or by ICT equipment. I can improve after testing. My methods of working are precise so that products have a high quality finish. <p>Evaluate</p> <ul style="list-style-type: none"> I evaluate my designs based on the original design criteria <p>Cooking</p> <ul style="list-style-type: none"> I can use a range of cooking techniques to prepare and cook food I can describe the 'journey' of individual foods My food is well presented and packaged using other DT skills. 	<p>Design</p> <ul style="list-style-type: none"> I draw on research and my own knowledge to design innovative products I can design products for any audience I work from my own detailed plans, modifying them where appropriate. I present my ideas with prototypes and cross sectional diagrams <p>Make</p> <ul style="list-style-type: none"> I work with autonomy when selecting tools and equipment I make precise measurements so that joins, holes and openings are in exactly the right place. I create my products with an awareness of commercial appeal. When choosing materials, I consider a number of factors, such as cost, appeal and suitability I use refined art skills to add colour and texture to my work. I mark out using my own patterns and templates My products have a high degree of precision and do the intended job well I use my science skills to alter the way my electrical products behave. I use precise electrical connections. My product is well received by intended users. <p>Evaluate</p> <ul style="list-style-type: none"> I test and evaluate my products in the context of their intended use I am aware that resources may be limited (budget, time, availability) I understand how key events and individuals in DT have helped to shape the world <p>Cooking</p> <ul style="list-style-type: none"> I use my science knowledge of micro-organisms to store and prepare food properly. I use my science knowledge of irreversible changes to create food products that combine to make a new material, that I can then describe using its sensory qualities. 	

Science & Technology Computing	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none"> to understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions to create and debug simple programs to use logical reasoning to predict the behaviour of simple programs to use technology purposefully to create, organise, store, manipulate and retrieve digital content to recognise common uses of information technology beyond school to use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies to design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts to use sequence, selection, and repetition in programs; work with variables and various forms of input and output to use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs to understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration to use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content to select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information to use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact 	<p>UW (Technologies)</p> <p>40-60 months</p> <ul style="list-style-type: none"> I can complete a simple program on a computer I use ICT hardware to interact with age appropriate computer software <p>Early Learning Goal</p> <ul style="list-style-type: none"> I recognise that a range of technology is used in places such as homes and schools I select and use technology for particular purposes <p>Exceeding statements</p> <ul style="list-style-type: none"> I find out about and use a range of everyday technology 	<p>Multimedia and Word Processing</p> <ul style="list-style-type: none"> I can word process a range of short texts I can use editing skills to improve my work I select different presentational features I can save, print and retrieve my work I can use the mouse, arrow keys or touchscreen to insert text I can use graphics, video and sound to enhance my work I can talk about how my use of graphics, sound and video enhance the mood I can use different layouts and templates for different purposes <p>Digital Media</p> <ul style="list-style-type: none"> I can use ICT to source, generate and amend ideas for their art work I can talk about the advantages and disadvantages of using a graphics package over paper based art activities I can use a variety of skills using a range of tools and techniques to communicate a specific idea or artistic style /effect I can choose an art programme or APP for a purpose and explain my choice I can manipulate digital stills or video I can select and edit and change images Begin to change or enhance photographs and pictures (crop, re-colour) I can use a sequence of still images which together form a short animated sequence I can create a simple animation to illustrate a story or idea I can upload images to a safe website, blog, iCloud or server <p>Programming</p> <ul style="list-style-type: none"> I can talk about how everyday devices can be controlled I can control actions on screen by sequences of instructions I can create a sequence of instructions to control a programmable robot to include direction, distance and turn I can use a range of control devices and programmes/APPs I can control music software through sequencing icons I can talk about how to improve/change their sequence of commands <p>Communication and Collaboration</p> <ul style="list-style-type: none"> I can contrast the different ways that messages can be sent I can contribute/respond to emails, forums and blogs I can talk about benefits of using online communications with a wider audience I can look and talk about other people's contributions on the learning platform I consider who can see their contributions on the learning platform <p>Data</p> <ul style="list-style-type: none"> I can present data in range of ways I can use a graphing package to record information, adding labels and numbers I can use ICT to edit and change the information quickly. I can talk about how ICT helps them to organise their information <p>e-Safety</p> <ul style="list-style-type: none"> I demonstrate the school's e-safety rules in all aspects of my ICT work 	<p>Multimedia and Word Processing</p> <ul style="list-style-type: none"> I can evaluate a range of electronic multimedia I can plan the structure and layout of a document/presentation I can select and import graphics from digital media and the Internet I can select and import sounds and video/ visual effects I choose freely from a range of text styles I use more than two fingers to enter text <p>Digital Media</p> <ul style="list-style-type: none"> I can import photos and explore effects I can use visual effects such as filters, hues and painting over photographs. I can create patterns and montages can plan and create audio for a podcast <p>Programming</p> <ul style="list-style-type: none"> I can navigate a programming APP I can create a sprite for a game. I can add inputs to control my sprite. I can use conditional statements (if... then) within my game. I can create a 3D digital world for a game with land, water and scenery. I can program my sprite to navigate my 3D world I can use conditional statements ("if...then") to give objects behaviours <p>Communication and Collaboration</p> <ul style="list-style-type: none"> I can select my best work to organise and save I can use different online communication methods to share my work I can discuss advantages and disadvantages of different communication methods I can use different levels of formality when I communicate with different people online <p>Data</p> <ul style="list-style-type: none"> I can enter data into a graphing package to create a range of graphs, and to interpret data across all subjects I can compare how different graphs can be used for different purposes I can create and use a branching database to organise and analyse information compare the use of graphing software, branching database and card-based database for organising and interpreting data I can explore real-life examples of branching databases, such as keys for animal identification <p>e-Safety</p> <p>I demonstrate the school's e-safety rules in all aspects of my ICT work</p>	<p>Multimedia and Word Processing</p> <ul style="list-style-type: none"> I can plan the structure of a presentation I can use a multimedia program to organise, refine and present information for a specific audience I can use a hyperlinks in my work I can format text to indicate relative importance. I can justify text where appropriate. I can cut and paste between applications. I can delete/insert and replace text to improve clarity and mood. I can make corrections using spell check I can use both hands when typing <p>Digital Media</p> <ul style="list-style-type: none"> I can use different filming techniques and camera angles I can plan a video or animation by drawing a storyboard I can use sound effects, music and voice-overs to create mood/ atmosphere I can select and edit sounds, text and movie clips to suit a purpose I can evaluate and improve work with a view to purpose and audience I can record and import sounds using sound editing software I use sounds from a variety of sources I can layer and edit sounds I can save work as a web compatible format for uploading <p>Programming</p> <ul style="list-style-type: none"> I can create a basic HTML page with head and body sections. I can create more complex games I can create a user controlled sprite and sprites with different behaviours. I can shift camera angles in settings and in the code <p>Communication and Collaboration</p> <ul style="list-style-type: none"> I can register a blog; selecting a url and navigate to my blog once it is created I can create and publish a new post I understand that websites such as Wikipedia are made by users I use strategies to check the reliability of information and websites I can save/upload/download files in iCloud and on servers <p>Data</p> <ul style="list-style-type: none"> I can change variables in a spreadsheet to solve problems I can enter formulae for the four operations (+-x/) into a spreadsheet I can use 'SUM' to calculate the total of a set of numbers in a range of cells I can change data in a spreadsheet to answer 'what if...?' questions I can create a simple spreadsheet model and use it to solve problems I can plan and carry out an investigation using data logging technology I make predictions for my investigation and know how to make it a fair test I can interpret results and draw conclusions from my investigation <p>e-Safety</p> <ul style="list-style-type: none"> I demonstrate the school's e-safety rules in all aspects of my ICT work 	<p>Multimedia and Word Processing</p> <ul style="list-style-type: none"> I can select appropriate software for the task/audience I can plan structure and layout of presentation I can evaluate and select suitable media from a range of electronic resources I can organise and present information for a specific audience I can use hyperlinks in a presentation I can choose appropriate techniques to create a high quality presentation I can evaluate presentations and give reasons for chosen techniques I can use various display features to communicate to an audience I can make corrections using a range of tools I can type fluently using both hands <p>Digital Media</p> <ul style="list-style-type: none"> I can use all the features of a given video editing or animation package I can plan a storyboard for a video or animation to suit a purpose I can film, edit and refine to ensure quality; present to an audience <p>Programming</p> <ul style="list-style-type: none"> I can design a game including sprites, backgrounds, scoring and/or timers. I can evaluate the effectiveness of my game and debug if required I can open and test my HTML pages in internet explorer I can add text, pictures and video to give the page structure I can create hyperlinks to other pages and websites. <p>Communication and Collaboration</p> <ul style="list-style-type: none"> I can alter the theme and appearance of my blog, adding background images etc. I can embed photos, hyperlinks and videos into posts. I can reorganise posts and remove posts they no longer want. I visit and follow other blogs I can build my blog content over time <p>Data</p> <ul style="list-style-type: none"> I can identify a problem which can be solved by collecting data I can identify which data to collect I can collect data in an efficient and accurate way I can organise data by designing fields and records in a database I can interpret data by using a range of searches and graphs I can draw conclusions from data and solve the original problem I can present findings to a specified audience I can justify reasons for my choices and explain why other methods were not appropriate I can identify and enter the correct formulae into cells, modify the data, make predictions and check them I can identify formulae and enter them into a spreadsheet <p>e-Safety</p> <ul style="list-style-type: none"> I demonstrate the school's e-safety rules in all aspects of my ICT work 	

World Class Curriculum

Humanities

- RE
- History
- Geography

Humanities RE	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
AT1: Learning About Religion and Belief	<p><i>UW (People and communities)</i></p> <p>40-60 months</p> <ul style="list-style-type: none"> • I enjoy joining in with family customs and routines <p>Early Learning Goal</p> <ul style="list-style-type: none"> • I can talk about similarities and differences among families, communities and traditions <p>Exceeding statements</p> <ul style="list-style-type: none"> • I understand that different people have different beliefs, attitudes, customs and traditions and why it is important to treat them with respect 	<ul style="list-style-type: none"> • I begin to name the different beliefs and practices of Christianity. • I begin to name the different beliefs and practices of at least one religion other than Christianity. • I begin to look for differences and similarities between religions. • I respond to religious and moral stories from the Bible • I respond to religious and moral stories from at least one religion other than Christianity • I retell some of the religious and moral stories from the Bible • I retell some of the religious and moral stories from at least one religion other than Christianity. • I begin to understand what it looks like to be a person of faith • I can show how different people celebrate aspects of religion • I am familiar with key words related to Christianity • I use key words related to Christianity • I am familiar with key words relating to at least one religion other than Christianity. • I use key words related to at least one religion other than Christianity. 	<ul style="list-style-type: none"> • I recall in detail the different beliefs and practices of Christianity. • I recall in detail the different beliefs and practices of at least one religion other than Christianity. • I begin to compare the differences and similarities of at least three religions. • I retell some of the religious and moral stories from at least three different religious texts. • I understand what it looks like to be a person of faith • I begin to understand the diversity of belief in different religions, nationally and globally. • I use the correct vocabulary for the beliefs and practices of different religions. • I begin to compare different responses to ethical questions, looking at a range of different religions. 	<ul style="list-style-type: none"> • I make connections between different beliefs and practices of all religions • I make links and compare stories, beliefs and practices from different religions including differences and similarities. • I understand and evaluate the diversity of belief in different religions, nationally and globally. • I articulate my own responses to ethical questions from a range of different religions. 	<ul style="list-style-type: none"> • I can explain how some beliefs and teachings are shared by different religions. • I can explain how beliefs and teachings affect the lives of individuals and communities • I can explain how religious life and practices affect the lives of individuals and communities. • I can explain, using the correct terminology, how religious beliefs and ideas can be shown in many different ways. 	
AT2: Learning From Religion		<ul style="list-style-type: none"> • I talk about and find meanings behind different beliefs and practices • I suggest meanings of some religious and moral stories • I respond to questions about what individuals and faith communities do. • I ask questions about what individuals and faith communities do. • I express my own ideas creatively • I use a range of media to convey my opinions. 	<ul style="list-style-type: none"> • I suggest and find meanings behind different beliefs and practices • I respond to the meanings of some religious and moral stories and suggest how these relate to right and wrong • I ask and respond to questions about what individuals and faith communities do and why • I express views about why belonging to a faith community is valuable in my own life. • I use a range of different media to creatively express my own ideas, thoughts and opinions. • I begin to make connections between my own ideas and those of others. 	<ul style="list-style-type: none"> • I reflect and respond thoughtfully to the significance of meaning behind different beliefs and practices • I respond thoughtfully to a range of sacred writings, stories and provide good reason for differences and similarities in different texts. • I express views creatively as to why belonging to a faith community may be valuable to members and my own life. • I recognise that those with no faith may also have a faith system. • I discuss and apply my own and other's ideas about ethical questions and express my own ideas clearly in response. 	<ul style="list-style-type: none"> • I recognise and express my feelings about my own identity and link this to my learning about religion. • I can explain why there are differences between my own and others' ideas about ultimate questions. • I can express my own values. • I can respond to the values and commitments of others 	

Humanities History	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none"> to describe changes within living memory. Where appropriate, these should be used to reveal aspects of change in national life to know events beyond living memory that are significant nationally or globally e.g. the Great Fire of London, the first aeroplane flight and events commemorated through festivals or anniversaries to learn about the lives of significant individuals in the past who have contributed to national and international achievements. Some should be used to compare aspects of life in different periods e.g. Elizabeth I, Queen Victoria, Christopher Columbus, Neil Armstrong, William Caxton, Tim Berners-Lee, Pieter Bruegel the Elder, LS Lowry, Rosa Parks, Emily Davison, Mary Seacole, Florence Nightingale, Edith Cavell to learn about significant historical events, people and places in their own locality. to describe changes in Britain from the Stone Age to the Iron Age to learn about the Roman Empire and its impact on Britain to learn about Britain's settlement by Anglo-Saxons and Scots to learn about the Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor to carry out a local history study to conduct a study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066 to learn about the achievements of the earliest civilizations – an overview of where and when the first civilizations appeared and a depth study of one of the following: Ancient Sumer; The Indus Valley; Ancient Egypt; The Shang Dynasty of Ancient China to learn about Ancient Greece – a study of Greek life and achievements and their influence on the western world to learn about a non-European society that provides contrasts with British history – one study chosen from: early Islamic civilization, including a study of Baghdad c. AD 900; Mayan civilization c. AD 900; Benin (West Africa) c. AD 900-1300. 	<p>CL (Speaking)</p> <p>Early Learning Goal</p> <ul style="list-style-type: none"> I use past, present and future forms accurately when talking about events that have happened or are to happen in the future <p>UW (People and communities)</p> <p>Early Learning Goal</p> <ul style="list-style-type: none"> I can talk about past and present events in my own life and in the lives of family members <p>Exceeding statements</p> <ul style="list-style-type: none"> I know the difference between past and present events in my own life and some reasons why people's lives were different in the past 	<ul style="list-style-type: none"> I understand the difference between things that happened in the past and the present. I can talk about things that happened to me in living memory. I can name some things that happened to other people or events in living memory. I can put a few events or objects in order of when they happened. I can use words and phrases such as: now, yesterday, last week, recently, when I was younger, a long time ago, a very long time ago, before I was born, when my parents/carers were young. I have found out some facts about events that happened long ago (before living memory). I answer questions about events, using 'before' and 'after' to describe when something happened. I have found out some facts about people long ago (before living memory). I can say why people may have acted as they did. I can make comparisons between some aspects of life in different time periods I can recall facts about events that happened locally in the past I can recall facts about significant local people from the past I know about significant historical places in the locality I can order events and people I have studied using a simple timeline I have looked at books to help me find out about the past. I have listened to and can recall stories about the past. I ask questions about pictures from the past. I ask questions about artefacts from the past 	<ul style="list-style-type: none"> I understand that a time line can be divided into BC and AD I can divide recent history into 21st, 19th and 20th Centuries. I can place events and people that I have studied onto a time line. I use words and phrases such as century, decade, before Christ, after, before, during to describe the passing of time. <p>I use evidence to describe:</p> <ul style="list-style-type: none"> houses and settlements; culture and leisure activities; clothes, way of life and actions and uses of people in the past. buildings and their uses of people from the past. things people believed in the past (attitudes and religion) what was important to people from the past. show how the lives of rich and poor people from the past differed. find out how any of the above may have changed during a time period. I give reasons why changes may have occurred. I can describe some similarities and differences between some people, events and objects (artefacts) I have studied. I can describe how some of the things I have studied from the past affect life today. I have looked at two versions of the same event in history and have identified differences in the accounts. I give reasons why there may be different accounts of history. I use documents, printed sources (e.g. archive materials) the Internet, databases, pictures, photographs, music, artefacts, historic buildings, visits to museums and galleries and visits to sites to collect evidence about the past. I suggest sources of evidence to help me answer questions. I present my findings about the past using my speaking, writing, maths, ICT, drama and drawing skills. I discuss the most appropriate way to present my information, which I realise is for an audience. 	<ul style="list-style-type: none"> I understand that a time line can be divided into periods I can describe the main changes in a period in history. I show on a time line, the changes that I have identified. I can name the date of any significant event from the past that I have studied and place it on a time line. I use words and phrases such as era, century, decade, BC, AD, after, before, to describe passing of time. <p>I choose reliable sources of evidence to:</p> <ul style="list-style-type: none"> describe the houses, settlements; culture and leisure activities; clothes, way of life and actions of people; buildings and their uses of people from the past. describe the things people believed in the past (attitudes and religion) describe what was important to people from the past. contrast the lives of the rich and poor people I give my own reasons why changes may have occurred, backed up by evidence I have researched. I can describe similarities and differences between some people, events and objects I have studied. I can describe how some of the things I have studied from the past affect life today. I have looked at different versions of the same event in history and have identified differences in the accounts. I give clear reasons why there may be different accounts of history. I ask questions about change, causes, similarity, difference and significance. I choose the most appropriate way to present my information, which I realise is for an audience. 	<ul style="list-style-type: none"> I can use a time line to place events, people and periods of history. I can make connections and draw contrasts. I can analyse trends within periods and over long arcs of time I evaluate evidence, which helps me to choose the most reliable sources. I know that people both in the past and now, including myself, have a point of view and that this can affect interpretation of the past. I give clear reasons why there may be different accounts of history, linking this to factual understanding of the past. I can discuss how and why contrasting arguments and interpretations of the past have been constructed. I can pursue a historically valid enquiry. I use the key vocabulary of the time to convey my understanding of the past. I present my information in a structured format using evidence to support my work 	

Humanities Geography	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none">to name and locate the 7 continents and 5 oceansto name, locate and identify characteristics of the 4 countries and major cities of the UK and the surrounding seas and other countries around the world, their human and physical characteristics, land-use patterns; and how these have changed over timeto understand the terms latitude, longitude, Equator, N & S Hemisphere, Tropics of Cancer/Capricorn, Arctic/Antarctic Circle and time zones.to understand geographical similarities and differences between an area in the UK and a contrasting European and non European countryto identify weather patterns in the UKto identify location of hot and cold areas of the world in relation to the Equator and North and South Polesto use geographical vocabulary for physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weatherto describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycleto use geographical vocabulary for human features, including: city, town, village, factory, farm, house, office, port, harbour and shopto describe and understand human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and waterto use world maps, atlases, globes and digital mapping to identify the UK and its countries, as well as the countries, continents and oceans studied including describing their featuresto use compass directions (4 points 8 points) and locational and directional language to describe the location of features and routes on a mapto use 4- and 6-figure grid references, symbols and key to build their knowledge of the UK and the wider worldto use aerial photographs to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a keyto use simple fieldwork to observe, measure and present the geography of their school and grounds and its key human and physical features, using a range of methods including sketch maps, plans and graphs, and digital technologies.	<p>UW (The World)</p> <p>40-60 months</p> <ul style="list-style-type: none">I look closely at similarities, differences, patterns and change <p>Early Learning Goal</p> <ul style="list-style-type: none">I know about similarities and differences in relation to places, objects, materials and living things.I can talk about features of my own immediate environment and how environments might vary from one another.I can make observations of animals and plants and explain why some things occur, and talk about changes. <p>Exceeding statements</p> <ul style="list-style-type: none">I know that the environment and living things are influenced by human activityI can describe some actions which people in my own community do that help to maintain the area I live in	<p>Locational Knowledge</p> <ul style="list-style-type: none">I can name and locate the world's seven continentsI can name and locate the world's five oceansI can name and locate the four countries and capital cities of the UKI can name and locate the seas surrounding the UK <p>Place Knowledge</p> <ul style="list-style-type: none">I can talk about physical and human geographical similarities and differences between a small area of the UK and a non-European country <p>Human and Physical Geography</p> <ul style="list-style-type: none">I can identify seasonal and daily weather patterns in the UKI can locate hot and cold areas of the world in relation to the Equator and North and South polesI use geographical words for physical featuresI can use geographical words for human features <p>Geographical Skills & Fieldwork</p> <ul style="list-style-type: none">I can find the UK and its countries on a map, globe and in an atlasI can find countries, continents and oceans I have learnt about on a map, globe and in an atlasI can use the four compass directions: N, S, E and W to describe the location of features and routes on a mapI can use locational and directional languageI can identify landmarks and basic human and physical features on a plan or aerial photographI can create a simple map of my own with a simple keyI observe the geography of my school groundsWhen out in the local environment, I observe key human and physical features	<p>Locational Knowledge</p> <ul style="list-style-type: none">I can name and locate countries I am learning aboutI can name and locate major cities in the countries I am learning aboutI can locate human and physical characteristics in the countries I am learning aboutI can locate land-use patterns in the countries I am learning aboutI can name and locate cities of the UK <p>Place Knowledge</p> <ul style="list-style-type: none">I can talk about physical and human geographical similarities and differences between the UK and a European country <p>Human and Physical Geography</p> <ul style="list-style-type: none">I can describe some aspects of physical geography e.g. climate zones; biomes and vegetation belts; rivers; mountains; volcanoes and earthquakes and the water cycleI can describe some aspects of human geography e.g. types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water <p>Geographical Skills & Fieldwork</p> <ul style="list-style-type: none">I can find the UK and its countries using digital mapping and describe featuresI can find countries, continents and oceans I have learnt about using digital mapping and describe featuresI can use the eight compass directions to describe the location of features and routes on a mapI can read four-figure grid references, symbols and a key on a mapI can make sketch maps of human and physical features in the local areaI can use digital technologies to observe human and physical features in the local area	<p>Locational Knowledge</p> <ul style="list-style-type: none">I can name and locate countries of the WorldI can name and locate major citiesI can locate human and physical characteristics of countriesI can locate land-use patterns of countriesI can discuss how some key feature and land-use patterns have changed over timeI can correctly use the terms latitude, longitude, Equator, North and South Hemisphere, Topics of Cancer/Capricorn, Arctic/Antarctic Circle and time zones <p>Place Knowledge</p> <ul style="list-style-type: none">I can talk about physical and human geographical similarities and differences between the UK and another country <p>Human and Physical Geography</p> <ul style="list-style-type: none">I can accurately describe some aspects of physical geography e.g. climate zones; biomes and vegetation belts; rivers; mountains; volcanoes and earthquakes and the water cycleI can accurately describe some aspects of human geography e.g. types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water <p>Geographical Skills & Fieldwork</p> <ul style="list-style-type: none">I can find countries, continents and oceans using digital mapping and describe featuresI can read six-figure grid references, symbols and a key on a mapI can make plans of the local area showing human and physical featuresI can measure human and physical features in the local area and display data in a graphical form	<p>Locational Knowledge</p> <ul style="list-style-type: none">I can discuss the location of a country in relation to other countries in the world. <p>Place Knowledge</p> <ul style="list-style-type: none">I can talk about physical and human geographical similarities and differences between two regions in the world <p>Human and Physical Geography</p> <ul style="list-style-type: none">I can accurately describe aspects of physical geography e.g. geological timescales and plate tectonics; rocks, weathering and soils; weather and climate; glaciation, hydrology and coastsI can accurately describe some aspects of human geography e.g. population and urbanisation; international development; economical activity in the primary, secondary, tertiary and quaternary sectors and the use of natural resourcesI can describe how physical and human features interact to influence and change landscapes, environments and the climate.I can explain how human activity relies on effective functioning of natural systems <p>Geographical Skills & Fieldwork</p> <ul style="list-style-type: none">I can interpret Ordnance Survey maps by using grid references, scales, topological and other thematic mapping and aerial and satellite photographsI can use GIS to view, analyse and interpret places and dataI can use fieldwork in a contrasting locality to collect analyse and draw conclusions from geographical data using multiple sources	

Planning for a World Class Curriculum

The Arts

- Music
- Art & Design

The Arts Music	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none"> to use their voices expressively and creatively by singing songs and speaking chants and rhymes to play tuned and untuned instruments musically to listen with concentration and understanding to a range of high-quality live and recorded music to experiment with, create, select and combine sounds using the interrelated dimensions of music to play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression to improvise and compose music for a range of purposes using the interrelated dimensions of music to listen with attention to detail and recall sounds with increasing aural memory to use and understand staff and other musical notations to appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians to develop an understanding of the history of music 	<p><i>EAD (Being Imaginative)</i></p> <p>Early Learning Goal</p> <ul style="list-style-type: none"> I can represent my own ideas, thoughts and feelings through music <p>Exceeding statements</p> <ul style="list-style-type: none"> I talk about the ideas and processes which have led me to make music <p><i>EAD (Exploring and using media...)</i></p> <p>40-60 months</p> <ul style="list-style-type: none"> I am beginning to build a repertoire of songs I explore the different sounds of instruments <p>Early Learning Goal</p> <ul style="list-style-type: none"> I can sing songs, make music and experiment with ways of changing them 	<p>Performing</p> <ul style="list-style-type: none"> I take part in singing songs, following the tune well I perform with others', taking instructions from the leader. I make and control long and short sounds using voices and instruments <p>Composing</p> <ul style="list-style-type: none"> I carefully choose sounds to achieve an effect (including use of ICT) I can create short musical patterns. I create a sequence of long and short sounds I create short rhythmic phrases I show control when playing musical instruments so that they sound as they should I use changes in pitch to communicate an idea <p>Appraising</p> <ul style="list-style-type: none"> I can identify the beat in music I recognise changes in timbre, dynamics and pitch <p>Applying</p> <ul style="list-style-type: none"> I listen carefully and recall short rhythmic and melodic patterns. I use my knowledge of dynamics, timbre and pitch to organize my music. I know how sounds can be made and changed to suit a situation. I make my own signs and symbols to make, record my music. I know that music can be played or listened to for a variety of purposes 	<p>Performing</p> <ul style="list-style-type: none"> I can sing songs from memory with accurate pitch. I sing in tune and pronounce words clearly I can maintain a simple part within a group. I play notes on instruments with care so they sound clear. I perform with control and awareness of what others in the group are singing or playing. <p>Composing</p> <ul style="list-style-type: none"> I compose and perform melodies and songs (including use of ICT) I recognise and create repeated patterns with a range of instruments. I create accompaniments for my tunes. I carefully choose, order, combine and control sounds with awareness of their combined effect <p>Appraising</p> <ul style="list-style-type: none"> I describe music using words such as duration, timbre, pitch, beat, tempo and texture I use these words to identify where my music works well and how it can be improved. I listen to several layers of sound and talk about the effect on the mood and feelings. <p>Applying</p> <ul style="list-style-type: none"> I recognise how musical elements can be used together to compose music. I know how many beats in a minim, crotchet and semibreve and I recognise their symbols. I know the symbol for a rest in music, and use silence for effect in my music. I describe the different purposes of music throughout history and in other cultures. I know that the sense of occasion affects the performance. 	<p>Performing</p> <ul style="list-style-type: none"> I sing in tune. I sing with a great degree of control I perform alone and in a group, displaying a variety of techniques I hold my part in a round. I perform songs in a way that reflects their meaning I can sustain a drone or melodic ostinato to accompany singing. I can play an accompaniment on an instrument I can improvise within a group. <p>Composing</p> <ul style="list-style-type: none"> I know how to make creative use of the way sounds can be changed, organised and controlled (including use of ICT) I create my own songs. I can create rhythmic patterns with an awareness of timbre and duration. I create music, which reflects given intentions and uses notations as a support for performance. I identify where to place emphasis and accents in a song to create effects. <p>Appraising</p> <ul style="list-style-type: none"> I have a range of words to help me describe music I understand how lyrics reflect cultural context and social meaning <p>Applying</p> <ul style="list-style-type: none"> I can combine sounds expressively I create songs with an understanding of the relationship between lyrics and melody. I know and use standard musical notation to indicate how many beats to play. I can read the musical stave and can work out the notes, EGBDF and FACE. I can draw a treble clef at the correct position on the stave. 	<p>Performing</p> <ul style="list-style-type: none"> I sing or play from memory with confidence. I take turns to lead a group. I sing or play expressively and in tune. I perform showing expression. I hold my part in a round. I am confident in singing or playing solo. I sing a harmony part confidently and accurately. I maintain my own part with an awareness of what others are playing. I play the more complex instrumental parts (e.g. xylophone, flute, recorder, violin, cello or clarinet with control). <p>Composing</p> <ul style="list-style-type: none"> I demonstrate imagination and confidence in the use of sound. I use ICT to organize my musical ideas. I show thoughtfulness in selecting sounds and structures to convey an idea. I create my own musical patterns. I use a variety of different musical devices including melody, rhythms and chords. <p>Appraising</p> <ul style="list-style-type: none"> I use my knowledge of cultural context and social meaning to enhance my own compositions. I appreciate harmonies and work out how drones and melodic ostinati are used to accompany singing. I refine and improve my work <p>Applying</p> <ul style="list-style-type: none"> I know and use standard musical notation to perform and record my music. I use my musical vocabulary to help me understand how best to combine musical elements. I can quickly read notes and know how many beats they represent 	

The Arts Art & Design	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none"> to use a range of materials creatively to design and make products to use drawing, painting and sculpture to develop and share their ideas, experiences and imagination to develop a wide range of art and design techniques in using colour, pattern, texture, line, shape, form and space to learn about the work of a range of artists, craft makers and designers, describing the differences and similarities between different practices and disciplines, and making links to their own work to create sketch books to record their observations and use them to review and revisit ideas to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials to identify and discuss the work of great artists, architects and designers in history 	<p><i>EAD (Exploring and using media...)</i></p> <p>40-60 months</p> <ul style="list-style-type: none"> I explore what happens when I mix colours I experiment to create textures I use simple tools and techniques competently and appropriately <p>Early Learning Goal</p> <ul style="list-style-type: none"> I safely use and explore a variety of materials, tools and techniques <p><i>EAD (Being Imaginative)</i></p> <p>40-60 months</p> <ul style="list-style-type: none"> I choose particular colours to use for a purpose I create simple representations of events, people and objects <p>Early Learning Goal</p> <ul style="list-style-type: none"> I represent my own ideas, thoughts and feelings through art <p>Exceeding statements</p> <ul style="list-style-type: none"> I talk about the ideas and processes which have led me to make images and designs 	<ul style="list-style-type: none"> I use pencils, pastels and charcoal in my drawings. I show patterns and textures in my artwork by adding dots and lines. I show different tones of colour I make a variety of lines of different sizes, thickness and shapes I mix primary colours to make secondary colours. I add white or black to make different tones I link colours to natural and man-made objects. I combine materials with different textures and appearances. I use shapes, textures, colours and patterns in my artwork I have added texture to my artwork by combining different materials I have printed by pressing, rolling, rubbing and stamping. I have looked at artwork in the environment I have created a piece of art to emulate the work of an artist I have looked at how artists and designers have used colour, shapes and lines to create patterns. I use simple techniques to join fabrics and other materials 	<ul style="list-style-type: none"> I use a sketchbook to record ideas I look at art work from other cultures and times I can evaluate my work and suggest areas of development I use different grades of pencil and hatching techniques to show tone I annotate sketches to explain my ideas I mix colours using tints and tones. I use equipment and techniques to produce shapes, textures, patterns and lines. I contrast techniques and methods of different artists I experiment with different colour palettes I use precise cutting skills for a range of purposes I experiment with making artwork in different sizes My artwork has a well thought out purpose. I use the technique of combining materials to create texture, feeling, expression or movement. I can make prints of 2 or more colours. I know how printing is used by designers or artists. I can use basic sewing techniques 	<ul style="list-style-type: none"> I collect visual and other information in my sketchbook and can explain my ideas I select from a wide range of materials for the type of artwork I want to produce I comment on the ideas, methods and approaches used in my own and others' work I adapt and refine my work to reflect its purpose and meaning I have studied other artists and emulate their technique I have a good knowledge of art from other cultures and times I use shading to show shadows and reflections I can create colours to match those I have observed in the natural and man-made world. I use a range of media in my work I experiment with colours and shapes to create a mood My artwork replicates patterns I have observed in either the natural or man-made world I experiment with techniques that use contrasting textures, colours or patterns. I have experimented with mosaic techniques to produce art My artwork is sometimes based on observational drawings. My artwork combines both visual and tactile qualities. My artwork takes inspiration from artists and designers I use shape, texture and pattern in my work I can use different sewing techniques I combine techniques I know to create hangings I use the internet to research. I take digital photographs and modify them using computer software. My work communicates a meaning, idea, thought, feeling or emotion and this is explained in a short piece of writing to accompany each piece of artwork or technique 	<ul style="list-style-type: none"> I explore ideas from the information in my sketchbook. I select appropriate art materials. I know when materials can be combined to good effect. I am developing my own artistic style I choose appropriate techniques to convey meaning I analyse and comment on my own and others' work I adapt and refine my work to reflect my own view of its purpose and meaning. I can communicate movement with my artwork I can use shadows and reflections to enhance my artwork My artistic techniques are well developed. I choose different techniques and materials to reflect a purpose My artwork can convey realism or a more abstract impression Different features of my artwork reflect different moods and feelings. I can produce quality artwork on a range of different materials I use drawings and designs to bring fine detail into my work. I can combine a range of visual elements to reflect a purpose I can base my artwork on a theme from other cultures My prints have a starting point from a designer in history. I can convey a definite theme with my artwork My artwork has a striking effect because the techniques used I can create artwork on a range of scales from the real or natural world. My artwork contains both visual and tactile qualities. My artwork is sometimes based on historical or cultural observations I create digital images to communicate my ideas. My work combines visual and tactile qualities to communicate an intention or purpose 	

World Class Curriculum

Physical Education

- PE

Physical Education PE	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none"> to master basic movements including running, jumping, throwing and catching, as well as developing balance, agility and co-ordination, and begin to apply these in a range of activities to participate in team games, developing simple tactics for attacking and defending to perform dances using simple movement patterns to use running, jumping, throwing and catching in isolation and in combination to play competitive games, modified where appropriate [for example, badminton, basketball, cricket, football, hockey, netball, rounders and tennis], and apply basic principles suitable for attacking and defending to develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics] to perform dances using a range of movement patterns to take part in outdoor and adventurous activity challenges both individually and within a team to compare their performances with previous ones and demonstrate improvement to achieve their personal best to swim competently, confidently and proficiently over a distance of at least 25 metres to use a range of strokes effectively [for example, front crawl, backstroke and breaststroke] to perform safe self-rescue in different water-based situations 	<p>PD (Moving and handling)</p> <p>40-60 months</p> <ul style="list-style-type: none"> I experiment with different ways of moving I can jump off an object and land appropriately I negotiate space successfully when playing racing and chasing games with other children, adjusting speed or changing direction to avoid obstacles I travel with confidence and skill around, under, over and through balancing and climbing equipment I show increasing control over an object in pushing, patting, throwing, catching or kicking it <p>Early Learning Goal</p> <ul style="list-style-type: none"> I show good control and coordination in large and small movements I move confidently in a range of ways, safely negotiating space <p>Exceeding statements</p> <ul style="list-style-type: none"> I can hop confidently and skip in time to music <p>PD (Health and Self Care)</p> <p>40-60 months</p> <ul style="list-style-type: none"> I show understanding of how to transport and store equipment safely <p>EAD (Exploring and using media...)</p> <p>40-60 months</p> <ul style="list-style-type: none"> I am beginning to build a repertoire of dances I dance, and experiment with ways of changing it <p>EAD (Being Imaginative)</p> <p>40-60 months</p> <ul style="list-style-type: none"> I initiate new combinations of movement and gesture in order to express and respond to feelings, ideas and experiences <p>Early Learning Goal</p> <ul style="list-style-type: none"> I represent my own ideas, thoughts and feelings through dance 	<ul style="list-style-type: none"> I copy and remember actions. I repeat and explore skills. I move with coordination and care. I use the terms 'opponent' and 'team-mate' when playing games. I use my rolling, hitting and kicking skills in games. I decide on the best position to be in during a game I have developed some tactics for the game I am playing. I perform my dance actions with control and co-ordination. I link two or more actions together to make a sequence. I remember and repeat dance movements. I choose the best movements to communicate a mood or feeling. I plan sequences of movements. I can show contrasts such as small/tall, straight/curved and wide/narrow. My movements are controlled. I can balance on different points of my body. I talk about the differences between my own and others' performances. I say what has gone well and why. I identify how a performance could be improved. I can describe how my body feels during different activities, using parts of the body to describe the effects. I know how to exercise safely by looking for space, others' and by warming up properly. 	<ul style="list-style-type: none"> I select and use the most appropriate skills, actions and ideas. I move with co-ordination and control. I throw and catch a ball with control and accuracy. I strike a ball and field with control. I choose appropriate tactics to cause problems for opposition I follow rules in a game. I keep possession of a ball (feet, hockey stick, hands). My body is balanced and my shapes are controlled. I plan, perform and repeat sequences. My sequences include changes in speed and level. I work on improving strength and flexibility by practicing stretches and shapes. I can sprint over a short distance. I can run over a longer distance, conserving energy. I have a range of throwing techniques I throw with accuracy to hit a target. I can jump in a number of ways, sometimes using a run-up. I use plans and diagrams to help me get from one place to another. I enjoy solving problems or challenges outdoors. I work and behave safely. I discuss with others' how to solve problems. I say how my work is similar to and different from others'. I use this understanding to improve my own performance. I give reasons why warming up before an activity is important. I give reasons why physical activity is good for my health. I can swim 25 metres 	<ul style="list-style-type: none"> I link skills, techniques and ideas and apply them accurately and appropriately. I am controlled and skilful in my actions and movements. I use a variety of techniques to pass. I work with my team or alone to gain possession of the ball. I can strike a bowled ball. I use forehand and backhand when playing racquet games. I field well. I choose the most appropriate tactics in a game. I make complex sequences that include changes in direction, level and speed. I combine actions, shapes and balances in my gymnastic performance. My movements are clear, accurate and consistent. I prepare and perform to an audience. I choose the best pace for running. I am controlled in take off and landing when jumping. I am accurate when throwing for distance. I combine running and jumping well. I use maps and diagrams to orientate myself. I can adapt my actions to changing situations With others, I plan careful responses to challenges or problems. I compare and comment on the skills, techniques and ideas used in my work and in others'. I use this to improve my performance. I explain and apply basic safety principles in preparing for exercise. I describe the effects exercise has on my body I use a range of swimming stroke effectively I perform safe, self-rescue in different water-based situations 	<ul style="list-style-type: none"> I select and combine my skills, techniques and ideas. I apply my skills, techniques and ideas accurately, appropriately and consistently. I show precision, control and fluency. I use tactics and follow rules. I plan my approach to attacking and defending. I use a range of shots and strokes to strike a ball. I can strike a ball on the volley. I practice and perform with control. My movements include very controlled balances, shapes, levels and actions. I link and adapt actions together into a well-timed sequence. I show accurate control, speed, strength and stamina in my athletics. I adapt my skills to different situations. I know and follow event rules. I am careful but confident in unfamiliar environments. I use my senses to assess risks and adapt my plans accordingly. I prepare well by considering safety first. I can plan with others, seeking advice. I analyse and comment on skills and techniques and how they are applied in my own and in others' work. I modify and refine my skills and techniques to improve my performance. I explain how different parts of my body react during different types of exercise. I warm up and cool down in ways that suit the activity. I describe why regular, safe exercise is good for my fitness and health. 	

World Class Curriculum

Life Skills

- RSE

RSE	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<p>Families and people who care about me</p> <ul style="list-style-type: none">• That families are important for children growing up because they can give love, security and stability• The characteristics of healthy family life, including commitment, times of difficulty, protection and the importance of spending time together• That others’ families sometimes look different from their family but that they should respect differences and know that other families are also characterised by love and care• That stable, caring relationships, which may be of different types, are important for children’s well-being• That marriage represents a legally recognised, lifelong commitment of two people to each other• How to recognise if family relationships are making them feel unhappy or unsafe and how to seek help if needed <p>Caring relationships</p> <ul style="list-style-type: none">• How important relationships are in making us feel happy and secure and how people choose and make friends• The characteristics of friendships including respect, trust, support, loyalty, kindness and generosity.• That healthy relationships are positive and welcoming towards others and do not make others feel excluded• That relationships have ups and downs and that these can often be resolved so that the friendship is repaired or even strengthened and that violence is never right• How to recognise who to trust, how to judge when a friendship is making them feel unhappy and how to manage these situations, seeking advice if needed <p>Respectful relationships</p> <ul style="list-style-type: none">• The importance of respecting others, even when they are very different from them or make different choices or have different preferences or beliefs• Practical steps they can take in a range of different contexts to improve or support respectful relationships• The conventions of courtesy and manners• The importance of self-respect and it’s link to happiness• That they can expect to be treated with respect by others and that they should show respect to others• About different types of bullying, the impact of bullying, responsibilities of bystanders and how to get help• What a stereotype is and how stereotypes can be unfair• The importance of permission-seeking and giving in relationships with friends peers and adults <p>Online relationships</p> <ul style="list-style-type: none">• That people sometimes behave differently online, including by pretending to be someone they are not• That the same principles apply to online relationships as to face-to-face relationships, including the importance of respect for others including when they are anonymous• The rules and principles for keeping safe online, how to recognise risks, harmful content and how to report them• How to critically consider their online friendships and sources of information including awareness of risks associated with people they have never met• How information and data is shared and used online <p>Being safe</p> <ul style="list-style-type: none">• What sorts of boundaries are appropriate in friendships with peers and others (including in a digital context)• About the concept of privacy and implications of it for both children and adults, including that it is not always right to keep secrets if they relate to being safe• That each person’s body belongs to them and the differences between appropriate and inappropriate or unsafe physical or other contact• How to respond safely and appropriately to adults they may encounter whom they do not know• How to recognise and report feelings of being unsafe or feeling bad about any adult• How to ask for advice or help for themselves or others and to keep trying until they are heard• How to report concerns or abuse, and the vocabulary and confidence to do so• Where to get advice eg; family, school or other sources	<p><i>PSED (Making relationships)</i></p> <p>40-60 months</p> <ul style="list-style-type: none">• I take steps to resolve conflicts with other children• I initiate conversations, attend to and take account of what others say• I explain my own knowledge and understanding and ask appropriate questions of others <p>Early Learning Goal</p> <ul style="list-style-type: none">• I play cooperatively, taking turns with others• I take account of one another’s ideas about how to organise an activity• I show sensitivity to others’ needs and feelings and form positive relationships with adults and other children <p><i>PSED (Managing feelings and behaviour)</i></p> <p>40-60 months</p> <ul style="list-style-type: none">• I am aware of the boundaries set and of behavioural expectations in the setting• I am beginning to be able to negotiate and solve problems without aggression• I understand that my own actions affect other people <p>Early Learning Goal</p> <ul style="list-style-type: none">• I talk about how I and others show feelings, talk about my own and other’s behaviour, and its consequences and know that some behaviour is unacceptable• I work as part of a group or class, and understand and follow the rules.• I adjust my behaviour to different situations, and take changes of routine in my stride <p><i>PSED (Self confidence and self awareness)</i></p> <p>40-60 months</p> <ul style="list-style-type: none">• I am confident to speak to others about my own needs, wants, interests and opinions• I can describe myself in positive terms and talk about my abilities <p>Early Learning Goal</p> <ul style="list-style-type: none">• I am confident to try new activities, and say why I like some activities more than others• I am confident to speak in a familiar group, will talk about my ideas, and will choose the resources I need for my chosen activities• I can say when I do or don’t need help <p><i>EAD (Being Imaginative)</i></p> <p>40-60 months</p> <ul style="list-style-type: none">• I can play alongside other children who are engaged in the same theme• I can introduce a storyline or narrative into my play• I play cooperatively as part of a group to develop and act out a narrative <p><i>UW (People and Communities)</i></p> <p>Early Learning Goal</p> <ul style="list-style-type: none">• I know that other children don’t always enjoy the same things and I am sensitive to this• I know about similarities and differences between myself and others, and among families, communities and traditions	<p><i>PSED (Making relationships)</i></p> <p>Exceeding statements</p> <ul style="list-style-type: none">• I can play group games with rules• I understand someone else’s point of view can be different from mine• I resolve minor disagreements through listening to each other to come up with a fair solution• I understand what bullying is and it is unacceptable behaviour <p><i>PSED (Managing feelings and behaviour)</i></p> <p>Exceeding statements</p> <ul style="list-style-type: none">• I can stop and think before acting and I can wait for things that I want.• I know when and how to stand up for myself appropriately.• I can listen to the suggestions of others and plan how to achieve an outcome without adult help.• I know some ways to manage my feelings and am beginning to use these to maintain control <p><i>PSED (Self confidence and self awareness)</i></p> <p>Exceeding statements</p> <ul style="list-style-type: none">• I can speak confidently to a class group• I can talk about the things that I enjoy, and are good at, and about the things I do not find easy.• I can talk about plans I have made to carry out activities and what I might change if I were to repeat them.• I am resourceful in finding support when I need help or information <p><i>UW (People and Communities)</i></p> <p>Exceeding statements</p> <ul style="list-style-type: none">• I know that other children have different likes and dislikes and that they may be good at different things• I understand that different people have different beliefs, attitudes, customs and traditions and why it is important to treat them with respect <ul style="list-style-type: none">• I understand and follow the school rules for online safety (Key Stage 1)	<p>Families and people who care about me</p> <ul style="list-style-type: none">• I know that families provide children with love, security and stability• I can identify differences in a variety of family types• I recognise that stable, caring relationships support well-being• I know the importance of marriage as a commitment between two people• I can recognise where relationships make me feel unhappy <p>Caring relationships</p> <ul style="list-style-type: none">• I recognise how important strong relationships are for happiness and security.• I can talk about how people choose and make friends• I can recognise features of a strong friendship.• I can recognise the characteristics of a healthy relationship• I know that problems in relationships can often be resolved• I make good judgements about who to trust• I know when a friendship is making me feel unhappy <p>Respectful relationships</p> <ul style="list-style-type: none">• I am aware that people may have different views and beliefs to my own• I model respect of others in the way that I conduct myself• I am clear on the steps I can take in a range of different contexts to improve or support respectful relationships• I understand the conventions of courtesy and manners• I understand how self-respect is important for a person’s happiness• I understand what is meant by mutual respect• I am aware of different types of bullying, including cyber-bullying• I am aware of my own responsibilities towards bullying• I am clear about what a stereotype is and how stereotypes can be unfair• I understand the importance of permission-seeking and giving in relationships with children and adults <p>Online relationships</p> <ul style="list-style-type: none">• I am aware that people sometimes behave differently online, including by pretending to be someone they are not• I can talk about the rules and principles for keeping safe online• I know how information and data is shared and used online <p>Being safe</p> <ul style="list-style-type: none">• I recognise the boundaries that are appropriate in friendships with peers and others (including online)• I understand that it is not always right to keep secrets if they relate to being safe• I make informed decision about privacy• I respond safely and appropriately to unfamiliar adults who I meet• I recognise feelings of being unsafe• I know how to ask for advice or help for myself or others• I know how to report concerns or abuse• I know where to get advice from my own network eg; family and school	<p>Families and people who care about me</p> <ul style="list-style-type: none">• I know that families provide children of a healthy family life• I respect the differences between different types of family• I understand that different families are characterised by love and care• I recognise that stable, caring relationships can be of different types• I know where to seek help when relationships make me feel unhappy <p>Caring relationships</p> <ul style="list-style-type: none">• I can describe relationships in my own life that provide happiness and security• I can describe the key characteristics of a strong friendship• I know the characteristics of a healthy relationship in different contexts• I conduct myself in a way which is positive, inclusive and welcoming towards others• I know that resolving problems in relationships can repair and even strengthen them• I recognise that violence is never the right way to resolve a conflict• I make good judgements about who to trust in a range of contexts• I know how to seek advice when a friendship is making me feel unhappy <p>Respectful relationships</p> <ul style="list-style-type: none">• I recognise the importance of respecting the views, beliefs and choices of others• I am successful in building and maintaining respectful relationships in a range of contexts• I consistently display good manners• I recognise the importance of mutual respect in building positive relationships• I can talk about different types of bullying and the impact they may have• I am aware of the responsibilities of others towards bullying eg; bystanders and how to get help• I can give examples of where stereotypes can be unfair <p>Online relationships</p> <ul style="list-style-type: none">• I know that the same principles apply to online relationships as to face-to-face relationships, including the importance of respect for others• I can recognise online risks, harmful content and how to report them• I critically consider my online friendships and sources of information including awareness of the associated risks• I understand and follow the school rules for online safety (Key Stage 2) <p>Being safe</p> <ul style="list-style-type: none">• I understand the concept of privacy and how this applies to children and adults• I understand that each person’s body belongs to them and the differences between appropriate and inappropriate or unsafe physical or other contact• I make good decisions when I recognise feelings of being unsafe• I seek advice and keep trying until I am heard• I have the vocabulary and confidence to articulate my concerns• I know where to get advice from a range of sources		

Appendix 1

<div>Curriculum Enrichment</div> <div>Visits and visitor; enterprise and action</div>	
	<div>En</div> <div>MFL</div> <div>Ma</div> <div>Sc</div> <div>DT</div> <div>Co</div> <div>RE</div> <div>Hi</div> <div>Ge</div> <div>Mu</div> <div>Art</div> <div>PE</div> <div>LS</div>
<div>Learning Environment</div> <div>How will the various elements support learning? Linked to time/place/event, how will the narrative develop during the theme?</div>	
	<div>En</div> <div>MFL</div> <div>Ma</div> <div>Sc</div> <div>DT</div> <div>Co</div> <div>RE</div> <div>Hi</div> <div>Ge</div> <div>Mu</div> <div>Art</div> <div>PE</div> <div>LS</div>
<div>Engagement Activities</div> <div>Engagement week and additional engagement activities during the theme</div>	
	<div>En</div> <div>MFL</div> <div>Ma</div> <div>Sc</div> <div>DT</div> <div>Co</div> <div>RE</div> <div>Hi</div> <div>Ge</div> <div>Mu</div> <div>Art</div> <div>PE</div> <div>LS</div>
<div>Outdoor Learning</div> <div>How will learning outside the classroom support the theme?</div>	
	<div>En</div> <div>MFL</div> <div>Ma</div> <div>Sc</div> <div>DT</div> <div>Co</div> <div>RE</div> <div>Hi</div> <div>Ge</div> <div>Mu</div> <div>Art</div> <div>PE</div> <div>LS</div>

Appendix 2

Languages

- Reading: Word Reading
- Writing: Vocabulary, Grammar and Punctuation
- Writing: Spelling
- Writing: Handwriting
- Modern Foreign Languages

Languages Reading: Word Reading	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
Word Reading <ul style="list-style-type: none"> to apply phonic knowledge and skills to decode words so that automatic decoding is embedded to respond quickly with the correct grapheme sound (letters or groups of letters) for all 40+ phonemes, recognising alternative sounds for graphemes to read accurately words of two or more syllables that contain the same graphemes as above to read accurately by blending sounds in unfamiliar words containing GPCs that have been taught to read further common exception words, noting unusual correspondences between spelling and sound and where these occur in the word to read words containing taught GPCs and –s, –es, –ing, –ed, –er and –est endings to read contractions [I'm, I'll, we'll], and understand that the apostrophe represents the omitted letter(s) to read books aloud, accurately, matched to their phonic knowledge, sounding out unfamiliar words accurately, automatically and without hesitation to reread books for fluency and confidence to read frequently encountered words quickly and accurately to read words containing common suffixes to apply their growing knowledge of root words, prefixes and suffixes (etymology and morphology), both to read aloud and to understand the meaning of new words they meet to read further exception words, noting the unusual correspondences between spelling and sound, and where these occur in the word 	Literacy (Reading) 40-60 months <ul style="list-style-type: none"> I can continue a rhyming string I can hear and say the initial sound in words I can segment sounds in simple words and blend them together and I know which letters represent some of them I can link sounds to letters, naming and sounding the letters of the alphabet I am beginning to read words and simple sentences Early Learning Goal <ul style="list-style-type: none"> I use my phonic knowledge to decode regular words and read them aloud accurately I can read some common irregular words Exceeding statements <ul style="list-style-type: none"> I can read phonically regular words of more than 1 syllable as well as many irregular but high frequency words I use phonic, semantic and syntactic knowledge to understand familiar vocabulary 	<ul style="list-style-type: none"> I can decode words using my phonics knowledge I recognise all phonemes I know the alternative sounds for graphemes I can read words of two or more syllables I can blend sounds in unfamiliar words I can read common exception words I can read contractions like I'm, I'll, we'll and understand that the apostrophe represents the omitted letter(s) I can quickly sound out unfamiliar and exception words I read fluently and with expression I can sound out unfamiliar words accurately and without hesitation I reread books to build fluency and confidence I can read words containing -s, -es, -ing, -ed, -ed and -est endings I read with an awareness of basic punctuation , . 	<ul style="list-style-type: none"> I can read a wide range of new words on sight I read with fluency, understanding and expression and an awareness of ? , ! “ ”. 	<ul style="list-style-type: none"> I can read all complex and exception words on sight As well as reading fluently, I can skim read and scan information I can use my knowledge of prefixes and suffixes to understand the meaning of new words 		

Languages Writing: Vocab, Grammar & Punctuation	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none"> to leave spaces between words to join words and clauses using 'and.' to use a wider range of conjunctions to join clauses (but, if, because, so, also, however). to begin to punctuate sentences using a capital letter and a full stop, ? and ! to use a capital letter for names of people, places, the days of the week, and 'I' to identify new punctuation correctly. to use familiar and new punctuation correctly including capital letters, full stops, !, ? and commas/bullet points for lists. to use apostrophes for omission and possession. to use adjectives in simple noun phrases to describe and specify [for example, the blue butterfly] to use adverbs and verbs in simple phrases. to use the present and past tenses correctly and consistently to build new vocabulary to use subordination (using when, if, that, or because) and co-ordination (using or, and, or but) to write with an awareness of grammar and tense. to extend sentences with more than one clause by using a wider range of conjunctions, including: when, if, because, although to choose nouns or pronouns appropriately for clarity and cohesion and to avoid repetition to use conjunctions, adverbs and prepositions to express time and cause to use adverbs to start sentences to use commas after fronted adverbials to use verbs and adverbs correctly within adverbial phrases. to use familiar and new punctuation correctly. to identify examples of parenthesis. to indicate possession by using the possessive apostrophe to use and punctuate direct speech to identify determiners and prepositions. to understand the difference between active and passive voice. to recognise vocabulary and structures for formal speech and writing to identify prepositional phrases. to understand that the root word can be adapted to change the meaning of the word eg: noun – adjective. to use passive verbs to affect the information in a sentence to use expanded noun phrases to convey complicated information to use modal verbs or adverbs to indicate degrees of possibility to use relative clauses beginning with who, which, where, when, whose, that or with an implied (omitted) relative pronoun to accurately use parenthesis. to understand the difference between past progressive and subjunctive form. to use commas to clarify meaning to use brackets or commas to indicate parenthesis to use semicolons and colons to mark boundaries between clauses to use a colon to introduce a list to punctuate bullet points consistently to use and understand grammatical terminology when discussing my reading and writing 	<p>Literacy (Reading) 40-60 months</p> <ul style="list-style-type: none"> I use vocabulary and forms of speech that are increasingly influenced by my experience of books 	<ul style="list-style-type: none"> I can order my ideas by using numbers or time sequence I can write accurate clauses I can link clauses with 'and.' I can link clauses using a wider range of conjunctions (but, if, because, so, also, however). I use capital letters for names of people, places and days of the week, and 'I' I can choose some simple vocabulary to use in my writing I can sometimes use capitals to start sentences and full stops to end them I usually use capital letters and full stops accurately I can write in the past tense using the correct verb form, with some accuracy. I can write in the present tense, using the correct verb form, with some accuracy. I can identify whether something is singular or plural. Most of the clauses I write are grammatically correct I sometimes use question & exclamation marks. I can use commas within a list. I am starting to use bullet points in a list. I can understand the effect of ellipsis. I can use vocabulary that I wouldn't normally use I use descriptive language to add detail to a sentence I can use coordination. I use subordination. I am starting to use apostrophes to show omission. I am starting to use apostrophes to show possession. I can use adjectives to describe nouns within a sentence. I can identify adjectives, nouns, adverbs and verbs within a sentence. I can identify noun phrases within writing. I can use adjectives, nouns, adverbs and verbs confidently within writing. I can identify and use different sentence types (commands, questions, statements and exclamations). 	<ul style="list-style-type: none"> I usually use capital letters and full stops accurately I can write in the past and present tense, using the correct verb forms, accurately. I am starting to use speech marks with some accuracy I use comma splicing well, particularly in narrative I can understand the effect of ellipsis and use it confidently in writing. I extend sentences by using a wide range of conjunctions, including: when, if, because, although I can identify subordination in writing. I can identify the main and subordinate clause in a complex sentence. I am starting to use commas within subordination. I can identify relative clauses (beginning with: that, which, who). I am starting to use relative clauses in writing. I can identify modal verbs in writing (verbs indicating possibility or wanting – should, would, could...) I choose nouns and pronouns for clarity and cohesion and to avoid repetition I can identify and use possessive pronouns. I can use time connectives to show sequence and chronology I use commas after fronted adverbials like: <i>Slowly</i>, I use apostrophes to indicate possession and omission accurately. I can punctuate direct speech with some accuracy (inverted commas and commas) I can use adverbs to start sentences I can explain the difference between active and passive sentences, using the words subject, verb and object. I can identify examples of parenthesis in writing (dashes, brackets, commas). I am beginning to use parenthesis in writing (dashes, brackets, commas). I understand the difference between dashes and hyphens. I can identify determiners in writing. I can use bullet points in lists. I can identify prepositions in a sentence. I understand that conjunctions can be used anywhere in a sentence eg: <i>Since</i> the storm was coming, the residents boarded up their windows. 	<ul style="list-style-type: none"> I can identify synonyms and antonyms. I can switch between different verb forms accurately. I can identify the present perfect tense. I can accurately use possessive pronouns. I can identify and use relative pronouns in writing. I can accurately use relative clauses in writing - beginning with: who, which, where, when, whose Most of the clauses I write are grammatically correct My sentences show an accurate use of fully stops, capital letters, ? and ! I sometimes use question & exclamation marks, commas for lists and apostrophes for contractions I can use comma splicing accurately. I use commas for lists, to mark clauses and to clarify meaning I can use vocabulary that I wouldn't normally use I use descriptive language to add detail to a sentence I can identify and use determiners in writing. I can identify coordinating and subordinating conjunctions. I can confidently use complex sentences, identifying both the main and subordinate clause. I can use and identify unfamiliar conjunctions anywhere within a sentence (since, whilst, before...) I use coordination within my sentences. I accurately use commas in subordination. I use appropriate vocabulary and structures for formal speech (direct and reported) I can identify the subject, verb and object within a sentence. I can accurately identify active and passive voice in writing. I can identify the past progressive in a sentence. I can use passive verbs to affect the information in a sentence in writing. I can use expanded noun phrases to convey complicated information I can use modal verbs like <i>can</i>, <i>might</i>, <i>should</i> or adverbs to good effect in writing. I can use dashes and hyphens correctly in writing. I can identify prepositional phrases. I can accurately use brackets, commas and dashes to indicate parenthesis I can use a colon to introduce a list or examples or explanations. I can use semi colons to separate longer phrases within a list. I can use semi colons to mark the boundary. I punctuate bullet points consistently I can use and understand grammatical terminology to discuss my work I can accurately change word classes (root word to a noun/verb; verb into an adjective) I can identify the subjunctive form. 	<ul style="list-style-type: none"> I can use all forms of punctuation consistently and accurately I choose challenging vocabulary and structures for formal speech and writing I use verbs tenses accurately throughout my work I can extend and apply my grammatical knowledge to analyse increasingly challenging texts I can discuss the impact of grammatical features on the texts I read I can draw on new vocabulary and grammatical knowledge and consciously use this in my writing and speech I know and understand the differences between spoken and written language, including between Standard English and other varieties of English I use Standard English confidently and accurately in my own writing and speech I can discuss reading, writing and spoken language with precise and confident use of linguistic and literary terminology I can use prepositional phrases in writing. I can use colons and semi colons to mark boundaries between clauses 	

Languages Writing: Spelling	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none">• to spell words containing each of the 40+ phonemes already taught• to spell common exception words• to spell the days of the week• to name the letters of the alphabet in order• to use letter names to distinguish between alternative spellings of the same sound• to use the spelling rule for adding –s or –es to nouns and verbs• to use the prefix un–• to use –ing, –ed, –er and –est where no change is needed in the spelling of root words• to write from simple sentences that include words using GPCs and common exception words taught so far• to segment spoken words into phonemes and representing these by graphemes, spelling many correctly• to learn new ways of spelling phonemes for which 1 or more spellings are already known, and learn words with each spelling, including a few common homophones• to learn to spell common exception words• to learn to spell words with contractions• to learn the possessive apostrophe (singular)• to distinguish between homophones and near-homophones• to add suffixes to spell longer words including –ment, –ness, –ful, –less, –ly• to use further prefixes and suffixes and understand how to add them• to spell further homophones• to spell words that are often misspelt• to place the possessive apostrophe accurately in words with regular and irregular plurals• to use the first 2 or 3 letters of a word to check its spelling in a dictionary• to understand the rules for adding suffixes and prefixes• to spell some words with ‘silent’ letters• to continue to distinguish between homophones and other words which are often confused• to use knowledge of morphology and etymology in spelling and understand that the spelling of some words needs to be learnt specifically• use dictionaries to check the spelling and meaning of words• use the first 3/4 letters of a word to check spelling and meaning in a dictionary• to use a thesaurus	<p>Literacy (Writing) 40-60 months</p> <ul style="list-style-type: none">• I can segment the sounds in simple words and blend them together• I can link sounds to letters, naming and sounding the letters of the alphabet <p>Early Learning Goal</p> <ul style="list-style-type: none">• I spell some words correctly and others are phonetically plausible <p>Exceeding statements</p> <ul style="list-style-type: none">• I can spell phonetically regular words of more than 1 syllable as well as many irregular words but high frequency words	<ul style="list-style-type: none">• I can segment simple, spoken words and spell them correctly• I can spell words containing vowel and consonant digraphs and trigraphs• I can spell common exception words• I can spell simple compound words• I can spell the days of the week• I can name the letters of the alphabet in order• I can use letter names to distinguish between alternative spellings of the same sound• I can use the spelling rules for plural words, such as adding –s or –es• I can use the prefix un–• I can use –ing, –ed, –er and –est where no change is needed in the spelling of root words• I can spell words where the ending ‘y’ makes the ‘e’ sound.• I can spell words where the ‘y’ is sounded ‘ie’• I can use k for the /k/ sound• I can use the spelling rule for ‘dge’ as ‘ge’ within words• I can use the spelling rule for /s/ as c before e, l and y• I can use the spelling rule for /n/ sound spelt ‘kn’ and ‘gn’• I can use the spelling rule for /r/ spelt ‘wr’• I can use the spelling rule for /l/ sound as ‘el’, ‘al’, ‘il’ and ‘le’ at the end of words• I can spell the ‘o’ sound as ‘a’ as words want, watch, wander, squash• I can spell the ‘or’ sound as ‘all’ in words such as all, ball, call and as ‘ar’ in words such as ‘war, warm, towards’• I can spell the ‘er’ sound spelt as ‘o’ after ‘w’ such as ‘work, world, worm’• I can spell the ‘sh’ sound in ‘television, treasure’• I can spell the ‘tion’ sound in words• I can use the ‘u’ sound spelt ‘o’ such as other, mother, brother• I can spell phonemes for which 1 or more spellings are already known, and learn some words with each spelling, including a few common homophones• I can spell more words with contractions• I can use the possessive apostrophe (singular)• I can distinguish between homophones and near-homophones• I can add suffixes to spell longer words including –ment, –ness, –ful, –less, –ly• I can write simple sentences that include GPCs and common exception words	<ul style="list-style-type: none">• I can add suffixes beginning with vowel letters to words of more than 1 syllable, e.g. forgetting, forgotten, beginning, beginner, prefer, preferred• I can add the suffix –ation to verbs to form nouns, e.g. information, adoration, preparation• I can use the suffixes –sion, -tion, -ssion, -cian• I can spell words with the /k/ sound spelt ‘ch’, e.g. scheme, chemist, and distinguish between words with the ‘ch’ sound, e.g. chef, machine, brochure• I can understand that words with the suffix –our are changed to –or before -ous is added, e.g. humour/humorous, glamour/glamorous• I can use the suffix –ly and add this to an adjective to form an adverb e.g. sadly, completely (with exception words, gently)• I can spell words with the –sure ending (-sure, -ture, -er) e.g. measure, treasure, pleasure, creature, picture• I can spell words with the /g/ sound spelt ‘gue’ and the /k/ sound spelt ‘que’ e.g. league, tongue, antique, unique• I can spell words with the /s/ sound spelt ‘se’ e.g. science, scene, discipline, fascinate, crescent• I can spell words with ‘ei’, ‘eigh’, and ‘ey’ e.g. vein, weigh, eight, neighbour, they, obey• I can use the ‘l’ sound when spelt with a ‘y’ within words, e.g. myth, gym, Egypt, pyramid etc• I can spell the ‘u’ sound as ‘ou’ within words such as young, touch, double, trouble, country• To use the prefixes –un, -dis, -mis, -in, -im, -ir -re, -sub, -inter, -super, -anti, -auto, and understand their meanings• I can spell a range of homophones and near homophones (see spelling appendix yr 3/4)• I can spell words that are often misspelt• I can use the possessive apostrophe accurately, including regular [girls’] and irregular plurals [children’s]• I can use the first 2 or 3 letters of a word to check its spelling in a dictionary• I can accurately write simple sentences from memory	<ul style="list-style-type: none">• I can use the endings –cious and –tious; -cial and –tial; -ant, -ance; –ancy and -ation• I can use the –ent, -ence and –ency after the ‘soft c’ sound, ‘soft g’ and ‘qu’• I can distinguish between the –able, -ably; -ible, -ibly; -ant, -ancy, -ancy and –able endings• I understand that if the –able ending is used there is a related word ending in –ation (considerable/consideration)• I can add suffixes beginning with vowel letters to words ending in –fer (referring, referred, reference)• I can use hyphens appropriately to join a prefix to a root word• To distinguish between words with –ie and –ei• I can spell words containing the letter string -ough• I can spell words with ‘silent’ letters [for example, knight, psalm, solemn]• I can distinguish between homophones and other words which are often confused• I use knowledge of morphology and etymology to spell complex words• I can use dictionaries to check the spelling and meaning of words• I can use a thesaurus		

Languages Writing: Handwriting	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none"> to sit correctly at a table, holding a pencil comfortably and correctly to begin to form lower-case letters in the correct direction, starting and finishing in the right place to form capital letters of the correct size, orientation and relationship to one another to form digits 0-9 of the correct size and orientation to understand which letters belong to which handwriting 'families' (ie letters that are formed in similar ways) and to practise these to accurately form lower-case letters of the correct size relative to one another to form letters ready to join and understand when it is best to leave letters unjoined to use spacing between words that reflects the size of the letters to increase the legibility, consistency and quality of their handwriting to write with increasing speed and join writing accurately 	<p>Literacy (Writing)</p> <p>40-60 months</p> <ul style="list-style-type: none"> I can give meaning to marks that I make as I draw, write and paint I can use some clearly identifiable letters to communicate meaning, representing some sounds correctly and in sequence <p>PD (Moving and handling)</p> <p>40-60 months</p> <ul style="list-style-type: none"> I show a preference for a dominant hand I am beginning to use anti-clockwise movement and retrace vertical lines I am beginning to form recognisable letters I use a pencil and hold it effectively to form recognisable letters, most of which are correctly formed <p>Early Learning Goal</p> <ul style="list-style-type: none"> I handle equipment and tools effectively, including pencils for writing <p>Exceeding statements</p> <ul style="list-style-type: none"> I can hold paper in position and use my preferred hand for writing, using a correct pencil grip I am beginning to be able to write on the lines and control letter size 	<ul style="list-style-type: none"> I can sit at a table and hold a pencil correctly I can form some lower case letters accurately I can form some capital letters I can form the digits 0-9 I identify which letters are formed in similar ways I can use a keyboard to type my own name I accurately write the digits 0-9 I can write lower case and capital letters with the correct orientation and of the correct size I space my words out nicely I can often use capital letters and lower case letters in the right place 	<ul style="list-style-type: none"> My handwriting is well formed, evenly spaced and consistent in size. I am starting to join my writing. 	<ul style="list-style-type: none"> I can write quickly and neatly I join my writing accurately 		

Languages MFL	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none"> to listen attentively to spoken language and show understanding by joining in and responding to explore the patterns and sounds of language through songs and rhymes and link the spelling, sound and meaning of words to engage in conversations; ask and answer questions; express opinions and respond to those of others; seek clarification and help to speak in sentences, using familiar vocabulary, phrases and basic language structures to develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases to present ideas and information orally to a range of audiences to read carefully and show understanding of words, phrases and simple writing to appreciate stories, songs, poems and rhymes in the language to broaden their vocabulary and develop their ability to understand new words that are introduced into familiar written material, including through using a dictionary to write phrases from memory, and adapt these to create new sentences, to express ideas clearly to describe people, places, things and actions orally and in writing to understand basic grammar appropriate to the language being studied, including (where relevant): feminine, masculine and neuter forms and the conjugation of high-frequency verbs; key features and patterns of the language; how to apply these, for instance, to build sentences; and how these differ from or are similar to English 	<p><i>CL (Listening and Attention)</i></p> <p>40-60 months</p> <ul style="list-style-type: none"> I maintain attention, concentrate and sit quietly during appropriate activity <p>Early Learning Goal</p> <ul style="list-style-type: none"> I listen attentively in a range of situations <p><i>CL (Speaking)</i></p> <p>40-60 months</p> <ul style="list-style-type: none"> I extend my vocabulary, especially by grouping and naming, exploring the meaning and sounds of new words 	<p>Listening and responding</p> <ul style="list-style-type: none"> I can understand a range of familiar statements and questions I can understand short sentences if they are repeated. I can name and describe people, places and objects I can use set phrases I can give hesitant but clear responses <p>Reading</p> <ul style="list-style-type: none"> I can read short phrases presented in a familiar context. I can use books or glossaries to find out the meanings of new words. <p>Writing</p> <ul style="list-style-type: none"> I can copy familiar short phrases correctly I can write simple phrases used regularly in class My spelling is usually good enough to be read accurately 	<p>Listening and responding</p> <ul style="list-style-type: none"> I can understand short passages (instructions, messages and dialogues) spoken at normal speed I can identify and note main points from a passage, for example, likes, dislikes and feelings I can take part in brief exchanges, using visual or other cues to help me I can use short phrases to give a personal response <p>I mostly use memorised language, but occasionally substitute vocabulary to vary questions or statements</p> <p>Reading</p> <ul style="list-style-type: none"> I can read and understand short texts and dialogues independently I can identify the main points of a short text and respond I can select appropriate texts independently <p>Writing</p> <ul style="list-style-type: none"> I can write two or three short sentences on familiar topics I can write about my likes dislikes and feelings I can write short phrases from memory My good spelling makes my work easy to read 	<p>Speaking and Listening</p> <ul style="list-style-type: none"> I understand longer passages, made up of familiar language in simple sentences I can identify smaller details in spoken passages I can hold a simple conversation with more than 4 exchanges I can use my knowledge of grammar to adapt single words and phrases. My pronunciation is generally accurate and consistent <p>Reading</p> <ul style="list-style-type: none"> I can read and understand longer passages of stories and factual texts I can identify the main points and finer details <p>Writing</p> <ul style="list-style-type: none"> I can write individual paragraphs of three or four simple sentences, mainly using memorised language. I am beginning to use my knowledge of grammar to substitute words for effect I am beginning to use dictionaries or glossaries to check words I have learnt. 	<p>Reading</p> <ul style="list-style-type: none"> I can use the context of a text to work out unfamiliar words mean. I can read extended factual texts and short stories <p>Writing</p> <ul style="list-style-type: none"> I can write complete texts on a familiar subject I experiment with new, unfamiliar vocabulary I confidently use my knowledge of grammar to substitute words to good effect I confidently use dictionaries or glossaries to check words I have learnt. 	

Appendix 2

Mathematics

- Number
- Calculation: Addition & Subtraction
- Calculation: Multiplication & Division
- Fractions (Including Decimals and Percentages)
- Measurement
- Geometry
- Statistics
- Ratio & Proportion
- Algebra

Mathematics Number	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none"> to count to and across 100, forwards and backwards, beginning with 0 or 1, from any given number to read and write numbers from 1 to 100 in numerals and words to count in multiples of 2, 5 and 10 to identify a number one more or one less than a given number to count in steps of 2, 3, 5 from 0 and 10 from any number, forwards or backwards to compare and order numbers to 100 using <, > and = to identify, represent and estimate numbers using objects and pictorial representations including the number line, and use the language of equal to, more than, less than, fewer, most, least to recognise the place value of each digit in a 2-digit number to use place value and number facts to solve problems <ul style="list-style-type: none"> to count from 0 in multiples of 4, 6, 7, 8, 9, 25, 50, to find 100 or 1000 more or less than a given number to count backwards through 0 to include negative numbers to partition 3-digit and 4-digit numbers to read and write numbers to 1000 in numerals and words to order and compare numbers up to and beyond 1000 to identify, represent and estimate numbers using different representations to round any number to the nearest 10, 100 or 1000 to solve number and practical problems involving increasingly large numbers to read Roman numerals to 100 (C) and know that over time, the number system changed to include the concept of 0 and place value <ul style="list-style-type: none"> to read, write, order and compare numbers up to 10,000,000 to count forwards or backwards in steps of power of 10 for any given number up to 1,000,000 to round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 or 100,000 to partition numbers up to 10,000,000 to round any number to a required degree of accuracy to use negative numbers in context and calculate intervals across zero to read Roman numerals to 1000 (M) and recognise years written in Roman numerals to solve number and practical problems 	<p>Mathematics (Numbers)</p> <p>40-60 months</p> <ul style="list-style-type: none"> I can recognise some numerals of personal significance I can recognise numerals 1 to 5 I can count up to three or four objects by saying one number name for each item I can count actions or objects which cannot be moved I can count objects to 10, and am beginning to count beyond 10 I can count out up to six objects from a larger group I can select the correct numeral to represent 1 to 5, then 1 to 10 objects I can count an irregular arrangement of up to ten objects I can estimate how many objects I can see and check by counting them. I use the language of 'more' and 'fewer' to compare two sets of objects. I can say the number that is one more than a given number. I can find one more or one less from a group of up to five objects, then ten objects I record using marks that I can interpret and explain I begin to identify my own mathematical problems based on my own interests and fascinations <p>Early Learning Goal</p> <ul style="list-style-type: none"> I can count reliably from 1 to 20 and place the numbers in order I can say which number is 1 more or 1 less than a given number to 20 <p>Exceeding statements</p> <ul style="list-style-type: none"> I can estimate a number of objects and check quantities by counting up to 20 I can solve practical problems that involve combining groups of 2, 5 or 10, or sharing into equal groups 	<ul style="list-style-type: none"> I can count to and across 100 from any given number, forwards to backwards I can read and write numbers to 100 I can write numbers to 20 in words I can count in 2s, 5s and 10s I can find one more or one less than a number I can count from 0 in 2s, 3s, 5s I can count in 10s from any number, forwards and backwards I know 2, 5 and 10 times tables I can partition 2-digit numbers I can order numbers to 100, using < and > I can write numbers to 100 in words I can use place value and number facts to solve problems 	<ul style="list-style-type: none"> I can count from 0 in 4s, 8s, 50s and 100s I can find 10 or 100 more or less than any given number I can partition 3-digit numbers I can order numbers to 1000, using < and > I can read and write numbers to 1000 in words I can solve number problems I can count from 0 in 6s, 7s, 8s, 9s and 25s I can find 1000 more or less than any given number I can count backwards through 0 to include negative numbers I can partition 4-digit numbers I can round numbers to the nearest 10, 100 and 1000 I can read Roman numerals to 100 (C) 	<ul style="list-style-type: none"> I can read and write numbers to 1,000,000 I can order numbers to 1,000,000 I can partition numbers to 1,000,000 I can count forwards or backwards in steps of powers of 10 for any number up to 1,000,000 I can count forwards and backwards through 0, including negative numbers I can round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000 I can solve number problems I can read Roman numerals to 1000 (M) and recognise years written in Roman numerals I can read and write numbers to 10,000,000 I can order numbers to 10,000,000 I can partition numbers to 10,000,000 I can round any number to a required degree of accuracy I can use negative numbers in context I can calculate intervals across 0 	<ul style="list-style-type: none"> I can use place value for decimals, measures and integers of any size I can order positive and negative integers, decimals and fractions I can use the number line as a model for ordering of the real numbers I can use the symbols =, ≠, <, >, ≤, ≥ I can 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 I can use integer powers and associated real roots (square, cube and higher), I recognise powers of 2, 3, 4, 5 and distinguish between exact representations of roots and their decimal approximations I can interpret and compare numbers in standard form $A \times 10^n$ $1 \leq A < 10$, where n is a positive or negative integer or 0 I can round numbers and measures to an appropriate degree of accuracy [for example, to a number of decimal places or significant figures] I can use approximation through rounding to estimate answers and calculate possible resulting errors expressed using inequality notation $a < x \leq b$ I appreciate the infinite nature of the sets of integers, real and rational numbers 	

Mathematics Calculation: Addition & Subtraction	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none"> to read, write and interpret mathematical statements involving addition, subtraction and equals signs to represent and use number bonds and related subtraction facts within 20 and derive and use related facts up to 100 to add and subtract 1-digit and 2-digit numbers to 20, including 0 to solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods to add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers to show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot to recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. to add and subtract numbers mentally, including: a three-digit number and ones; a three-digit number and tens; a three-digit number and hundreds to estimate the answer to a calculation and use inverse operations to check answers to add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate to solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. to solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. to add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) to add and subtract numbers mentally with increasingly large numbers to use rounding and estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy to solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why 	<p>Mathematics (Numbers)</p> <ul style="list-style-type: none"> I can find the total number of items in two groups by counting all of them. In practical activities and discussion, I am beginning to use the vocabulary involved in adding and subtracting <p>Early Learning Goal</p> <ul style="list-style-type: none"> Using quantities and objects, I can add and subtract two single digit numbers I can count on and back to find an answer 	<ul style="list-style-type: none"> I can use objects to take away a small number from any number up to 20 I can add and subtract some 2-digit and 1-digit numbers to 20, including 0 I can talk about adding and subtracting I can use the signs +, – and = when I write addition and subtraction sentences I can solve missing number problems e.g. 7 = _ - 9 I know pairs of numbers that total 10 I know pairs of numbers that total 20 I can add and subtract 2-digit and 1-digit numbers I can add and subtract three single digit numbers I can add and subtract some 2-digit and tens numbers I can add and subtract bigger numbers (2-digit and 2-digit) I can work out the missing number in a number sentence such as $14 + _ = 35$ using number facts to 100 I know that addition can be done in any order and subtraction cannot I know that addition and subtraction are inverse 'undo each other' 	<ul style="list-style-type: none"> I can add and subtract one–digit and three–digit numbers in my head (e.g. $162+7$, $7+145$, $248-6$, $160-8$) I can explain how I add and subtract numbers in my head I can add and subtract three-digit and tens numbers in my head (e.g. $126 + 40$, $243 - 20$) I can add and subtract three-digit and hundreds numbers in my head (e.g. $126 + 400$, $243 - 100$) I can estimate the answer and use inverse operations to check my answer I can add and subtract 2-digit numbers using the formal column method for addition and subtraction I can add and subtract 3-digit numbers using the formal column method for addition and subtraction I can solve addition and subtraction word problems using mental and formal written methods as appropriate I can add and subtract 4-digit numbers using the formal column method for addition and subtraction I can solve 2-step addition and subtraction word problems using mental and formal written methods as appropriate I can explain why I have chosen a particular method I can add and subtract amounts of money, including giving change using £ and p separately I can add and subtract amounts of money using decimal notation 	<ul style="list-style-type: none"> I can add increasingly large numbers mentally e.g. $11,567 + 231 =$ I can subtract increasingly large numbers mentally e.g. $12,462 - 2300 =$ I can add whole numbers with more than 4 digits using the formal column method I can subtract whole numbers with more than 4 digits using the formal column method I can use rounding to check my answers I can solve addition and subtraction multi-step problems, deciding which operations and methods to use and why, including those involving decimals up to 3 d.p. 	<ul style="list-style-type: none"> I can use the four operations, including formal written methods, applied to integers, decimals, proper and improper fractions, and mixed numbers, both positive and negative I can use conventional notation for the priority of operations, including brackets, powers, roots and reciprocals I recognise and use relationships between operations including inverse operations I can use a calculator and other technologies to calculate results accurately and then interpret them appropriately 	

Mathematics Calculation: Multiplication & Division	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none">to recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbersto calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signsto show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannotto solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.to 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 methodsto 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.to recall multiplication and division facts for multiplication tables up to 12 × 12to use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbersto recognise and use factor pairs and commutativity in mental calculationsto multiply two-digit and three-digit numbers by a one-digit number using formal written layoutto 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.to identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbersto know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbersto establish whether a number up to 100 is prime and recall prime numbers up to 19to multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbersto multiply and divide numbers mentally drawing upon known factsto divide numbers up to 4 digits by a one-digit number or two-digit number using the formal written method of short division and interpret remainders appropriately for the contextto interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the contextto multiply and divide whole numbers and those involving decimals by 10, 100 and 1000to solve problems involving multiplication and divisionto use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy	<p>Mathematics (Numbers)</p> <p>Early Learning Goal</p> <ul style="list-style-type: none">I can solve problems, including doubling, halving and sharing.	<ul style="list-style-type: none">I can recall the 2, 5 and 10 times-tablesI recognise odd and even numbersI know doubles of numbers up to 10 and I can use what I know to work out halvesI can solve simple problems involving multiplication and division using objects, picture or simple arrays with supportI can use a number line (repeated addition) to solve multiplication and division questions and can work out remainders if there are anyI can use arrays to solve multiplication and division questions and can work out remainders if there are anyI know how to write number sentences for multiplication and division and I can explain what my number sentence meansI know that multiplication can be done in any order (commutative) and division cannotI can solve multiplication and division problems in context using mental and written methods	<ul style="list-style-type: none">I can recall multiplication facts for tables up to 12x12 and corresponding division factsI can use multiplication facts to work out 2-digit by 1-digit multiplication in my headI can use multiplication facts when dividing a 1-digit number into a 2-digit number in my headI can solve multiplication and division problems, including missing number problemsI can count in multiples of 6, 7, 9, 25 and 1000I can multiply 3 numbers including 1 and 0 and know that I can do this in any orderI can find related multiplication and division facts using the times tables I know e.g. 3x4 =12 so 120÷4=30I can use the distributive law to multiply 2-digit by 1-digit numbers e.g. 39x7= 30x7+9x7I can use formal written methods when multiplying and dividing 2-digit and 1-digit numbersI can use formal written methods when multiplying and dividing 3-digit and 1-digit numbers	<ul style="list-style-type: none">I can find all factor pairs of a given numberI can find common factors of two given numbersI can recall all prime numbers up to 19 and work out whether a number up to 100 is primeI can use the vocabulary 'prime number' and 'composite number'I can write a given number as a product of its prime factorsI can recognise and use square and cube numbers and the correct notationI can use what I know about square and cube numbers to create equivalence statements e.g. 4 x 35 = 2² x 35I can multiply and divide mentally using know number factsI can multiply up to 4-digit numbers by a 2-digit number using long multiplicationI can divide up to 4-digit numbers by a 1-digit number using short division.I can show non whole number answers with remainders, fractions, decimals or use rounding e.g. 98 ÷ 4 = 24r2 = 24 ½ = 24.5 ≈ 25I can use the equals sign to show equivalence when solving missing number calculationsI can solve problems involving multiplication and division, including using my knowledge of factors, multiples, squares and cubesI can multiply 1-digit numbers with up to 3 decimal places by whole numbersI can divide up to 4-digit numbers by a 2-digit number using long divisionI can use my knowledge of the order of operations to carry out calculations involving the four operations, including those involving brackets e.g. 2 + 1 x 3 = 5, (2 + 1) x 3 = 9I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	<ul style="list-style-type: none">I can use the four operations, including formal written methods, applied to integers, decimals, proper and improper fractions, and mixed numbers, both positive and negativeI can use conventional notation for the priority of operations, including brackets, powers, roots and reciprocalsI recognise and use relationships between operations including inverse operationsI can use a calculator and other technologies to calculate results accurately and then interpret them appropriately	

Mathematics Fractions (Including Decimals and Percentages)	Skills					Teaching and learning
	EYFS (40-60 months)	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none">to recognise, find and name a half as one of two equal parts of an object, shape or quantityto recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.to recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantityto write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of 2/4 and 1/2to 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 10to count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.to recognise and write decimal equivalents of any number of tenths or hundredthsto recognise and write decimal equivalents to 1/4 1/2 3/4to recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominatorsto recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominatorsto compare and order unit fractions, and fractions with the same denominatorsto recognise and show, using diagrams, families of common equivalent fractionsto solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole numberto add and subtract fractions with the same denominatorto 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 hundredthsto round decimals (1dp) to the nearest whole numberto compare numbers with the same number of decimal places up to two decimal placesto solve simple measure and money problems involving fractions and decimals to two decimal placesto compare and order fractions, including fractions > 1to name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredthsto recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed numberto add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractionsto multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagramsto divide proper fractions by whole numbersto associate a fraction with division and calculate decimal fraction equivalents for a simple fraction [eg; $0.375 = \frac{3}{8}$]to recognise and use thousandths and relate them to tenths, hundredths and decimal equivalentsto read and write decimal numbers as fractionsto round decimals with two decimal places to the nearest whole number and to one decimal placeto read, write, order and compare numbers with up to three decimal placesto solve problems involving numbers with up to three decimal placesto recognise the % symbol and understand that it relates to 'parts per hundred', and write percentages as a fraction with denominator 100, and as a decimalto solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25.to use common factors to simplify fractions; use common multiples to express fractions in the same denominationto multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places	<p>Mathematics (Numbers)</p> <p>Early Learning Goal</p> <ul style="list-style-type: none">I can solve problems, including doubling, halving and sharing.	<ul style="list-style-type: none">I can find half of objects and shapesI can find half of a small numberI can find a quarter of objects and shapesI can find a quarter of a small numberI know doubles of numbers up to 10 and I can use what I know to work out halvesI understand the connection between doubling and halvingI can use my knowledge of halving numbers to help me to work out half and a quarter of a set of objects or a shapeI can also work out three quartersI can write $\frac{1}{2}$ $\frac{1}{4}$ and $\frac{3}{4}$ and simple fractions e.g. $\frac{1}{2}$ of 6 = 3I can find, name and write 1/3 of an object, shape or numberI recognise the equivalence of $\frac{1}{2}$ and $\frac{2}{4}$	<ul style="list-style-type: none">I can count up and down in tenthsI can divide a quantity by 10 to find a tenthI can place fractions on a number line, including non-unit fractions e.g. $\frac{2}{3}$ as well as unit fractions $\frac{1}{4}$I can compare and order unit fractions and fractions with the same denominatorI can add and subtract fractions with the same denominator within one whole e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$I recognise and can show equivalent fractions using diagramsI can show families of common equivalent fractions e.g. $\frac{1}{2} = \frac{2}{4} = \frac{5}{10} = \frac{50}{100}$I can count in hundredths.I can multiply and divide by 10 and 100, including 1-digit and 2-digit numbers. I can explain what happens to the digits when I do this and use the terms units, tenths and hundredthsI can find decimal equivalents of any number of tenths or hundredths and $\frac{1}{4}$ and $\frac{3}{4}$I can order numbers with the same number of decimal places up to 2 decimal placesI can find fractions of measurements in context by dividing and multiplying if necessary e.g. $\frac{1}{4}$, $\frac{3}{4}$, $\frac{1}{3}$, $\frac{2}{3}$I can solve measurement problems, including those involving fractions and decimals up to 2 decimal places	<ul style="list-style-type: none">I recognise and use thousandths and relate them to tenths, hundredths and decimal equivalentsI can compare and order fractions whose denominations are all multiples of the same numberI can identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredthsI recognise mixed number and improper fractions and convert from one to anotherI can add and subtract fractions with the same denominatorI can add and subtract fractions with mixed numbers and different denominators, using common multiples to express fractions is the same denominationI can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagramsI can multiply simple pairs of proper fractions, giving the answer in its simplest form e.g. $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$I can divide proper fractions by whole numbers e.g. $\frac{1}{3} \div 2 = \frac{1}{6}$I associate fractions with division and calculate decimal fraction equivalents e.g. $\frac{3}{8} = 0.375$I can read and write decimal numbers as fractionsI can round decimals with two decimal places to the nearest whole number and to one decimal placeI can read, write, order and compare numbers with up to three decimal placesI recognise the percent symbol and understand that percent relates to 'number of parts per hundred' and write percentages as a fraction with denominator hundred and as a decimalI can solve problems which require knowing percentage and decimal equivalents of $\frac{1}{4}$, $\frac{1}{2}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples e.g. $\frac{3}{5}$ of the class of 30 children are boysI can solve multi-step problems, deciding which operations and methods to use and why, including those involving decimals up to 3 d.p.	<ul style="list-style-type: none">I can order positive and negative integers, decimals and fractionsI can express one quantity as a fraction of another, where the fraction is less than 1 and greater than 1I work interchangeably with terminating decimals and their corresponding fractions (such as 3.5 and $\frac{7}{2}$ or 0.375 and $\frac{3}{8}$)I can define percentage as 'number of parts per hundred', interpret percentages and percentage changes as a fraction or a decimal, interpret these multiplicatively, express 1 quantity as a percentage of another, compare 2 quantities using percentages, and work with percentages greater than 100%I can interpret fractions and percentages as operatorsI can solve problems involving percentage change, including: percentage increase, decrease and original value problems and simple interest in financial mathematicsI can use the four operations, including formal written methods, applied to integers, decimals, proper and improper fractions, and mixed numbers, both positive and negativeI understand that a multiplicative relationship between two quantities can be expressed as a ratio or a fraction	

Mathematics Measurement	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none">to choose and use appropriate standard units to estimate and measure length/height (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vesselsto compare and order lengths, mass, volume/capacity and record the results using >, < and =to recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular valueto find different combinations of coins that equal the same amounts of moneyto solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving changeto sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]to recognise and use language relating to dates, including days of the week, weeks, months and yearsto compare and sequence intervals of timeto tell/write the time to five minutes, including quarter past/to and draw hands on a clock face to show theseto know the number of minutes in an hour and the number of hours in a day.to measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)to convert between different units of measureto measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metresto find the area of rectilinear shapes by counting squares □ estimate, compare and calculate different measures, including money in pounds and penceto add and subtract amounts of money to give change, using both £ and p in practical contextsto tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocksto estimate and read time with 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 midnightto know the number of seconds in a minute and the number of days in each month, year and leap yearto compare durations of events [for example to calculate the time taken by particular events or tasks].to use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller to larger unit of measure, and vice versa, using decimal notation up to three decimal placesto understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pintsto convert between miles and kilometresto recognise that shapes with the same areas can have different perimeters and vice versato measure and calculate the perimeter of composite rectilinear shapes in centimetres and metresto calculate and compare the area of rectangles (inc. squares) using standard units, square cm (cm2) and square m (m2) and estimate the area of irregular shapesto recognise when it is possible to use formulae for area and volume of shapesto calculate the area of parallelograms and trianglesto calculate, estimate and compare volume of cubes and cuboids using standard units, including cm3 and m3, and extending to other units [for example, mm3 and km3].to solve problems involving converting units of timeto use all four operations to solve problems involving measures, using decimal notation, including scaling.to solve problems involving the calculation/conversion of units of measure, using up to 3 decimal places	<p>Mathematics (Shape, space and measures)</p> <p>40-60 months</p> <ul style="list-style-type: none">I can order two or three items by length or heightI can order two items by weight or capacityI can use everyday language related to timeI am beginning to use everyday language related to moneyI can order and sequence familiar eventsI can measure short periods of time in simple ways <p>Early Learning Goal</p> <ul style="list-style-type: none">I can use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems <p>Exceeding statements</p> <ul style="list-style-type: none">I can estimate, measure, weigh and compare and order objects and talk about properties, position and time	<ul style="list-style-type: none">I can measure length or height in m and cm; weight or mass in kg or g and capacity in l or mlI can compare and order lengths, heights, weights, masses and capacities and record the results using < and >I can measure temperature in degrees celcius using a thermometerI can compare and order temperature and record the results using < and >I recognise coins and notes and can use £ and pI can find different combinations of coins which equal the same amount of moneyI can solve simple addition and subtraction problems involving money of the same unit in a practical contextI can give change in practical situations using either £ or pI know the days of the week and can say them in orderI can estimate how long an activity might take, then check using a timerI can tell the time when it is something o'clock and half past the hour.I can tell the time to the nearest 5 minutes.I can draw hands on a clock to show these timesI know the number of minutes in a hour and the number of hours in a day	<ul style="list-style-type: none">I can measure lengths in m, cm and mm; mass in kg and g and capacity/volume in l and mlI can compare lengths in m, cm and mm; mass in kg and g and capacity/volume in l and mlI can add and subtract lengths in m, cm and mm; mass in kg and g and capacity/volume in l and mlI can find fractions of lengths, mass and capacities in context by dividing and multiplying if necessary e.g. ¼, ¾, 1/3, 2/3I can convert between different units of measure e.g. kilometre to metre; kilograms to grams and litres to millilitresI can measure the perimeter of simple 2-D shapesI can find the area of a shape by counting squaresI can solve measurement problems, including those involving fractions and decimals up to 2 decimal placesI can add and subtract amounts of money, including giving change using £ and p separatelyI can tell the time to the nearest minute on an analogue clock I can use words such as am/pm, morning, afternoon, noon and midnight accuratelyI can tell the time from a clock with Roman numeralsI can read the time to the nearest minute on a 12 hour digital clock I can use words such as am/pm, morning, afternoon, noon and midnight accuratelyI know the number of seconds in a minute, the number of days in each month, year and leap yearI can compare times and durations of events in terms of seconds, minutes and hoursI can read 24hr clocksI can write and convert times between analogue and 24hr digital clocksI can solve problems involving time including converting from hours to minutes; minutes to seconds; years to months; weeks to days	<ul style="list-style-type: none">I can convert between different units of measure e.g. kilometre and metre; centimetre and metre; gram and kilogram; millilitre and litreI can use equivalences between metric units and common imperial units such as inches, pints and poundsI can find the perimeter of composite rectilinear shapes in cm and mI can calculate and compare the area of rectangles (including squares) using standard units e.g. cm² and m²I can estimate the area of irregular shapesI can find unknown lengths using what I know about perimeter and area and express algebraically e.g. 4 + 2b = 20 for a rectangle of sides 2cm and bcm and perimeter of 20cmI recognise that shapes with the same areas can have different perimeters and vice versaI can calculate, estimate and compare volume of cubes and cuboids using cm³, m³, mm³ and km³I recognise when it is possible to use formulae for area and volume of shapesI can find the area of parallelograms and trianglesI can convert between kilometres and milesI can use all four operations to solve problems involving measure, including using decimal notationI can solve problems which involve converting between units of time	<ul style="list-style-type: none">I can use standard units of mass, length, time, money and other measures, including with decimal quantitiesI can 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)I can calculate and solve problems involving: perimeters of 2-D shapes (including circles), areas of circles and composite shapes	

Mathematics Geometry	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none">to recognise and name common 2-D and 3-D shapes, including: 2-D shapes [for example, rectangles (including squares), circles and triangles]; 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]to identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical lineto identify and describe the properties of 3-D shapes, including the number of edges, vertices and facesto identify 2-D shapes on the surface of 3-D shapes [eg; a circle on a cylinder and a triangle on a pyramid]to compare and sort common 2-D and 3-D shapes and everyday objects.to order and arrange combinations of mathematical objects in patterns and sequencesto 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).to draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe themto compare and classify geometric shapes, including quadrilaterals and triangles, based on property and sizeto recognise angles as a property of shape or a description of a turnto 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 angleto identify acute and obtuse angles and compare and order angles up to two right angles by sizeto identify horizontal and vertical lines and pairs of perpendicular and parallel lines.to identify lines of symmetry in 2-D shapes presented in different orientationsto complete a simple symmetric figure with respect to a specific line of symmetry.to describe positions on a 2-D grid as coordinates in the first quadrantto describe movements between positions as translations of a given unit to the left/right and up/downto plot specified points and draw sides to complete a given polygon.to identify 3-D shapes, including cubes and other cuboids, from 2-D representationsto know angles are measured in degrees: estimate and compare acute, obtuse and reflex anglesto draw given angles, and measure them in degrees (°)to identify angles at a point and one whole turn (total 360°); angles at a point on a straight line and ½ a turn (total 180°) and other multiples of 90°to use the properties of rectangles to deduce related facts and find missing lengths and anglesto distinguish between regular and irregular polygons based on reasoning about equal sides and angles.to 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 changedto draw 2-D shapes using given dimensions and anglesto recognise, describe and build simple 3-D shapes, including making netsto compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygonsto illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radiusto describe positions on the full coordinate grid (all four quadrants)	<p>Mathematics (Shape, Space and Measure)</p> <p>40-60 months</p> <ul style="list-style-type: none">I am beginning to use mathematical names for 3D shapes and 2D shapes and mathematical terms to describe shapesI can select a particular named shapeI can describe relative position such as ‘behind’ or ‘next to’I can use familiar objects and common shapes to create and recreate patterns and build models <p>Early Learning Goal</p> <ul style="list-style-type: none">I can use everyday language to talk about positionI can compare objectsI recognise, create and describe patterns.I can use mathematical language to describe characteristics of everyday objects and shapes.	<ul style="list-style-type: none">I can name most of the 2-D and 3-D shapes I use in my work as well as those I see around meI can use shapes to copy and continue a simple patternI can identify properties of 2-D and 3-D shapesI can sort a set of 2-D or 3-D shapesI can identify 2-D shapes on the surfaces of 3-D shapesI can draw a line of symmetry on a 2-D shapeI know how to turn right and to turn leftI can describe whole, half, quarter or three quarter turns, either clockwise or anticlockwiseI can recognize right angles in quarter, half and three quarter turns	<ul style="list-style-type: none">I can draw 2-D shapesI can talk about the properties of the shapes I draw and makeI can use what I know about polygons to group them into regular and irregular polygonsI can identify horizontal, vertical, and pairs of parallel and perpendicular linesI can make 3-D shapes using modelling materialsI can pick out symmetrical and non-symmetrical 2-D and 3-D shapesI can identify lines of symmetry in 2-D shapes in different orientationsI can draw the other half of a symmetrical shape or the reflection of a shape/pattern where the line of symmetry doesn't go through the shapeI can recognise equilateral, isosceles and scalene trianglesI can recognise different quadrilaterals e.g. parallelogram, rhombus and trapeziumI can describe angles as right, acute or obtuse and order anglesI know that an angle is a measure of a turn: one right angle is a quarter turn, two right angles make a half turn, three make three quarter turns and four a whole turnI can use the eight compass pointsI can draw axes with equal scales and plot given coordinates, including drawing sides to complete a polygonI can describe movements between coordinates in terms of units and direction e.g. 3 units right or 4 units down	<ul style="list-style-type: none">I can identify 3-D shapes from 2-D representationsI can sort shapes according to their properties and explain how I sorted themI can illustrate and name parts of a circle, including radius, diameter and circumference and I know that the diameter is twice the radiusI can use conventional markings for parallel linesI know angles are measured in degrees and I can estimate and compare acute, obtuse and reflex anglesI can measure angles in degreesI can draw given angles, using a protractor, and use conventional markings for right anglesI can find unknown angles in any triangles, quadrilaterals and regular polygonsI recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing anglesI can draw 2-D shapes using given dimensions and anglesI can make nets for simple 3-D shapes using a ruler and protractor accuratelyI can draw the reflection of a shape in lines that are parallel to the axes, working in the first quadrantI can draw a shape following a translation in the first quadrantI can draw and label a pair of axes in all 4 quadrantsI can read coordinates in the full coordinate grid (all 4 quadrants)I can draw rectangles (including squares), parallelograms and rhombuses, specified by coordinates in the four quadrantsI can use what I know about shapes to predict missing coordinatesI can reflect shapes in the axes using all four quadrantsI can translate shapes on the coordinate plane and express translations algebraically e.g. (a,b) to (a-2, b+3); (a,b) and (a+d, b+d) being opposite vertices of a square of side dI can solve problems involving similar shapes where the scale factor is known or can be found	<ul style="list-style-type: none">I can draw and measure line segments and angles in geometric figures, including interpreting scale drawingsI can 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 lineI can 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 I can use the standard conventions for labelling the sides and angles of triangle ABC, and know and use the criteria for congruence of trianglesI can derive and illustrate properties of triangles, quadrilaterals, circles, and other plane figures [for example, equal lengths and angles] using appropriate language and technologiesI can identify properties of, and describe the results of, translations, rotations and reflections applied to given figuresI can identify and construct congruent triangles, and construct similar shapes by enlargement, with and without coordinate gridsI can apply the properties of angles at a point, angles at a point on a straight line, vertically opposite anglesI understand and use the relationship between parallel lines and alternate and corresponding anglesI can 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 polygonsI 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 proofsI use Pythagoras’ Theorem and trigonometric ratios in similar triangles to solve problems involving right-angled trianglesI use the properties of faces, surfaces, edges and vertices of cubes, cuboids, prisms, cylinders, pyramids, cones and spheres to solve problems in 3-D	

Mathematics Statistics	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none"> to interpret and construct simple pictograms, tally charts, block diagrams and tables to ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity to ask-and-answer questions about totalling and comparing categorical data to interpret and present data using bar charts, pictograms and tables to 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 to interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs to solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs to solve comparison, sum and difference problems using information presented in a line graph to complete, read and interpret information in tables, including timetables to interpret and construct pie charts and line graphs and use these to solve problems to calculate and interpret the mean as an average 	<p>Mathematics (Shape, Space and Measure)</p> <p>Early Learning Goal</p> <ul style="list-style-type: none"> I can compare objects 	<ul style="list-style-type: none"> I can sort objects and talk about how I sorted them (Carroll/Venn diagram) I can decide what information I need to answer a question I can put information in tally charts or tables I can draw a simple pictogram to show what I found out I can make block graphs and get information from other people's graphs I can find totals and make comparisons 	<ul style="list-style-type: none"> I can collect data and present it in a table I can explain what a table tells me I can use a simple scale e.g. 2, 5 or 10 units per cm and present my data in a bar chart or pictogram I can tell people what I have found out using my graph I can solve one-step and two-step questions about the information in a table and bar chart I can present continuous data in a time graph I can explain what my time graph tells me I can solve comparison, sum and difference problems using data presented in bar charts, tables and pictograms 	<ul style="list-style-type: none"> I can explain why I chose to represent data using a particular table, graph or chart I can explain what a table or graph or chart tells us and consider questions that it raises I can make comparisons using information presented in a line graph I can solve sum and difference problems using information presented in a line graph I can read and interpret information in tables, including timetables I know when it is appropriate to find the mean and calculate it I can interpret pie charts using what I know about angles, fractions and percentages I can create pie charts using what I know about angles, fractions and percentages I can interpret a graph showing the conversion of kilometres to miles 	<ul style="list-style-type: none"> I can 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) I can 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 I can describe simple mathematical relationships between 2 variables (bivariate data) in observational and experimental contexts and illustrate using scatter graphs 	

Mathematics Ratio and Proportion	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none">• to solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts• to solve problems involving the calculation of percentages [for example, of measures and such as 15% of 360] and the use of percentages for comparison• to solve problems involving similar shapes where the scale factor is known or can be found• to solve problems involving unequal sharing and grouping using knowledge of fractions and multiples				<ul style="list-style-type: none">• I can solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts• I can solve problems involving the calculation of percentages• I can solve problems involving similar shapes where the scale factor is known or can be found• I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples e.g. $\frac{3}{5}$ of the class of 30 children are boys	<ul style="list-style-type: none">• I can change freely between related standard units [for example time, length, area, volume/capacity, mass]• I can use scale factors, scale diagrams and maps• I can express 1 quantity as a fraction of another, where the fraction is less than 1 and greater than 1• I can use ratio notation, including reduction to simplest form• I can divide a given quantity into 2 parts in a given part:part or part:whole ratio; express the division of a quantity into 2 parts as a ratio• I understand that a multiplicative relationship between 2 quantities can be expressed as a ratio or a fraction• I can relate the language of ratios and the associated calculations to the arithmetic of fractions and to linear functions• I can solve problems involving percentage change, including: percentage increase, decrease and original value problems and simple interest in financial mathematics• I can solve problems involving direct and inverse proportion, including graphical and algebraic representations• I can use compound units such as speed, unit pricing and density to solve problems	

Mathematics Algebra	Skills					Teaching and learning
	EYFS	KS1	LKS2	UKS2	KS3	
<ul style="list-style-type: none"> to use simple formulae to generate and describe linear number sequences to express missing number problems algebraically to find pairs of numbers that satisfy an equation with 2 unknowns to enumerate possibilities of combinations of 2 variables 				<ul style="list-style-type: none"> I can express missing number problems algebraically I can find pairs of numbers that satisfy an equation with two unknowns I can find all possibilities of combinations of two variables I can translate shapes on the coordinate plane and express translations algebraically e.g. (a,b) to (a-2, b+3); (a,b) and (a+d, b+d) being opposite vertices of a square of side d 	<ul style="list-style-type: none"> I can 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 $a \times a$, a^3 in place of $a \times a \times a$ a^2b in place of $a \times a \times b$ a/b in place of $a \div b$ coefficients written as fractions rather than as decimals brackets I can substitute numerical values into formulae and expressions, including scientific formulae I understand and use the concepts and vocabulary of expressions, equations, inequalities, terms and factors I can simplify and manipulate algebraic expressions to maintain equivalence by: <ul style="list-style-type: none"> collecting like terms multiplying a single term over a bracket taking out common factors expanding products of 2 or more binomials I understand and use standard mathematical formulae; rearrange formulae to change the subject I can model situations or procedures by translating them into algebraic expressions or formulae and by using graphs I can use algebraic methods to solve linear equations in 1 variable (including all forms that require rearrangement) I can work with coordinates in all 4 quadrants I recognise, sketch and produce graphs of linear and quadratic functions of 1 variable with appropriate scaling, using equations in x and y and the Cartesian plane I can interpret mathematical relationships both algebraically and graphically I can 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 I can use linear and quadratic graphs to estimate values of y for given values of x and vice versa and to find approximate solutions of simultaneous linear equations I can find approximate solutions to contextual problems from given graphs of a variety of functions, including piece-wise linear, exponential and reciprocal graphs I can generate terms of a sequence from either a term-to-term or a position-to-term rule I recognise arithmetic sequences and find the nth term I recognise geometric sequences and appreciate other sequences that arisechange freely between related standard units [for example time, length, area, volume/capacity, mass] 	