Helping your Child

at home

Year 6

Al Ameen Primary School

In the name of Allah, The Beneficent, The Merciful

Our vision is to develop confident well-mannered children who use their full potential and achieve their best. Children at our school will acquire the skills and knowledge required for them to live in modern Britain. Subsequently, they will become courteous, law abiding, proud and active citizens of a harmonious multi cultured society, drawing guidance from the Quran and the life of the Prophet (peace be upon him).

Assalamu Alaikum wa Rahmatullah

Thank you for taking time out to look through this guide for parents. This guide includes a wealth of information and we have put this together with the aim of keeping you informed of what we are teaching your children in school and how you can further support their learning at home.

Please note that we hold regular parent workshops which are very useful and give you practical strategies for helping your child.

We hope this guide is useful. If there is something you're not sure about, please do not hesitate to speak to us.

The following are covered in this guide:

- Curriculum content - As outlined in the government's Programmes of Study (core subjects)
- Curriculum content - As outlined in the government's Programmes of Study (foundation subjects)
- Curriculum maps (these are maps of the topics we will be teaching throughout the year)
- Helping your child read (a guide for parents)
- Recommended reading list – This is a list of age appropriate books we expect children to have read for each year group
- SATS at Key Stage 2 – How to help your child
- Helping your child with spelling (a guide for parents)
- Helping your child with writing (a guide for parents)
- Helping your child with maths (a guide for parents)
- Helping your child in the foundation subjects (a guide for parents)
- Knowledge organisers – These are a snapshot of what children have learnt for that particular topic. Currently, we have these for Science and Humanities.
- Staying healthy
- Tips for packed lunches
- Recommended websites
- School subscriptions – This is a list of subscriptions we use to aid the children's learning

All curriculum booklets and additional content can be found on our website: www.alameen.bham.sch.uk

Curriculum content as outlined in the government's Programmes of Study

English		
By the end of year 6, pupils' reading and writing should be sufficiently fluent and effortless for them to manage the general demands of the curriculum in year 7, across all subjects and not just in English, but there will continue to be a need for pupils to learn subject specific vocabulary. They should be able to reflect their understanding of the audience for and purpose of their writing by selecting appropriate vocabulary and grammar.		
Word Reading	**Children will be taught to:**	
	1	apply their growing knowledge of root words, prefixes and suffixes (morphology and etymology), as listed in English Appendix 1, both to read aloud and to understand the meaning of new words that they meet.
Reading - Comprehension	**Children will be taught to:**	
	1	maintain positive attitudes to reading and understanding of what they read by: ○ continuing to read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or textbooks ○ reading books that are structured in different ways and reading for a range of purposes ○ increasing their familiarity with a wide range of books, including myths, legends and traditional stories, modern fiction, fiction from our literary heritage, and books from other cultures and traditions ○ recommending books that they have read to their peers, giving reasons for their choices ○ identifying and discussing themes and conventions in and across a wide range of writing ○ making comparisons within and across books ○ learning a wider range of poetry by heart ○ preparing poems and plays to read aloud and to perform, showing understanding through intonation, tone and volume so that the meaning is clear to an audience
	2	understand what they read by: ○ checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context ○ asking questions to improve their understanding ○ drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence ○ predicting what might happen from details stated and implied ○ summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas ○ identifying how language, structure and presentation contribute to meaning
	3	discuss and evaluate how authors use language, including figurative language, considering the impact on the reader
	4	distinguish between statements of fact and opinion
	5	retrieve, record and present information from non-fiction
	6	participate in discussions about books that are read to them and those they can read for themselves, building on their own and others' ideas and challenging views courteously
	7	explain and discuss their understanding of what they have read, including through formal presentations and debates, maintaining a focus on the topic and using notes where necessary
	8	provide reasoned justifications for their views
Writing - Transcription	**Spelling**	
	Children will be taught to:	
	1	use further prefixes and suffixes and understand the guidance for adding them
	2	spell some words with 'silent' letters [for example, knight, psalm, solemn]
	3	continue to distinguish between homophones and other words which are often confused
	4	use knowledge of morphology and etymology in spelling and understand that the spelling of some words needs to be learnt specifically, as listed in English Appendix 1
	5	use dictionaries to check the spelling and meaning of words
	6	use the first three or four letters of a word to check spelling, meaning or both of these in a dictionary
	7	use a thesaurus

	Handwriting	
	1	write legibly, fluently and with increasing speed by: ○ choosing which shape of a letter to use when given choices and deciding whether or not to join specific letters ○ choosing the writing implement that is best suited for a task.

Writing - Composition	**Children will be taught to:**	
	1	plan their writing by: ○ identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own ○ noting and developing initial ideas, drawing on reading and research where necessary ○ in writing narratives, considering how authors have developed characters and settings in what pupils have read, listened to or seen performed
	2	draft and write by: ○ selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning ○ in narratives, describing settings, characters and atmosphere and integrating dialogue to convey character and advance the action ○ précising longer passages ○ using a wide range of devices to build cohesion within and across paragraphs ○ using further organisational and presentational devices to structure text and to guide the reader [for example, headings, bullet points, underlining]
	3	evaluate and edit by: ○ assessing the effectiveness of their own and others' writing ○ proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning ○ ensuring the consistent and correct use of tense throughout a piece of writing ○ ensuring correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing the appropriate register
	4	proof-read for spelling and punctuation errors
	5	perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear
Writing – VGP*	**Children will be taught to:**	
	1	develop their understanding of the concepts set out in English Appendix 2 by: ○ recognising vocabulary and structures that are appropriate for formal speech and writing, including subjunctive forms ○ using passive verbs to affect the presentation of information in a sentence ○ using the perfect form of verbs to mark relationships of time and cause ○ using expanded noun phrases to convey complicated information concisely ○ using modal verbs or adverbs to indicate degrees of possibility ○ using relative clauses beginning with who, which, where, when, whose, that or with an implied (i.e. omitted) relative pronoun ○ learning the grammar for years 5 and 6 in English Appendix 2
	2	indicate grammatical and other features by: ○ using commas to clarify meaning or avoid ambiguity in writing ○ using hyphens to avoid ambiguity ○ using brackets, dashes or commas to indicate parenthesis ○ using semi-colons, colons or dashes to mark boundaries between independent clauses ○ using a colon to introduce a list ○ punctuating bullet points consistently
	3	use and understand the grammatical terminology in English Appendix 2 accurately and appropriately in discussing their writing and reading.

VGP = Vocabulary, Punctuation and Grammar

English - Appendix 2: Vocabulary, grammar and punctuation	
Year 6: Detail of content to be introduced	
Word	The difference between vocabulary typical of informal speech and vocabulary appropriate for formal speech and writing [for example, find out – discover; ask for – request; go in – enter] How words are related by meaning as synonyms and antonyms [for example, big, large, little].
Sentence	Use of the **passive** to affect the presentation of information in a **sentence** [for example, I broke the window in the greenhouse versus The window in the greenhouse was broken (by me)]. The difference between structures typical of informal speech and structures appropriate for formal speech and writing [for example, the use of question tags: He's your friend, isn't he?, or the use of **subjunctive** forms such as If I were or Were they to come in some very formal writing and speech]
Text	Linking ideas across paragraphs using a wider range of **cohesive devices**: repetition of a **word** or phrase, grammatical connections [for example, the use of **adverbials** such as on the other hand, in contrast, or as a consequence], and **ellipsis** Layout devices [for example, headings, sub-headings, columns, bullets, or tables, to structure text]
Punctuation	Use of the semi-colon, colon and dash to mark the boundary between independent **clauses** [for example, It's raining; I'm fed up] Use of the colon to introduce a list and use of semi-colons within lists **Punctuation** of bullet points to list information How hyphens can be used to avoid ambiguity [for example, man eating shark versus man-eating shark, or recover versus re-cover]
Terminology for pupils	subject, object active, passive synonym, antonym ellipsis, hyphen, colon, semi-colon, bullet points

Year 5 and 6 Word List				
accommodate	conscious*	forty	opportunity	stomach
accompany	controversy	frequently	parliament	sufficient
according	convenience	government	persuade	suggest
achieve	correspond	guarantee	physical	symbol
aggressive	criticise (critic + ise)	harass	prejudice	system
amateur	curiosity	hindrance	privilege	temperature
ancient	definite	identity	profession	thorough
apparent	desperate	immediate(ly)	programme	twelfth
appreciate	determined	individual	pronunciation	variety
attached	develop	interfere	queue	vegetable
available	dictionary	interrupt	recognise	vehicle
average	disastrous	language	recommend	yacht
awkward	embarrass	leisure	relevant	
bargain	environment	lightning	restaurant	
bruise	equip (–ped, –ment)	marvellous	rhyme	
category	especially	mischievous	rhythm	
cemetery	exaggerate	muscle	sacrifice	
committee	excellent	necessary	secretary	
communicate	existence	neighbour	shoulder	
community	explanation	nuisance	signature	
competition	familiar	occupy	sincere(ly)	
conscience*	foreign	occur	soldier	

Mathematics

The principal focus of mathematics teaching in upper key stage 2 is to ensure that pupils extend their understanding of the number system and place value to include larger integers. This should develop the connections that pupils make between multiplication and division with fractions, decimals, percentages and ratio.

At this stage, pupils should develop their ability to solve a wider range of problems, including increasingly complex properties of numbers and arithmetic, and problems demanding efficient written and mental methods of calculation. With this foundation in arithmetic, pupils are introduced to the language of algebra as a means for solving a variety of problems. Teaching in geometry and measures should consolidate and extend knowledge developed in number. Teaching should also ensure that pupils classify shapes with increasingly complex geometric properties and that they learn the vocabulary they need to describe them.

By the end of year 6, pupils should be fluent in written methods for all four operations, including long multiplication and division, and in working with fractions, decimals and percentages.

Pupils should read, spell and pronounce mathematical vocabulary correctly

Number & Place Value	**Children will be taught to:**	
	1	read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
	2	round any whole number to a required degree of accuracy
	3	use negative numbers in context, and calculate intervals across zero
	4	solve number and practical problems that involve all of the above
Addition, subtraction, multiplication and division	**Children will be taught to:**	
	1	multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
	2	divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
	3	divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context
	4	perform mental calculations, including with mixed operations and large numbers
	5	identify common factors, common multiples and prime numbers
	6	use their knowledge of the order of operations to carry out calculations involving the four operations
	7	solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
	8	solve problems involving addition, subtraction, multiplication and division
	9	use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
Fractions (inc decimals and percentages)	**Children will be taught to:**	
	1	use common factors to simplify fractions; use common multiples to express fractions in the same denomination
	2	compare and order fractions, including fractions > 1
	3	add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
	4	multiply simple pairs of proper fractions, writing the answer in its simplest form
	5	divide proper fractions by whole numbers
	6	associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example 3 eighths]
	7	identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places
	8	multiply one-digit numbers with up to two decimal places by whole numbers
	9	use written division methods in cases where the answer has up to two decimal places
	10	solve problems which require answers to be rounded to specified degrees of accuracy

	11	recall and use equivalences between simple fractions, decimals and percentages, including in different contexts
Ratio and proportion	**Children will be taught to:**	
	1	solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
	2	solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison
	3	solve problems involving similar shapes where the scale factor is known or can be found
	4	solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
Algebra	**Children will be taught to:**	
	1	use simple formulae
	2	generate and describe linear number sequences
	3	express missing number problems algebraically
	4	find pairs of numbers that satisfy an equation with two unknowns
	5	enumerate possibilities of combinations of two variables.
Measurement	**Children will be taught to:**	
	1	solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
	2	use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places
	3	convert between miles and kilometres
	4	recognise that shapes with the same areas can have different perimeters and vice versa
	5	recognise when it is possible to use formulae for area and volume of shapes
	6	calculate the area of parallelograms and triangles
	7	calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm3) and cubic metres (m3), and extending to other units [for example, mm3 and km3].
Geometry	**Properties of shapes**	
	Children will be taught to:	
	1	draw 2-D shapes using given dimensions and angles
	2	recognise, describe and build simple 3-D shapes, including making nets
	3	compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons
	4	illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
	5	recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.
	Position and directions	
	Children will be taught to:	
	1	describe positions on the full coordinate grid (all four quadrants)
	2	draw and translate simple shapes on the coordinate plane, and reflect them in the axes

Science

During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- using test results to make predictions to set up further comparative and fair tests
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
- identifying scientific evidence that has been used to support or refute ideas or arguments.

Living things & their habitats

Children will be taught to:

1	describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals
2	give reasons for classifying plants and animals based on specific characteristics.

Animals Inc humans

Children will be taught to:

1	identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood
2	recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function
3	describe the ways in which nutrients and water are transported within animals, including humans.

Evolution and inheritance

Children will be taught to:

1	recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago
2	recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents
3	identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

Light

Children will be taught to:

1	recognise that light appears to travel in straight lines
2	use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye
3	explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes
4	use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.

Electricity

Children will be taught to:

1	associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit
2	compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches
3	use recognised symbols when representing a simple circuit in a diagram.

History at Key Stage 2	
Pupils should continue to develop a chronologically secure knowledge and understanding of British, local and world history, establishing clear narratives within and across the periods they study. They should note connections, contrasts and trends over time and develop the appropriate use of historical terms. They should regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance. They should construct informed responses that involve thoughtful selection and organisation of relevant historical information. They should understand how our knowledge of the past is constructed from a range of sources. In planning to ensure the progression described above through teaching the British, local and world history outlined below, teachers should combine overview and depth studies to help pupils understand both the long arc of development and the complexity of specific aspects of the content	
Children will be taught about:	
1	changes in Britain from the Stone Age to the Iron Age
2	the Roman Empire and its impact on Britain
3	Britain's settlement by Anglo-Saxons and Scots
4	the Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor
5	a local history study
6	a study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066
7	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
8	Ancient Greece – a study of Greek life and achievements and their influence on the western world
9	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

Geography at Key Stage 2		
Pupils should extend their knowledge and understanding beyond the local area to include the United Kingdom and Europe, North and South America. This will include the location and characteristics of a range of the world's most significant human and physical features. They should develop their use of geographical knowledge, understanding and skills to enhance their locational and place knowledge.		
Children will be taught to:		
Locational Knowledge		
1	locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities	
2	name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time	
3	identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night)	
Place knowledge		
1	understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America	
Human and physical geography		
1	describe and understand key aspects of:	
	a	physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle
	b	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 water
Geographical skills and fieldwork		
1	use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied	
2	use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world	
3	use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.	

PE at Key Stage 2	
Pupils should continue to apply and develop a broader range of skills, learning how to use them in different ways and to link them to make actions and sequences of movement. They should enjoy communicating, collaborating and competing with each other. They should develop an understanding of how to improve in different physical activities and sports and learn how to evaluate and recognise their own success.	
Children will be taught about:	
1	use running, jumping, throwing and catching in isolation and in combination
2	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
3	develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics]
4	perform dances using a range of movement patterns
5	take part in outdoor and adventurous activity challenges both individually and within a team
6	compare their performances with previous ones and demonstrate improvement to achieve their personal best.

Art at Key Stage 2	
Pupils should be taught to develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design.	
Children will be taught:	
1	to create sketch books to record their observations and use them to review and revisit ideas
2	to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]
3	about great artists, architects and designers in history

Computing at Key Stage 2	
A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.	
Children will be taught to:	
1	design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
2	use sequence, selection, and repetition in programs; work with variables and various forms of input and output
3	use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
4	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
5	use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
6	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
7	use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Upper Key Stage 2 Full Curriculum Map

Stage	Year	Term	History/ Geography	Art/ D & T	Science	Computing	PE	PSHE	Islamic	English	Maths
Upper Key Stage 2	Year 5	1a	World War II	The Seaside	Earth & Space	Internet Research	Dance/ Movement: World War II	Right and wrong Rights, respect and responsibilities	5 Pillars: Charity	**Vehicle text:** Where once we stood **Narrative:** Exploration Narrative **Recount:** Formal report	Place value within 100000 Addition and subtraction Graphs and tables Multiplication and division Measure- area and perimeter
		1b	Magnificent Mountains	Wildlife	Living things and their habitats	Scratch 3: Developing Games	Gymnastics: Movement	**Building a future:** the world of work **Building a future:** money management	Etiquettes: Character development	**Vehicle text:** FArTHER **Narrative:** Setting narrative **Recount:** Letter	
		2a	Marvellous Maps	North America Art	Properties and changes of materials	Online Safety	Invasion Games	Democracy	W Religions: Different faiths & beliefs	**Vehicle text:** The hound of the baskervilles **Narrative:** Cliff hanger **Recount:** Formal event	Multiplication and division Fractions Decimals and percentages
		2b	Stone Age to the Iron Age	Marbulous Structures	Forces	3D Modelling	Striking and Fielding: Rounders	Feelings and relationships	Seerah: Final days	**Vehicle text:** The promise **Narrative:** Character narrative **Instructions:** Newspaper report	
		3a	Exploring Eastern Europe	Super Seasonal Cooking	Animals including humans	Using and Applying Skills	Athletics	Life in Britain	Prophets: Musa and Eesa	**Vehicle text:** The lost book of adventure **Narrative:** Survival narrative **Explanation:** Survival guide	Decimals Geometry- properties of shapes Geometry- position and direction Measure- converting units Measure- volume and capacity
		3b	Maya Civilisation	Programming Adventures	Scientists and Inventors	Radio Station	Swimming	Living in a global community	Campaigns	**Vehicle text:** King Kong **Narrative:** Dilemma **Discussions:** Balanced Argument	
	Year 6	1a	Our Changing World	Automata Animals	Living Things and their Habitats	Animated Stories	Gymnastics: Movement	Right and wrong Rights, respect and responsibilities	5 Pillars: Pilgrimage	**Vehicle Text:** Rose Blanche **Recount:** Diary **Recount:** Bravery speech award	Place value within 10000000 Four operations Fractions Geometry- position and direction
		1b	Leisure & Entertainment	Felt Phone Cases	Electricity	Film Making	Dance: Electricity	Building a future: the world of work Building a future: money management	Etiquettes: Character development	**Vehicle Text:** A story like the wind **Narrative:** Flashback Narrative **Recount:** Newspaper report	
		2a	The Amazing Americas	Global Food	Evolution and Inheritance	Online Safety	Striking and Fielding	Democracy	W Religions: Practicing religion in modern Britain	**Vehicle Text:** The origin of the species **Narrative:** Discovery Narrative **Explanation:** Adaption	Decimals Percentages Algebra Measure- imperial and metric measures Measure- perimeter, area and volume Ratio and proportion
		2b	Ancient Greece	South America Art	Light	Spreadsheets	Invasion Games	Feelings and relationships	Seerah: The companions	**Vehicle Text:** Wolves **Recount:** First person narrative **Discussions:** Balanced argument **Information Text:** Wolves **Narrative:** Suspense narrative	
		3a	Trading and Economic Activity	Plants and Flowers	Animals including humans	Kodu	Athletics	Life in Britain	Prophets and Messengers: Shamaail	**Vehicle Text:** Shackleton's Journey **Narrative:** Endurance narrative **Recount:** Magazine article	Geometry- properties of shapes Problem solving Statistics
		3b	Early Islamic Civilisation	Ancient Egypt	Scientists and Inventors	Using and Applying Skills	Swimming	Living in a global community	Prophets and Messengers: Shamaail	**Vehicle Text:** Hansel and Gretel **Narrative:** Dual Narrative **Persuasion:** Letter	

First Aid

Year 5 = Bleeding and Calling 999

Year 6 = Choking, Basic Life Support and Calling 999

Help your child with Reading

I SPY

Play 'I Spy' games. Can you find words beginning with...? Can you find a picture ofa...? How many ... can you see?

Ask Questions

Ask questions about the story as you read it, e.g. What is the story about? Why do you think they made that choice? Was it a good choice? Why did that happen? What do you think will happen next? What was your favourite part of the story? Why?

Make it Fun

Enjoy reading together. Give characters funny voicesand engagewith the pictures. Make a game out of finding words that rhyme or start with the same sound.

Create

Use reading to inspire drawings or new stories.

Be Seen

Make sure you are seen reading. Keep books magazines at easy reach.

Get Out

Go to your public library regularly. Find the books you loved as a kid to read together.

Go Online

Look online & in app stores for appropriate word & spelling games.

Make Space

Have a special place or a certain time when you read together.

Read everything out loud

Books, poems, nursery rhymes, newspaper & magazine articles, food labels...

anything that is close to hand!

All children will take two books home to read each week. One will be based on their book band as illustrated in this chart. The other will be a book they have chosen from the school library.

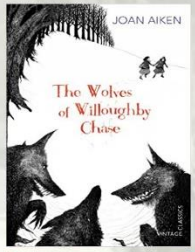
Children also take home reading logs and are expected to read every day for 10 – 15 minutes to a parent or older sibling. We request parents to make a note in their child's reading log after listening to them read.

Children will also have guided reading sessions as they progress through their grasp of phonics and will listen to their teacher read to them during storytime.

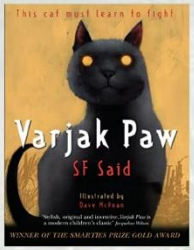
We have developed recommended reading lists for all children in our school and the list for year 6 is included below. Please work with your child and aim for them to complete reading all of the books in this list by the end of year 6.

Year group	Age	Oxford Level	Book Band
Nursery	Up to 4 years old	1	Lilac
		1+	Pink
Reception / Primary 1	4–5 years old	1	Lilac
		1+	Pink
		2	Red
		3	Yellow
		4	Light blue
Year 1 / Primary 2	5–6 years old	5	Green
		6	Orange
		7	Turquoise
Year 2 / Primary 3	6–7 years old	8	Purple
		9	Gold
		10	White
		11	Lime
		12	Lime +
Year 3 / Primary 4	7–8 years old	8	Brown
		9	
		10	
		11	
		12	Grey
		13	
		14	
Year 4 / Primary 5	8–9 years old	15	Dark blue
		16	
Year 5 / Primary 6	9–10 years old	17	Dark red
		18	
Year 6 / Primary 7	10–11 years old	19	
		20	

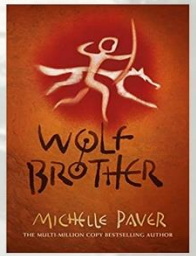
UKS2 YEAR 5



The Wolves of Willoughby Chase
by Joan Aiken
Long ago, England was overrun with wolves. But as Bonnie and her cousin Sylvia discover, real danger often lies closer to home.

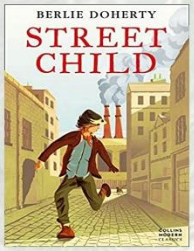


Varjak Paw
by SF Said
Varjak Paw is a Mesopotamian Blue kitten. He's never left home, but then his grandfather tells him about the Way - a secret martial art for cats.



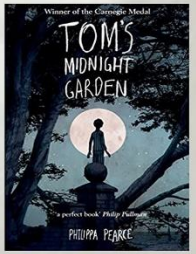
Wolf Brother
by Michelle Paver

Thousands of years ago, a powerful and malevolent force conjured a demon...



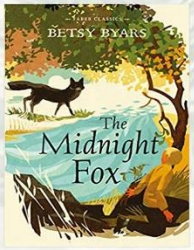
Street Child
by Berlie Doherty

The unforgettable tale of an orphan in Victorian London, based on the boy whose plight inspired Dr Barnardo to found his famous children's homes.



Tom's Midnight Garden
by Philippa Pearce

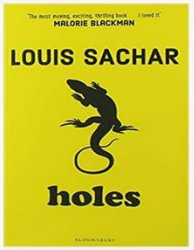
When Tom is sent to stay at his aunt and uncle's house for the summer, he resigns himself to endless weeks of boredom.



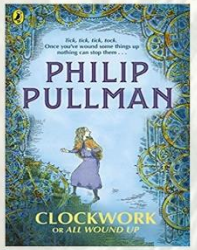
The Midnight Fox
by Betsy Byars

Tom, a town boy, is horrified when his parents tell him he has to stay on Aunt Millie's farm while they are away.

UKS2 YEAR 6

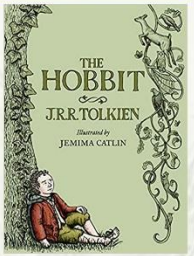


Holes
by Louis Sachar
Stanley's family has a history of bad luck, so when a miscarriage of justice sends him to Camp Green Lake he is not surprised.

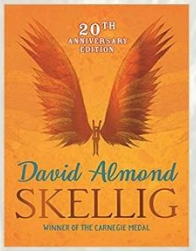


Clockwork
by Philip Pullman

It is a cold winter's night when Karl enters the White Horse Tavern looking like he's swallowed a thundercloud.



The Hobbit
by J. R. R. Tolkien
Bilbo Baggins is a hobbit who enjoys a quiet life. His peace is disturbed when the wizard, Gandalf, & the dwarves arrive to take him away on an adventure.

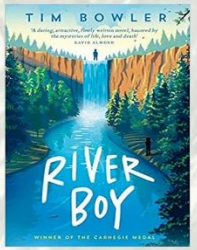


Skellig
by David Almond

When a move to a new house coincides with his baby sister's illness, Michael's world seems suddenly lonely and uncertain.

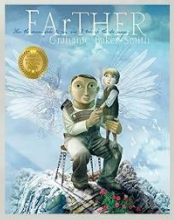
Fireweed
by Jill Paton Walsh

Bill is a fifteen year old runaway evacuee, and he's finding that surviving on the streets of London is pretty easy, thank you very much.



River Boy
by Tim Bowler

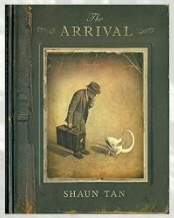
Grandpa is dying & can barely move his hands but, stubborn as ever, refuses to stay in hospital. He's determined to finish his last painting, River Boy



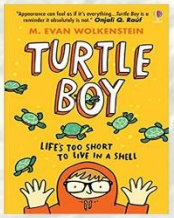
FArTHER
by Grahame Baker-Smith
A young boy, bewitched by his father's unrelenting passion to fly, finds himself entranced by the dream.

Voyage of the Sparrowhawk
by Natasha Farrant
If Ben is to avoid being sent back to the orphanage, he needs to find his brother Sam, wounded in action.

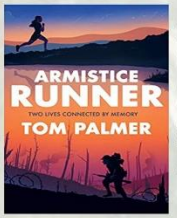
Talking to the Moon
by S.E. Durrant
As Iris's grandmother's memory fades, a mystery is uncovered.,



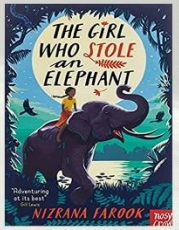
The Arrival
by Shaun Tan
A young man packs his bags and leaves his family to go and start a new life in another country.



Turtle Boy by M. Evan Wolkenstein
Here are 3 things Will loves: turtles, the nature reserve behind school, being left alone. And one thing Will really hates: his nickname.

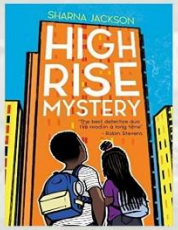


Armistice Runner
by Tom Palmer
Lily has lots of worries. But then she discovers her great-great-grandfather's diaries from the First World War...

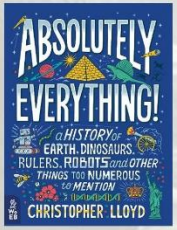


The Girl Who Stole an Elephant
by Nizrana Farook
Chaya, a no-nonsense, outspoken hero, leads her friends and a gorgeous elephant on a noisy, fraught, joyous adventure

Fire Girl, Forest Boy
by Chloe Daykin
Maya has to escape. She's on the run in a country she doesn't know and has no idea who to trust.



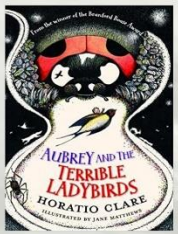
High-Rise Mystery
by Sharna Jackson
The detective duo everyone is dying to meet! Summer in London is hot, the hottest on record, and there's been a murder in THE TRI...



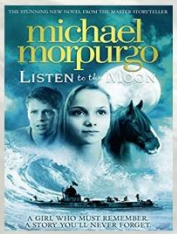
Absolutely Everything
by Christopher Lloyd
A History of Earth, Dinosaurs, Rulers, Robots and Other Things Too Numerous

The Song from Somewhere Else
by A.F. Harrold
No one likes Nick. He's big, he's weird and he smells - or so everyone in Frank's class thinks.

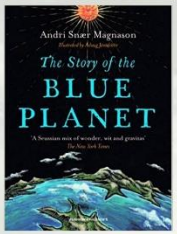
The Land of Neverendings
by Kate Saunders
What if there exists a world powered by imagination?



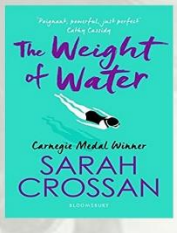
Aubrey and the Terrible Ladybirds
by Horatio Clare
The ladybirdz arrive in Woodside Terrace, and Aubrey's Easter holidays get complicated.



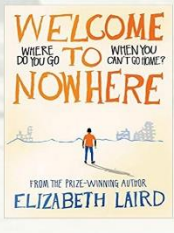
Listen to the Moon by Michael Morpurgo
Alfie and his father find a girl on an uninhabited island injured, thirsty, and with absolutely no memory of who she is



The Story of the Blue Planet
by Andri Magnason
Brimir and Hulda are best friends, living on a beautiful blue planet where there are no grown-ups.



The Weight of Water
by Sarah Crossan
Life is lonely for Kasienka. She misses her old home in Poland, her mother's heart is breaking, and at school friends are scarce.



Welcome to Nowhere
by Elizabeth Laird
Omar doesn't care about politics. All he wants is to become a successful businessman. but when...

Beetle Boy
by M.G. Leonard
Darkus can't believe his eyes when a huge insect drops out of the trouser leg of his horrible new neighbour.

SATS at Key Stage 2

As of 2014, the 'old' national curriculum levels (e.g. level 3, 4, 5) were abolished as set out in government guidelines. The 2014 curriculum is more rigorous and sets noticeably higher expectations than previous curricula, which is why all schools have had to work hard to meet and adapt to it since its introduction.

When children take their SATS tests, they are given a raw score which is the marks awarded for the questions they have answered. This 'raw score' is then converted into a 'scaled score'. Scaled scores range between 80 – 120 with 100 representing the 'national standard'.

- a child awarded a scaled score of 100 is judged to have met the 'national standard' in the area judged by the test;
- If a child's score is close to 120, they are working beyond (or above) the expected national standard.
- a child's score is close to 80, they are judged to have not yet met the national standard and performed below the expectation for their age.

The marking guidance provided by the government for key stage 2 SATS tests includes conversion tables which are used to convert a child's raw score into a scaled score.

A child who achieves the 'national standard' (a scaled score of 100) will be judged to have demonstrated sufficient knowledge in the areas assessed by the tests.

In your child's end of year report, you will be told the following:

- Your child's scaled score for each subject
- Whether or not your child has met the expectations
- If your child is working at 'greater depth'

Key Stage 2 SATs will take place nationally from Monday 9th May to Thursday 12th May 2022.

Statutory tests will be administered in the following subjects:

- Grammar and Punctuation (45 minutes)
- Spelling (20 minutes)
- Reading (60 minutes)
- Mathematics
  - Paper 1: Arithmetic (30 minutes)
  - Paper 2: Reasoning (40 minutes)
  - Paper 3: Reasoning (40 minutes)

As in recent years, writing will be teacher assessed internally. The revised 'pupil can' statements for English writing place a greater emphasis on composition and the statements that relate to the more 'technical' aspects of English writing (grammar, punctuation and spelling) have been made less prescriptive.

Higher attaining pupils

In the past, Key Stage 2 tests were aimed at children achieving levels 3-5 (with a national expectation to reach at least level 4).

This meant that additional level 6 tests were produced for children who demonstrated higher than expected attainment (above level 5).

Under the new system, there are not any separate tests for the most-able children.

Instead, each test will have scope for higher-attaining pupils to show their strengths.

This means that some questions towards the end of the tests may be more difficult for many children, but they should be encouraged to attempt as much of the test as they can.

Reading

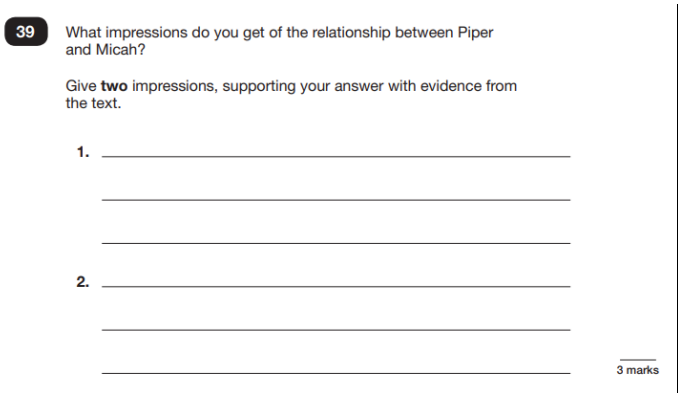
The reading test consists of a single test paper with three unrelated reading texts. Children are given 60 minutes in total, which includes reading the texts and answering the questions. A total of 50 marks are available.

Questions are designed to assess the comprehension and understanding of a child's reading.

During the reading paper, a child's inference and deduction skills are thoroughly tested. They will also be expected to answer questions on authorial choices: explaining why an author has chosen to use particular vocabulary, grammar and text features.

Some questions are multiple choice or selected response; others require short answers and some require an extended response or explanation.

Sample Questions



39 What impressions do you get of the relationship between Piper and Micah?

Give **two** impressions, supporting your answer with evidence from the text.

1. _____

_____

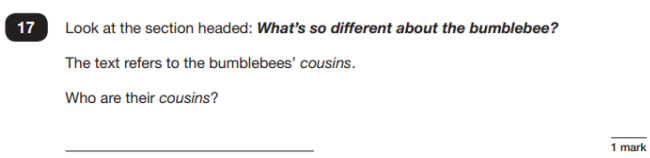
_____

2. _____

_____

_____

3 marks



17 Look at the section headed: ***What's so different about the bumblebee?***

The text refers to the bumblebees' *cousins*.

Who are their *cousins*?

_____

1 mark

Mathematics

Children will sit three tests: paper 1, paper 2 and paper 3.

Paper 1 is for arithmetic, lasting for 30 minutes, covering calculation methods for all operations, including use of fractions, percentages and decimals.

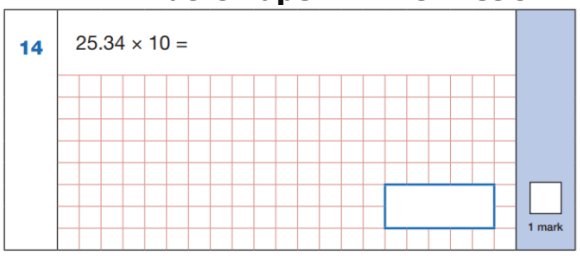
Questions gradually increase in difficulty. Not all children will be expected to access some of the more difficult questions later in the paper.

Papers 2 and 3 cover problem solving and reasoning, each lasting for 40 minutes.

Pupils will still require calculation skills but will need to answer questions in context and decide what is required to find a solution.

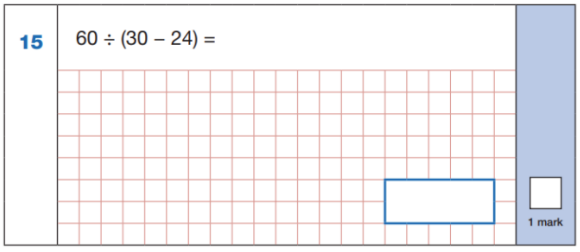
Sample Questions

Maths Paper 1: Arithmetic



14 25.34 × 10 =

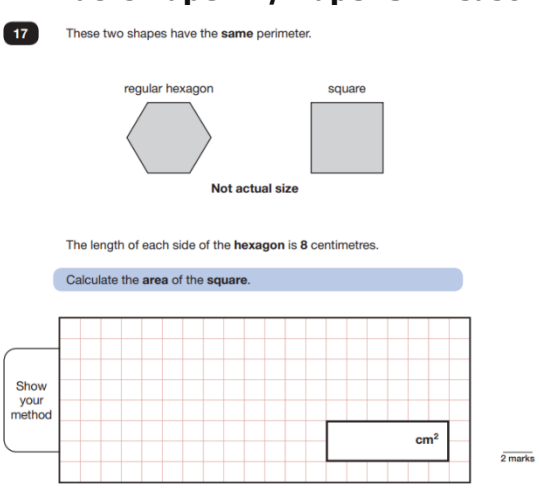
1 mark



15 60 ÷ (30 – 24) =

1 mark

Maths Paper 2 / Paper 3 : Reasoning



17 These two shapes have the **same** perimeter.

regular hexagon square

Not actual size

The length of each side of the **hexagon** is **8** centimetres.

Calculate the **area** of the **square**.

Show your method

cm²

2 marks

How to help your child

- First and foremost, support and reassure your child that there is nothing to worry about and they should always just try their best. Praise and encourage!
- Ensure your child has the best possible attendance at school.
- Support your child with any homework tasks.
- Reading, spelling and arithmetic (e.g. times tables) are always good to practise.
- Talk to your child about what they have learnt at school and what book(s) they are reading (the character, the plot, their opinion).
- Make sure your child has a good sleep and healthy breakfast every morning!

How to help your child with Reading

- Listening to your child read can take many forms.
- First and foremost, focus developing an enjoyment and love of reading.
- Enjoy stories together – reading stories to your child at KS1 and KS2 is equally as important as listening to your child read.
- Read a little at a time but often, rather than rarely but for long periods of time!
- Talk about the story before, during and afterwards – discuss the plot, the characters, their feelings and actions, how it makes you feel, predict what will happen and encourage your child to have their own opinions.
- Look up definitions of words together – you could use a dictionary, the Internet or an app on a phone or tablet.
- All reading is valuable – it doesn't have to be just stories. Reading can involve anything: fiction, non-fiction, poetry, newspapers, magazines, football programmes and TV guides.

How to help your child with Writing

- Practise and learn weekly spelling lists – make it fun!
- Encourage opportunities for writing such as letters to family or friends, shopping lists, notes or reminders, stories and poems.
- Write together – be a good role model for writing.
- Encourage use of a dictionary to check spelling and a thesaurus to find synonyms and expand vocabulary.
- Allow your child to use a computer for word processing, which will allow for editing and correcting of errors without lots of crossing out.
- Remember that good readers become good writers! Identify good writing features when reading (e.g. vocabulary, sentence structure and punctuation).
- Show your appreciation: praise and encourage, even for small successes!

How to help your child with Maths

- Play times tables games.
- Play mental maths games, including counting in different amounts, forwards and backwards.
- Encourage opportunities for telling the time.
- Encourage opportunities for counting coins and money; finding amounts or calculating change when shopping.
- Look for numbers on street signs, car registrations and anywhere else!
- Look for examples of 2D and 3D shapes around the home.
- Identify, weigh or measure quantities and amounts in the kitchen or in recipes.
- Play games involving numbers or logic, such as dominoes, card games, darts, draughts and chess.

Please note that in year 6, children may be given additional homework. Children will also have guided work set for them to complete at home using the CGP revision series. These will help pupils with the work they have already completed in class and enable them to be familiar with the style of questioning to be found in the SATS test papers.

Help your child with Spelling

At Al Ameen, we use the Read Write Inc scheme to develop children's spelling skills.

Spelling Games to play at home

Encourage your child to 'have a go' at spelling a new word

Making a first attempt is good for confidence, and it can reinforce spelling patterns and help identify problem areas.

Make sure they remember to use their phonics as they try to spell a word

Encouraging children to break the word they want to spell into its individual sounds and then try to match those sounds to the letters of the alphabet is really important. The chances are these have been painstakingly taught at school in KS1, and for older children it's about making sure they keep this skill fresh.

Reminding children to segment 'catch' into its three sounds – 'c' 'a' 'tch' – sounds like such a basic way of supporting spelling, but practising it is so important.

Ask them to write down the words that they need to remember how to spell

The physical act of writing the words by hand helps to anchor the spelling in children's memories and encourages them to think about the letters that represent the sounds in the word. You just don't get the same benefits if children type the words into a PC or tablet.

Hidden words is a game that you can prepare yourself

Write the words on your child's spelling list, hidden in a series of letters. Now that they are hidden, ask your child to find them. For example:

sfhplayknc – play | qrubitpdh – bit | nvzbikejfa – bike

Your child could circle the hidden words with coloured pens. To raise the challenge, you could set a time limit on the game. For example, how many words can you find in one minute?

Making silly sentences can be great fun

Challenge your child to write a silly sentence, including as many of the words on their spelling list as possible. For example, your child may have to learn 'room, took, hoop, foot, book'. They could make up a silly sentence such as 'The boy took his book across the room but got his foot caught in a hoop'. Again they could draw illustrations to go with the sentences.

Remind them to read through their writing and check for spelling errors

They need to develop a feel for whether a word looks right. They could underline words they are not sure of and then you could both check with a dictionary.

'Over-pronunciation' is a great spelling strategy

So for 'Wednesday' encourage children to say 'Wed-nes-day' as they write. There are lots of words which feature sounds that aren't always pronounced clearly (such as words ending in -ed), so asking children to over-pronounce these when spelling can also be useful (for example, teaching children to say 'hopped' or 'skipped' instead of 'jumpt' can be a huge help).

Few resources are more motivating than a highlighter pen for primary-aged children

You can focus children's attention on the tricky bits in a word by asking them to highlight them. For example, show them that receive has 'ei' in the middle and ask them to write the word, and then highlight or underline this part to help them remember.

PUNCTUATION, VOCABULARY & GRAMMAR YEAR 6 KNOWLEDGE ORGANISER

Year 6 Overview

-By the end of Year 6, you should be able to use a formal or informal tone whenever it is appropriate, altering your vocabulary choices appropriately.

-You should be able to make precise vocabulary choices drawing from a range of synonyms and antonyms.

-To add creativity and relevance to your writing, you should be able to accurately use the passive voice and the subjunctive form.

-You should be building whole text cohesion and clarity using adverbials and presentational devices.

-Use a wide range of punctuation accurately, including semi-colons, colons, dashes and hyphens.

Punctuation

Semi-Colons ;

-Semi-colons separate two independent clauses (clauses that make sense on their own) that are closely related.

-e.g. 'The town was deserted; everyone was on holiday' or 'I cleaned the car; it looked sparkling clean.

Colons :

-Colons can be used to introduce lists.
-e.g. 'I had three things to do that day: visit my grandma, go shopping and rest.'

-Colons are also used to separate clauses where one explains the other. E.g. a whale is not a fish: it is a warm-blooded mammal.

Dashes —

-Dashes can be used for a number of different purposes within writing.

-Dashes can be used in place of a semi-colon, e.g. 'The town was deserted – everyone was on holiday.

-They can also be used to show parenthesis.

Hyphens -

-Although they look similar, hyphens should not be confused with dashes.

-Hyphens join words and separate syllables. They can change the meaning of sentences.

-e.g. 'The man-eating shark' vs 'The man eating shark.' The meaning changes!

Vocabulary and Grammar

Word Level

Formal and Informal Tone: Unless the type of writing requires informal, speech-like language, you should now be attempting to use formal, precise vocabulary in your writing.

e.g. rather than 'find out' – 'discover', rather than 'ask for' – 'request', rather than 'go in' – enter, rather than 'try to' – 'attempt', and rather than 'right' – correct.

Synonyms: Synonyms are words with a similar meaning. Antonyms are words with an opposite meaning.

e.g. Synonyms of 'large' – substantial, huge, colossal, giant, great, enormous, immense, mighty, vast.

Antonyms of 'large' – small, thin, meagre, scanty, miniscule, tiny, little, compact, teeny, small-scale.

Sentence Level

- **Passive Voice:** The passive form is when the subject of the sentence is acted upon by the verb.

e.g. 'The ball was thrown by the pitcher. The fruit was eaten by the toddler. The fence was jumped by the horse.'

The Subjunctive Form: The subjunctive is a verb form that shows that that could or should happen. It can be used to express wishes, hopes, commands, demands and suggestions.

e.g. 'If I were you' and 'I suggest you take a coat with you.'

Note the use of 'were', rather than 'was.'

Text Level

Building Cohesion across Paragraphs: Ideas can be connected through the use of cohesive devices, such as adverbials e.g. 'on the other hand', 'consequently', 'furthermore', 'in contrast', or 'as a result.'

Layout Devices: You should now be thinking about how you present your writing on the page. Headings, sub-headings and bullet points can help to separate or compartmentalise ideas, whilst tables can add further information and clarity.

Key Terminology

Subject | Object | Active | Passive | Synonym | Antonym | Ellipsis | Hyphen | Colon | Semi-Colon | Bullet Points

Help your child with Writing

Writing is a key skill that is used in all areas of the curriculum and the breadth of our curriculum ensures that pupils make links across all areas and subjects, writing a range of genres using subject-specific vocabulary to enhance their writing and engage their reader. Through cross-curricular writing, the skills taught in English lessons are transferred into other subjects, showing consolidation of skills and a deeper understanding of how and when to use specific grammar, punctuation and grammar objectives.

Writing is taught in daily English lessons through units that are planned around high-quality texts. We teach English as whole class lessons, so that all children have access to the age-related skills and knowledge contained in the National Curriculum. Through differentiated quality first teaching, all pupils receive the support they need in order to make good progress, to be confident and to be able to enjoy writing. Those working above age related expectations are given opportunities to extend their writing in a variety of ways, such as being given a choice of tasks in order to write effectively for a range of audiences and purposes, having a deeper understanding of the impact their writing has on the reader, selecting the appropriate form and drawing independently on what they have read as models for their own writing; showing greater control in their writing, exercising an assured and conscious control over levels of formality, particularly through manipulating grammar and vocabulary to achieve this; and to use the range of punctuation taught at Key Stage Two correctly and, when necessary, to use such punctuation precisely to enhance meaning and avoid ambiguity.

Children are given adequate time to plan and edit their work. Teachers use high quality texts, full of rich vocabulary, to immerse the children in their learning and their writing builds on the knowledge that they have of the world around them. Teachers plan real life reasons for writing; tasks are meaningful and the children write for purpose, carefully considering the audience of and the purpose for their writing. Grammar is taught through the language used by the author in the class text. Class teachers model high quality writing, editing and proofreading, and use whole class writing to support all pupils. Teachers demonstrate the high expectations they have of all pupils. They recognise that good writing stems from reading and they place a high value on books and reading, regularly demonstrating the link between reading and writing. Children working above age-related expectations are able to draw independently on their own reading as a model for their writing.

Writing is celebrated throughout the school and we have whole-school writing events, including participation in school and nationwide competitions.

Help your child with Maths

The main focus of maths teaching in upper Key Stage 2 is to ensure that pupils extend their understanding of the number system and place value to include larger integers. This should develop the connections that pupils make between multiplication and division with fractions, decimals, percentages and ratio.

At this stage, pupils should develop their ability to solve a wider range of problems using both written and mental methods of calculation. With this grounding in arithmetic, pupils will learn the language of algebra as a means for solving a variety of problems. In geometry, your child will learn to classify shapes with complex properties and will learn the vocabulary they need to describe them.

Year 6 Maths activity games

Line it up

- You need a ruler marked in centimetres and millimetres.
- Use the ruler to draw 10 different straight lines on a piece of paper.
- Ask your child to estimate the length of each line and write the estimate on the line.
- Now give them the ruler and ask them to measure each line to the nearest millimetre.
- Ask them to write the measurement next to the estimate, and work out the difference.
- A difference of 5 millimetres or less scores 10 points. A difference of 1 centimetre or less scores 5 points.
- How close to 100 points can he / she get?

Guess my number

- Choose a number between 0 and 1 with one decimal place, e.g. 0.6.
- Challenge your child to ask you questions to guess your number. You may only answer 'Yes' or 'No'. For example, they could ask questions like 'Is it less than a half?'
- See if they can guess your number in fewer than 5 questions.
- Now let your child choose a mystery number for you to guess. Extend the game by choosing a number with one decimal place between 1 and 10, e.g. 3.6. You may need more questions!

Times tables

Ask your child a different times-table fact every day, e.g. What is 6 times 8? Can you use this to work out 12 x 8?

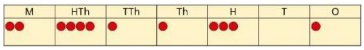
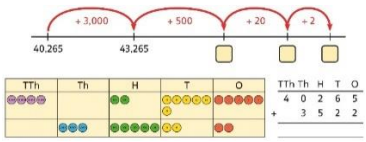
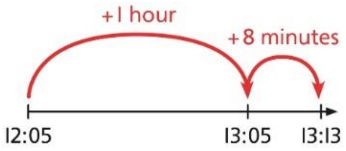
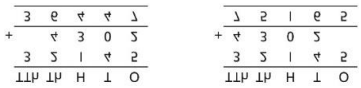
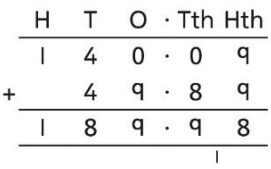
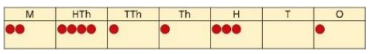
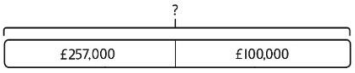
Target 1000

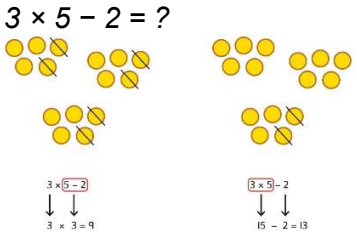
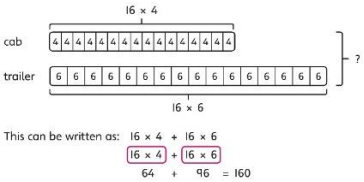
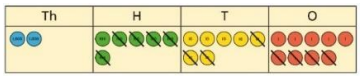
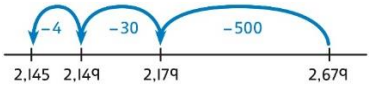
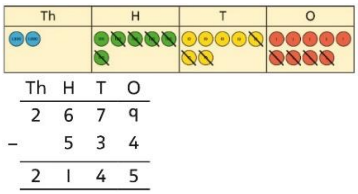
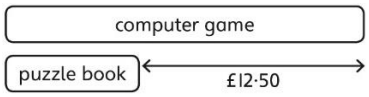
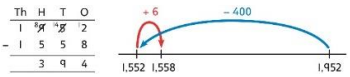
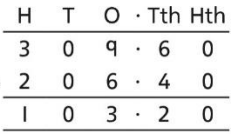
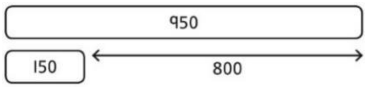
- Roll a dice 6 times.
- Use the six digits to make two three-digit numbers.
- Add the two numbers together.
- How close to 1000 can you get?

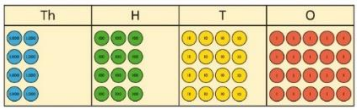
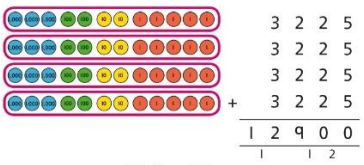
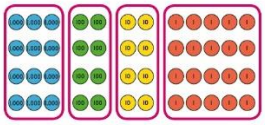
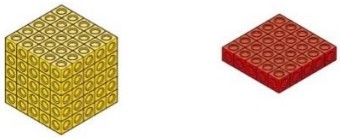
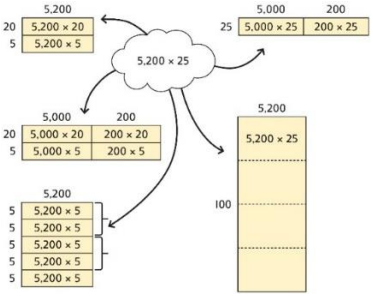
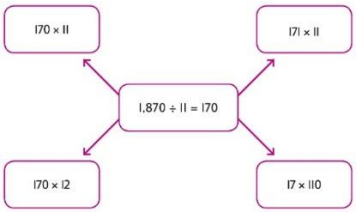
Finding areas and perimeters

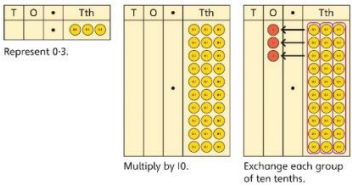
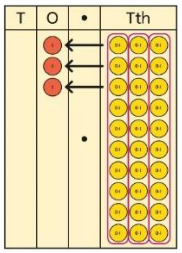
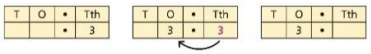
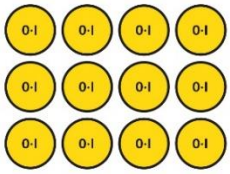
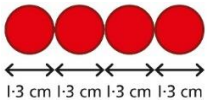
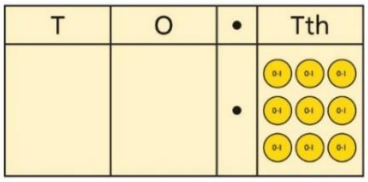
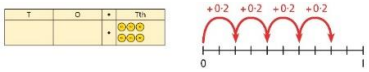
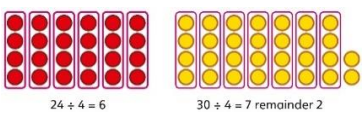
- Perimeter = distance around the edge of a shape
- Area of a rectangle = length x breadth (width)
- Collect 5 or 6 used envelopes of different sizes.
- Ask your child to estimate the perimeter of each one to the nearest centimetre. Write the estimate on the back.
- Now measure. Write the estimate next to the measurement.
- How close did your child get?
- Now estimate then work out the area of each envelope.
- Were perimeters or areas easier to estimate? Why? You could do something similar using an old newspaper, e.g.
- Work out which page has the biggest area used for photographs.
- Choose a page and work out the total area of news stories or adverts on that page

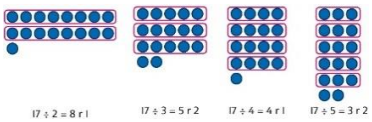
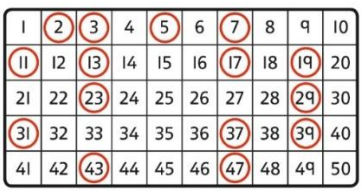
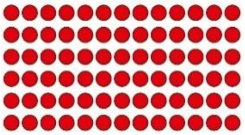
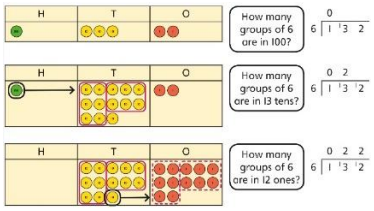
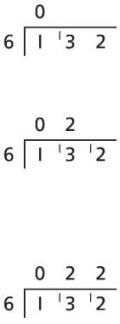
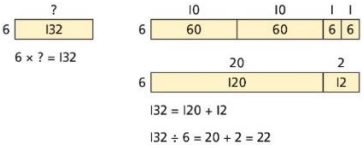
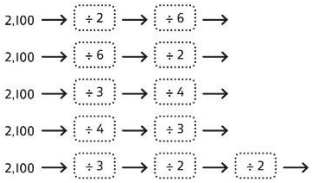
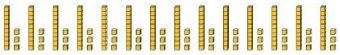
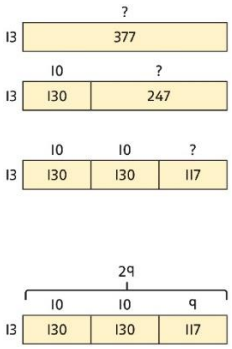
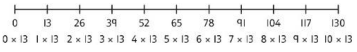
KEY STAGE 2		
In upper Key Stage 2, children build on secure foundations in calculation, and develop fluency, accuracy and flexibility in their approach to the four operations. They work with whole numbers and adapt their skills to work with decimals, and they continue to develop their ability to select appropriate, accurate and efficient operations.		
Key language: decimal, column methods, exchange, partition, mental method, ten thousand, hundred thousand, million, factor, multiple, prime number, square number, cube number		
Addition and subtraction: Children build on their column methods to add and subtract numbers with up to seven digits, and they adapt the methods to calculate efficiently and effectively with decimals, ensuring understanding of place value at every stage. Children compare and contrast methods, and they select mental methods or jottings where appropriate and where these are more likely to be efficient or accurate when compared with formal column methods. Bar models are used to represent the calculations required to solve problems and may indicate where efficient methods can be chosen.	**Multiplication and division:** Building on their understanding, children develop methods to multiply up to 4-digit numbers by single-digit and 2-digit numbers. Children develop column methods with an understanding of place value, and they continue to use the key skill of unitising to multiply and divide by 10, 100 and 1,000. Written division methods are introduced and adapted for division by single-digit and 2-digit numbers and are understood alongside the area model and place value. In Year 6, children develop a secure understanding of how division is related to fractions. Multiplication and division of decimals are also introduced and refined in Year 6.	**Fractions:** Children find fractions of amounts, multiply a fraction by a whole number and by another fraction, divide a fraction by a whole number, and add and subtract fractions with different denominators. Children become more confident working with improper fractions and mixed numbers and can calculate with them. Understanding of decimals with up to 3 decimal places is built through place value and as fractions, and children calculate with decimals in the context of measure as well as in pure arithmetic. Children develop an understanding of percentages in relation to hundredths, and they understand how to work with common percentages: 50%, 25%, 10% and 1%.

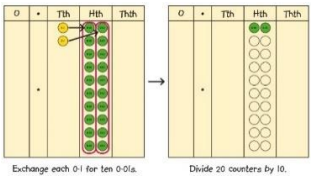
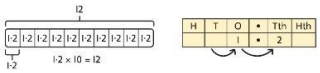
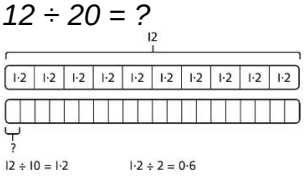
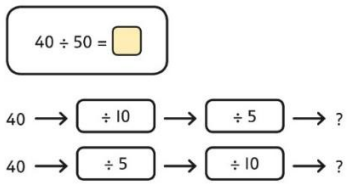
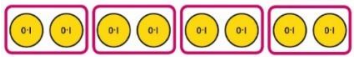
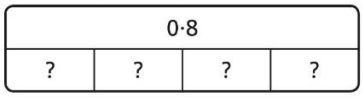
Year 6			
	Concrete	**Pictorial**	**Abstract**
Year 6 Addition			
Comparing and selecting efficient methods	Represent 7-digit numbers on a place value grid, and use this to support thinking and mental methods. 	Discuss similarities and differences between methods, and choose efficient methods based on the specific calculation. Compare written and mental methods alongside place value representations.  Use bar model and number line representations to model addition in problem-solving and measure contexts. 	Use column addition where mental methods are not efficient. Recognise common errors with column addition. *32,145 + 4,302 = ?*  *Which method has been completed accurately?* *What mistake has been made?* Column methods are also used for decimal additions where mental methods are not efficient. 
Selecting mental methods for larger numbers where appropriate	Represent 7-digit numbers on a place value grid, and use this to support thinking and mental methods.  *2,411,301 + 500,000 = ?* *This would be 5 more counters in the HTh place.* *So, the total is 2,911,301.* *2,411,301 + 500,000 = 2,911,301*	Use a bar model to support thinking in addition problems. *257,000 + 99,000 = ?*  *I added 100 thousands then subtracted 1 thousand.* *257 thousands + 100 thousands = 357 thousands* *257,000 + 100,000 = 357,000* *357,000 – 1,000 = 356,000* *So, 257,000 + 99,000 = 356,000*	Use place value and unitising to support mental calculations with larger numbers. *195,000 + 6,000 = ?* *195 + 5 + 1 = 201* *195 thousands + 6 thousands = 201 thousands* *So, 195,000 + 6,000 = 201,000*
Understanding order of	Use equipment to model different interpretations of	Model calculations using a bar model to demonstrate	Understand the correct order of operations in

operations in calculations	a calculation with more than one operation. Explore different results. *3 × 5 − 2 = ?* 	the correct order of operations in multi-step calculations.  	calculations without brackets. Understand how brackets affect the order of operations in a calculation. *4 + 6 × 16* *4 + 96 = 100* *(4 + 6) × 16* *10 × 16 = 160*
Year 6 Subtraction			
Comparing and selecting efficient methods	Use counters on a place value grid to represent subtractions of larger numbers. 	Compare subtraction methods alongside place value representations.   Use a bar model to represent calculations, including 'find the difference' with two bars as comparison. 	Compare and select methods. Use column subtraction when mental methods are not efficient. Use two different methods for one calculation as a checking strategy.  Use column subtraction for decimal problems, including in the context of measure. 
Subtracting mentally with larger numbers		Use a bar model to show how unitising can support mental calculations. *950,000 − 150,000* *That is 950 thousands − 150 thousands*  *So, the difference is 800 thousands.* *950,000 − 150,000 = 800,000*	Subtract efficiently from powers of 10. *10,000 − 500 = ?*
Year 6 Multiplication			

Multiplying up to a 4-digit number by a single digit number	Use equipment to explore multiplications.  *4 groups of 2,345* *This is a multiplication:* *4 × 2,345* *2,345 × 4*	Use place value equipment to compare methods. **Method 1**  3 2 2 5 3 2 2 5 3 2 2 5 + 3 2 2 5 1 2 9 0 0 1 1 2 **Method 2**  4 × 3,000 4 × 200 4 × 20 4 × 5 12,000 + 800 + 80 + 20 = 12,900	Understand area model and short multiplication. Compare and select appropriate methods for specific multiplications. **Method 3** 3,000 200 20 5 4 | 12,000 | 800 | 80 | 20 12,000 + 800 + 80 + 20 = 12,900 **Method 4** 3 2 2 5 × 4 1 2 9 0 0 1 2
Multiplying up to a 4-digit number by a 2-digit number		Use an area model alongside written multiplication. **Method 1** 1,000 200 30 5 20 | 20,000 | 4,000 | 600 | 100 1 | 1,000 | 200 | 30 | 5 1 2 3 5 × 2 1 5 1 × 5 3 0 1 × 30 2 0 0 1 × 200 1 0 0 0 1 × 1,000 1 0 0 20 × 5 6 0 0 20 × 30 4 0 0 0 20 × 200 2 0 0 0 0 20 × 1,000 2 5 9 3 5 21 × 1,235	Use compact column multiplication with understanding of place value at all stages. 1 2 3 5 × 2 1 1 2 3 5 1 × 1,235 2 4 7 0 0 20 × 1,235 2 5 9 3 5 21 × 1,235
Using knowledge of factors and partitions to compare methods for multiplications	Use equipment to understand square numbers and cube numbers.  *5 × 5 = 5^2 = 25* *5 × 5 × 5 = 5^3 = 25 × 5 = 125*	Compare methods visually using an area model. Understand that multiple approaches will produce the same answer if completed accurately.  5,200 5,000 200 20 5,200 × 20 25 5,000 × 25 200 × 25 5 5,200 × 5 5,200 × 25 5,000 200 20 5,000 × 20 200 × 20 5 5,000 × 5 200 × 5 5,200 5,200 × 25 100 5,200 5 5,200 × 5 5 5,200 × 5 5 5,200 × 5 5 5,200 × 5 5 5,200 × 5 Represent and compare methods using a bar model.	Use a known fact to generate families of related facts.  Use factors to calculate efficiently. *15 × 16* *= 3 × 5 × 2 × 8* *= 3 × 8 × 2 × 5* *= 24 × 10* *= 240*
Multiplying by 10, 100 and 1,000	Use place value equipment to explore exchange in decimal multiplication.	Understand how the exchange affects decimal numbers on a place value grid.	Use knowledge of multiplying by 10, 100 and 1,000 to multiply by

	 *0·3 × 10 = ?* *0·3 is 3 tenths.* *10 × 3 tenths are 30 tenths.* *30 tenths are equivalent to 3 ones.*	  *0·3 × 10 = 3*	multiples of 10, 100 and 1,000. *8 × 100 = 800* *8 × 300 = 800 × 3* *= 2,400* *2·5 × 10 = 25* *2·5 × 20 = 2·5 × 10 × 2* *= 50*
Multiplying decimals	Explore decimal multiplications using place value equipment and in the context of measures.  *3 groups of 4 tenths is 12 tenths.* *4 groups of 3 tenths is 12 tenths.*  *4 × 1 cm = 4 cm* *4 × 0·3 cm = 1.2 cm* *4 × 1·3 = 4 + 1·2 = 5·2 cm*	Represent calculations on a place value grid. 3 × 3 = 9 3 × 0·3 = 0·9  Understand the link between multiplying decimals and repeated addition. 	Use known facts to multiply decimals. *4 × 3 = 12* *4 × 0·3 = 1·2* *4 × 0·03 = 0·12* *20 × 5 = 100* *20 × 0·5 = 10* *20 × 0·05 = 1* Find families of facts from a known multiplication. *I know that 18 × 4 = 72.* *This can help me work out:* *1·8 × 4 = ?* *18 × 0·4 = ?* *180 × 0·4 = ?* *18 × 0·04 = ?* Use a place value grid to understand the effects of multiplying decimals. H T O • Tth Hth 2 × 3 — 6 • 0·2 × 3 — 0 • 6 0·02 × 3 — •
Year 6 Division			
Understanding factors	Use equipment to explore different factors of a number. 	Recognise prime numbers as numbers having exactly two factors. Understand the link with division and remainders.	Recognise and know primes up to 100. Understand that 2 is the only even prime, and that 1 is not a prime number.

	4 is a factor of 24 but is not a factor of 30.		
Dividing by a single digit	Use equipment to make groups from a total.  *There are 78 in total.* *There are 6 groups of 13.* *There are 13 groups of 6.*		Use short division to divide by a single digit.  Use an area model to link multiplication and division. 
Dividing by a 2-digit number using factors	Understand that division by factors can be used when dividing by a number that is not prime.	Use factors and repeated division. *1,260 ÷ 14 = ?*  *1,260 ÷ 2 = 630* *630 ÷ 7 = 90* *1,260 ÷ 14 = 90*	Use factors and repeated division where appropriate. *2,100 ÷ 12 = ?* 
Dividing by a 2-digit number using long division	Use equipment to build numbers from groups.  *182 divided into groups of 13.* *There are 14 groups.*	Use an area model alongside written division to model the process. *377 ÷ 13 = ?*  *377 ÷ 13 = 29*	Use long division where factors are not useful (for example, when dividing by a 2-digit prime number). Write the required multiples to support the division process. *377 ÷ 13 = ?* 

			13 | 3 7 7 − 1 3 0 10 2 4 7 − 1 3 0 10 1 1 7 − 1 1 7 9 0 29 *377 ÷ 13 = 29* A slightly different layout may be used, with the division completed above rather than at the side. 3 21 | 7 9 8 − 6 3 0 1 6 8 3 8 21 | 7 9 8 − 6 3 0 1 6 8 − 1 6 8 0 Divisions with a remainder explored in problem-solving contexts.
Dividing by 10, 100 and 1,000	Use place value equipment to explore division as exchange.  *0·2 is 2 tenths.* *2 tenths is equivalent to 20 hundredths.* *20 hundredths divided by 10 is 2 hundredths.*	Represent division to show the relationship with multiplication. Understand the effect of dividing by 10, 100 and 1,000 on the digits on a place value grid.  Understand how to divide using division by 10, 100 and 1,000. *12 ÷ 20 = ?*  	Use knowledge of factors to divide by multiples of 10, 100 and 1,000.  *40 ÷ 5 = 8* *8 ÷ 10 = 0·8* *So, 40 ÷ 50 = 0·8*
Dividing decimals	Use place value equipment to explore division of decimals. 	Use a bar model to represent divisions.  4 × 2 = 8 8 ÷ 4 = 2 So, 4 × 0·2 = 0·8 0·8 ÷ 4 = 0·2	Use short division to divide decimals with up to 2 decimal places.

	8 tenths divided into 4 groups. 2 tenths in each group.		$8\overline{)4 \cdot 2\ 4}$ $8\overline{)4 \cdot {}^{4}2\ 4}$ $8\overline{)4 \cdot {}^{4}2\ {}^{2}4}$ $8\overline{)4 \cdot {}^{4}2\ {}^{2}4}$

Helping your child with Science and the Foundation Subjects

Your child will study science and a number of foundation subjects throughout the year. Foundation subjects differ to the core subjects of: English, Maths and Science which are explored in further detail.

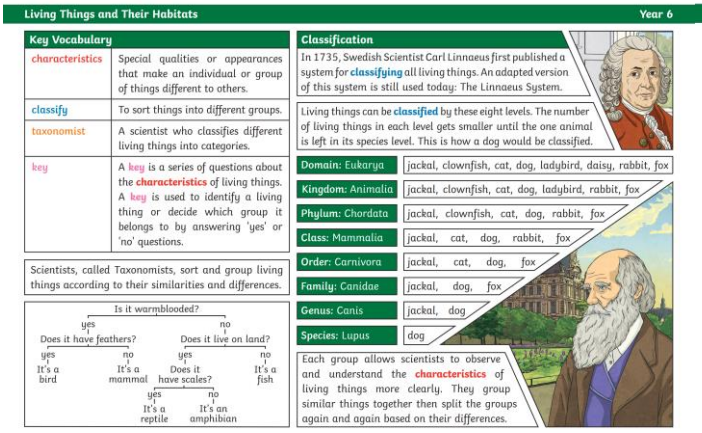
Even though foundation subjects are not explored as thoroughly, they are still important because they introduce pupils to a wide variety of skills and knowledge. Foundation subjects also give a taster to students on what they enjoy and excel at doing to give them a clear idea on what to progress further in their education.

Below are some Knowledge Organisers which will help you understand what we will be covering in the subjects mentioned above. A Knowledge Organiser (KO) sets out in detail what we want children to know by the end of the topic. We expect the majority of children to be able to recall all of the information on the KO by the end of the unit of work. During their topic the children will take part in regular quizzes, that help stretch their long-term memory and develop their recall of key information.

We ask that parents read through these Knowledge Organisers at home with their children. It is also useful for children to go back to previous Knowledge Organisers and revise these so that the information from previous learning is not forgotten.

We are developing knowledge organisers across the curriculum but for now, can share the following in science and humanities

Science: Term 1a



Living Things and Their Habitats — Year 6

Key Vocabulary

characteristics	Special qualities or appearances that make an individual or group of things different to others.
classify	To sort things into different groups.
taxonomist	A scientist who classifies different living things into categories.
key	A key is a series of questions about the characteristics of living things. A key is used to identify a living thing or decide which group it belongs to by answering 'yes' or 'no' questions.

Scientists, called Taxonomists, sort and group living things according to their similarities and differences.

Classification

In 1735, Swedish Scientist Carl Linnaeus first published a system for **classifying** all living things. An adapted version of this system is still used today: The Linnaeus System.

Living things can be **classified** by these eight levels. The number of living things in each level gets smaller until the one animal is left in its species level. This is how a dog would be classified.

Domain: Eukarya	jackal, clownfish, cat, dog, ladybird, daisy, rabbit, fox
Kingdom: Animalia	jackal, clownfish, cat, dog, ladybird, rabbit, fox
Phylum: Chordata	jackal, clownfish, cat, dog, rabbit, fox
Class: Mammalia	jackal, cat, dog, rabbit, fox
Order: Carnivora	jackal, cat, dog, fox
Family: Canidae	jackal, dog, fox
Genus: Canis	jackal, dog
Species: Lupus	dog

Each group allows scientists to observe and understand the **characteristics** of living things more clearly. They group similar things together then split the groups again and again based on their differences.

Living Things and Their Habitats — Year 6

Key Vocabulary

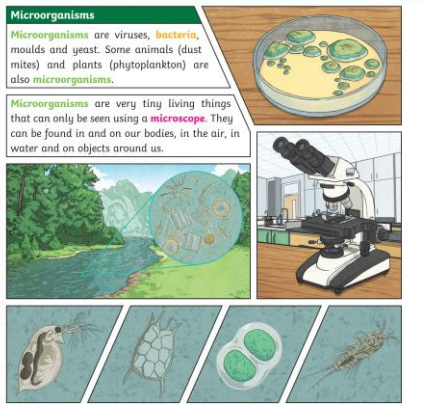
bacteria	A single-celled microorganism.
microorganism	An organism that can only be seen using a microscope, e.g. bacteria, mould and yeast.
microscope	A piece of equipment that is used to view very tiny (microscopic) things by magnifying their appearance.
species	A group of animals that can reproduce to produce fertile offspring.

Helpful Microbes	Harmful Microbes
Bacteria – cheese	Bacteria – salmonella is a bacterium that can lead to food poisoning
Yeast – wine	Virus – chicken pox and flu are examples of viral diseases
Bacteria – yoghurt	Fungi – athlete's foot
Yeast – bread dough	Bacteria – plaque
Penicillium fungi - antibiotics	Fungi - mould

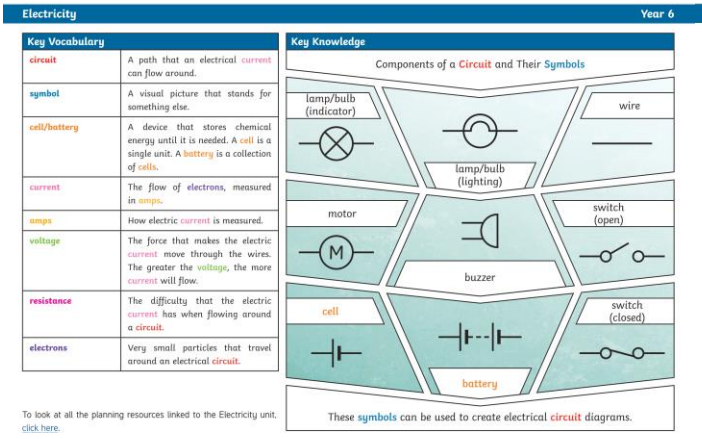
Microorganisms

Microorganisms are viruses, bacteria, moulds and yeast. Some animals (dust mites) and plants (phytoplankton) are also microorganisms.

Microorganisms are very tiny living things that can only be seen using a microscope. They can be found in and on our bodies, in the air, in water and on objects around us.



Science: Term 1b



Electricity — Year 6

Key Vocabulary

circuit	A path that an electrical current can flow around.
symbol	A visual picture that stands for something else.
cell/battery	A device that stores chemical energy until it is needed. A cell is a single unit. A battery is a collection of cells.
current	The flow of electrons, measured in amps.
amps	How electric current is measured.
voltage	The force that makes the electric current move through the wires. The greater the voltage, the more current will flow.
resistance	The difficulty that the electric current has when flowing around a circuit.
electrons	Very small particles that travel around an electrical circuit.

To look at all the planning resources linked to the Electricity unit, click here.

Key Knowledge

Components of a Circuit and Their Symbols

These symbols can be used to create electrical circuit diagrams.

Electricity — Year 6

Key Knowledge

What will make a bulb brighter or a buzzer louder?

- More batteries or a higher voltage create more power to flow through the circuit.
- Shortening the wires means the electrons have less resistance to flow through.

What will make a bulb dimmer or a buzzer quieter?

- Fewer batteries or a lower voltage give less power to the circuit.
- More buzzers or bulbs mean the power is shared by more components.
- Lengthening the wires means the electrons have to travel through more resistance.

Series Circuit

A circuit that has only one route for the current to take. If more bulbs or buzzers are added, the power has to be shared and so they will be dimmer or quieter. If just one part of this series circuit breaks, the circuit is broken and the flow of current stops.

Science: Term 2a

Evolution and Inheritance — Year 6

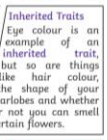
Key Vocabulary	
offspring	The young animal or plant that is produced by the reproduction of that species.
inheritance	This is when characteristics are passed on to offspring from their parents.
variations	The differences between individuals within a species.
characteristics	The distinguishing features or qualities that are specific to a species.
adaptation	An adaptation is a trait (or characteristic) changing to increase a living thing's chances of surviving and reproducing.
habitat	Refers to a specific area or place in which particular animals and plants can live.
environment	An environment contains many habitats and includes areas where there are both living and non-living things.

To look at all the planning resources linked to the Evolution and Inheritance unit, click here.

Offspring
Animals and plants produce offspring that are similar but not identical to them. Offspring often look like their parents because features are passed on.

Variation
In the same way that there is variation between parents and their offspring, you can see variation within any species, even plants.

Adaptive Traits
Characteristics that are influenced by the environment the living things live in. These adaptations can develop as a result of many things, such as food and climate.



Inherited Traits
Eye colour is an example of an inherited trait, but so are things like hair colour, the shape of your earlobes and whether or not you can smell certain flowers.

Habitats
A good habitat should provide shelter, water, enough space and plenty of food.

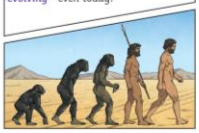
Environments
There are many types of environment around the world. Polar regions, deserts, rainforests, oceans, rivers, and grasslands are all environments.

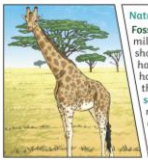
Evolution and Inheritance — Year 6

Key Vocabulary	
evolution	Adaptation over a very long time.
natural selection	The process where organisms that are better adapted to their environment tend to survive and produce more offspring.
fossil	The remains or imprint of a prehistoric plant or animal, embedded in rock and preserved.
adaptive traits	Genetic features that help a living thing to survive.
inherited traits	These are traits you get from your parents. Within a family, you will often see similar traits, e.g. curly hair.

Fossils are the preserved remains, or partial remains, of ancient animals and plants. **Fossils** let scientists know how plants and animals used to look millions of years ago. This is proof that living things have evolved over time.

Evolution is the gradual process by which different kinds of living organism have developed from earlier forms over millions of years. Scientists have proof that living things are continuously evolving - even today!





Natural Selection
Fossils of giraffes from millions of years ago show that they used to have shorter necks. They have gradually evolved through natural selection to have longer necks so that they can reach the top leaves on taller trees.

Living Things		Habitat	Adaptive Traits
polar bear		arctic	 Its white fur enables it to camouflage in the snow.
camel		desert	 It has wide feet to make it easier to walk in the sand.
cactus		desert	 It stores water in its stem.
toucan		rainforest	 Its narrow tongue allows it to eat small fruit and insects.

Science: Term 2b

Light — Year 6

Key Vocabulary	
light	A form of energy that travels in a wave from a source.
light source	An object that makes its own light.
reflection	Reflection is when light bounces off a surface, changing the direction of a ray of light.
incident ray	A ray of light that hits a surface.
reflected ray	A ray of light that has bounced back after hitting a surface.
the law of reflection	The law states that the angle of the incident ray is equal to the angle of the reflected ray.

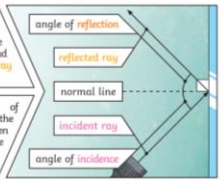
Key Knowledge
We need light to be able to see things. Light waves travel out from sources of light in straight lines. These lines are often called rays or beams of light.

Light from the sun travels in a straight line and hits the chair. The light ray is then reflected off the chair and travels in a straight line to the girl's eye, enabling her to see the chair.

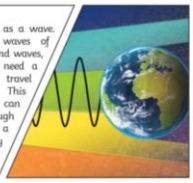
The law of reflection states that the angle of incidence is equal to the angle of reflection. Whenever light is reflected from a surface, it obeys this law.

The angle of reflection is the angle between the normal line and the reflected ray of light.

The angle of incidence is the angle between the normal line and the incident ray of light.



Light travels as a wave. But unlike waves of water or sound waves, it does not need a medium to travel through. This means light can travel through a vacuum - a completely airless space.



Light — Year 6

Key Vocabulary	
refraction	This is when light bends as it passes from one medium to another. E.g. Light bends when it moves from air into water.
visible spectrum	Light that is visible to the human eye. It is made up of a colour spectrum.
prism	A prism is a solid 3D shape with flat sides. The two ends are an equal shape and size. A transparent prism separates out visible light into all the colours of the spectrum.
shadow	An area of darkness where light has been blocked.
transparent	Describes objects that let light travel through them easily, meaning you can see through the object.
translucent	Describes objects that things let some light through, but scatters the light so we can't see through them properly.
opaque	Describes objects that do not let any light pass through them.

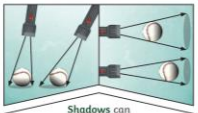
To look at all the planning resources linked to the Light unit, click here.

Key Knowledge

The spoon in this water looks as if it is bent. This is because light bends when it moves from air to water. When light bends in this way, it is called refraction.

A shadow is always the same shape as the object that casts it. This is because when an opaque object is in the path of light travelling from a light source, it will block the light rays that hit it, while the rest of the light can continue travelling.

Isaac Newton shone a light through a transparent prism, separating out light into the colours of the rainbow (red, orange, yellow, green, blue, indigo and violet) - the colours of the spectrum. All the colours together merge and make visible light.



Shadows can also be elongated or shortened depending on the angle of the light source. A shadow is also larger when the object is closer to the light source. This is because it blocks more of the light.

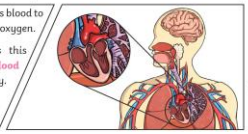
Science: Term 3a

Animals Including Humans — Year 6

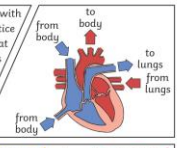
Key Vocabulary	
circulatory system	A system which includes the heart, veins, arteries and blood transporting substances around the body.
heart	An organ which constantly pumps blood around the circulatory system.
blood vessels	The tube-like structures that carry blood through the tissues and organs. Veins, arteries and capillaries are the three types of blood vessels.
oxygenated blood	Oxygenated blood has more oxygen. It is pumped from the heart to the rest of the body.
deoxygenated blood	Deoxygenated blood is blood where most of the oxygen has already been transferred to the rest of the body.

The heart pumps blood to the lungs to get oxygen.

It then pumps this oxygenated blood around the body.

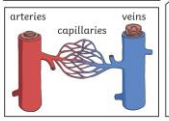


Mammals have hearts with four chambers. Notice how the blood that has come from the body is deoxygenated, and the blood that has come from the lungs is oxygenated again. The blood isn't actually red and blue: we just show it like that on a diagram.



Capillaries are the smallest blood vessels in the body and it is here that the exchange of water, nutrients, oxygen and carbon dioxide takes place.

Arteries carry oxygenated blood away from the heart.

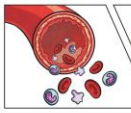


Veins carry deoxygenated blood toward the heart.

If you linked up all of the body's blood vessels, including arteries, capillaries, and veins, they would measure over 60,000 miles.

Animals Including Humans — Year 6

Key Vocabulary	
drug	A substance containing natural or man-made chemicals that has an effect on your body when it enters your system.
alcohol	A drug produced from grains, fruits or vegetables when they are put through a process called fermentation.
nutrients	Substances that animals need to stay alive and healthy.



The liquid part of blood contains water and protein. This is called plasma.

Blood transports:
- gases (mostly oxygen and carbon dioxide);
- nutrients (including water);
- waste products.

Plasma is liquid. The other parts of your blood are solid.

Platelets help you stop bleeding when you get hurt.

Red blood cells carry oxygen through your body.

White blood cells fight infection when you're sick.

Drugs, alcohol and smoking have negative effects on the body.

A healthy diet involves eating the right types of nutrients in the right amounts.

Regular exercise:
- strengthens muscles including the heart muscle;
- improves circulation;
- increases the amount of oxygen around the body;
- releases brain chemicals which help you feel calm and relaxed;
- helps you sleep more easily;
- strengthens bones.

It can even help to stop us from getting ill.

Science: Term 3b

Scientists and Inventors — Year 6

Key Individuals	
Stephen Hawking	Stephen Hawking was an astrophysicist whose theories, including those concerning black holes, have changed the way we understand the universe.
Libbie Hyman	Libbie Hyman was a zoologist who is best known for her work on the classification of invertebrates.
Marie Maynard Daly	Marie Maynard Daly is known for her work on how the heart and circulatory system are affected by sugar and cholesterol.
Alexander Fleming	Alexander Fleming is well known for discovering the world's first antibiotic that could be used to treat illnesses caused by bacteria. He called it penicillin.
Mary Leakey	Mary Leakey discovered many fossils of early hominins and their tools. These fossils provide evidence for the evolution of humans.
Dr Daniel Hale Williams	In 1893, Dr Daniel Hale Williams performed the world's first successful open-heart surgery, without blood transfusions, with unreliable anaesthetic and with no way of stopping the heart from beating while he operated!
Steve Jobs	Steve Jobs was an innovator, inventor and entrepreneur who introduced new technologies to the public. He co-founded the technology company, Apple Incorporated, and launched the iPod, iPhone and iPad.

Scientists and Inventors — Year 6

Key Vocabulary	
astrophysicist	An astrophysicist is a scientist who studies the universe beyond Earth.
black holes	Black holes are areas of space where gravity is so strong that matter and radiation (including light) are pulled in and can't escape.
classification	This is where plants or animals are placed into groups according to their similarities.
invertebrates	Animals without a backbone.
cholesterol	Cholesterol is a type of fat that travels in blood.
evolution	Evolution is the process of a living thing's characteristics changing over a long period of time to increase their chances of surviving and reproducing.
hominins	A group of primates which includes humans and recent ancestors of humans.

The Effects of Cholesterol
Too much of one type of cholesterol in our diets can cause it to build up and block blood vessels, which can be very dangerous. This type of cholesterol was what interested Marie Maynard Daly.

Her work has demonstrated that too many fatty and sugary foods can make the arteries narrower and can cause heart disease.

Evidence from Fossils
The fossilised footprints that Leakey found in Tanzania were extremely important. They have been dated to 3.7 million years ago and show a link between the species that made the prints and their ancestors, who would have walked on all fours. Leakey's find proved that changes were occurring over time, thus proving human evolution.

How Penicillin Was Discovered
Before going away on holiday, Alexander Fleming had not cleaned up his recent experiments with bacteria. On his return, he noticed that mould had grown in one of the Petri dishes. The colonies of bacteria around the mould had been destroyed, whereas the bacteria in other Petri dishes were still alive.

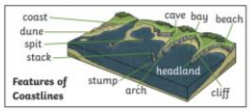
He originally called his discovery 'mould juice', but in March 1929 he officially named the substance 'penicillin', now a widely used antibiotic.

Humanities: Term 1a

Our Changing World — Year 6

Key Vocabulary

acidic	A chemical substance, usually a liquid, which reacts with other substances to form salts. Some acids burn or dissolve other substances that they come into contact with.
border/ boundary	The outer part or edge of a region or country that divides it from another.
deposition	When material/sediment is moved and dropped off in a different place.
dissolve	When a solid substance mixes with a liquid to make a solution.
erosion	When natural materials are worn away and transported to a different place.
weathering	The process of wearing away rocks by the weather.



Features of Coastlines

Weathering and Erosion

Weathering is the process of wearing away rocks by the weather.

There are three different types of **weathering**:

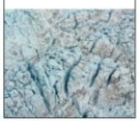
- physical **weathering**
- chemical **weathering**
- biological **weathering**

Erosion is where natural materials are worn away and transported by environmental features such as water, wind and ice.

Erosion - Wind blows loose particles away or into other rocks causing the rock to be worn away.

Physical Weathering

Water gets into cracks in the rock, it can then freeze causing the water to expand creating cracks in the rock.



Chemical Weathering

Slightly **acidic** rainwater can cause a chemical reaction and over time this can **dissolve** some of the rock.

Biological Weathering

Caused by animals and plants. Roots can grow under rocks and cause damage, animals can wear away paths, dig holes etc.

Our Changing World — Year 6

Features of Coastlines

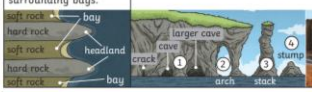
Bays and Headlands

Where there is harder and softer rock, the softer rock will **erode** more quickly and can form bays. The harder rock **erodes** more slowly and can form headlands surrounding bays.

Arches, Stacks and Stumps

Softer or weak sections of the rock are **eroded** more easily.

1. Over time, waves cause cracks to open forming caves.
2. If a cave forms in a headland, it may break through causing an arch to form.
3. The top of the arch can weaken and may collapse into the sea leaving a stack.
4. Over time, the stack will **erode** leaving a small stump of rock.



Spits

Formed by **deposition**.

1. The tide carries **eroded** material along the coastline.
2. **Deposits** form a long, thin sandy area of land.
3. Changing winds may cause the spit to form a hook shape.
4. Mud flats develop on the inland side of the spit.

Why Do Boundaries Change?

Many countries and **borders** across the world **have** and are **still** changing due to:

Human Political Activity	Natural Activity
• Tribes claiming areas of land • Invasion/war • Migration of other settlers • Royal/political union	• Rising sea levels • Natural processes and events e.g. changing river courses, volcanic eruptions.

These include the UK and other countries in Europe such as Germany, Poland and Czechoslovakia. These changes can have an impact on the **borders**, language, religion and culture of the country.

Changing Landscapes

Landscapes can change over time for many different reasons:

- New houses/buildings and roads are built
- Old buildings are demolished or updated
- Areas of land may be cleared for farming or building

Some landscapes are important and there are things in place to stop development such as:

- Listed buildings
- National/country Parks
- Green belt/conservation areas
- Sites of Special Scientific Interest
- World Heritage Sites

Humanities: Term 1b

Leisure and Entertainment — Year 6

Key Vocabulary

broadcast	To show on TV or radio.
century	A period of 100 years.
decade	A period of 10 years.
entertainment	An event or activity to provide amusement and enjoyment.
invented	Created for the first time.
leisure	Free time.
popular	Liked by many people.
technology	A collection of tools and devices which help people to do something.

Holidays

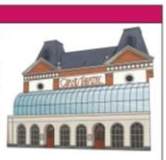
1936 - Billy Butlin set up the first family holiday camp in Britain including accommodation, food and **entertainment**.

Camping and caravanning became **popular**.

1960s - more people started travelling abroad with Spain being the most **popular** destination.

Cinema

Going to the cinema became one of the most **popular** forms of **entertainment** in the 20th **century**.



At the beginning of the 20th **century**, films were silent - a pianist would sit in the theatre and play live music that they thought might fit the story.

The first 'talkie' (a film that included sound and actors talking) was made in 1927 - The Jazz Singer.

By the 1930s, colour films began to be made.

People often went to the cinema once or twice a week, until televisions became **popular**.

The Wizard of Oz (1939) was the most **popular** movie of the **decade**.

Other **popular** films included King Kong (1933) and Dracula (1931).

Sport

At the beginning of the 20th **century**, cricket was the most **popular** sport. However, during WWI, many soldiers played football while away from home and so this became more and more **popular**.

The first World Cup was held in 1930 in Uruguay and included just 13 teams.

England won The World Cup in 1966. The final, between England and Germany, was held at Wembley. It finished 2-2 so extra time was given. The final score was 4-2 to England. The crowd invaded the pitch to celebrate.

Famous footballers of the 20th **century** included:

Pelé
Diego Maradona
George Best
Bobby Charlton
Johan Cruyff

Leisure and Entertainment — Year 6

The Swinging Sixties

Lots of changes took place in the 1960s, as many young people wanted a revolution (big change) in behaviour, clothes and music.

Food	Music	Clothes
Black Forest gateau Cheese and pineapple sticks Fondue Prawn cocktail Trifle	Songs about love and freedom Rock, jazz, pop and folk music Patsy Cline, Jimi Hendrix, The Supremes, The Beatles	Doc Marten boots Mini skirts Mop top hair Bright prints and colours

Television Moments

1929	The first television **broadcast** in Britain.
1953	Queen Elizabeth II's Coronation (a ceremony to mark the crowning of the new monarch) was televised.
1969	Apollo II Moon landing.
1981	The Wedding of Prince Charles and Lady Diana.

Technology

1920s	Radio became an important way of communicating. Live news and **entertainment** programmes were **broadcast**.
1930s	Cinemas became very **popular**.
1950s	TV became more **popular** than going to the cinema.
1958	The first computer game was created.
1969	The Internet was **invented** for use by the armed forces for defence.
1970s	Computers became cheap enough and small enough for many people to have in their homes.
1973	Mobile phones were **invented** but they became more **popular** in 1983 when they were available to buy.
1989	The World Wide Web was **invented**.

By the 1960s, most families had their own television.

Humanities: Term 2a

The Amazing Americas — Year 6

Key Vocabulary

biomes	A large geographical area which is home to certain plants and animals, specially adapted to suit the environment.
climate	The usual or average **weather** conditions over a long period of time.
continent	A large landmass made up of many **countries**.
country	An area that is controlled by its own government.
equator	An imaginary line around the globe at **latitude** 0° north dividing the earth into northern and southern hemispheres.
flora/fauna	Plant and animal life.
latitude	Imaginary parallel lines which circle the globe from east to west.
longitude	Imaginary lines which run north to south across the globe from pole to pole.
weather	The specific atmospheric conditions on a given day including temperature and rainfall.

The Americas

- The Americas are two separate **continents** consisting of North America and South America.
- North America contains 23 different countries.
- The Americas cover a huge area of the globe, extending over several lines of **latitude** and **longitude**.
- The characteristics of different countries and regions vary significantly, including **weather**, land use and **flora** and **fauna**.

How Can You Compare Different Places?

Physical Geography The natural features of a place or environment.	Human Geography Features of an environment that have been shaped by people.
• oceans and coastlines • rivers and lakes • mountains and volcanoes • **flora** and **fauna** • land-form	• country/region boundaries • buildings, roads and land use • changes to river courses • language/signs • religion, government, art and music

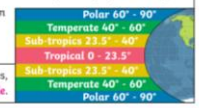
The Amazing Americas — Year 6

Climate Groups

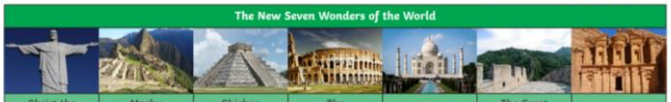
The Köppen System is a **climate** classification system. It is split into five main groups which each consist of a range of **climate** types:

- Temperate - hot dry summers, and cooler wetter winters, Mediterranean e.g. United Kingdom
- Continental - long, cold winters and short, hot summers, inland areas e.g parts of Turkey
- Polar - long periods of extreme cold, tundra, ice cap e.g. Antarctica
- Tropical - hot and humid, wet, rainforest e.g. Brazil
- Dry - arid, desert e.g. Saudi Arabia

The four main **climate** zones, determined by **latitude**.



The New Seven Wonders of the World



Christ the Redeemer, Brazil | Machu Picchu, Peru | Chichen Itza, Mexico | The Colosseum, Italy | Taj Mahal, India | The Great Wall of China | Petra, Jordan

Some of the Natural Wonders of the Americas

Grand Canyon, Arizona | Niagara Falls, Ontario/New York | Angel Falls, Venezuela | Yosemite Valley, California | Kilauea, Hawaii | Great Blue Hole, Belize | Amazon Rainforest, Brazil

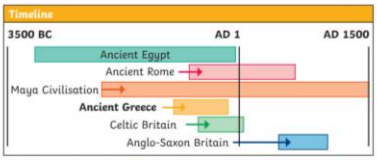
Humanities: Term 2b

Ancient Greece — UKS2

Key Vocabulary

ancient	Something from a very long time ago.
civilisation	In this context, the word 'civilisation' is used to describe a human society with well-developed rules and government, often where technology and the arts are considered important.
city states	Small areas that ancient Greece was divided into, each with their own governments, laws and army.
empire	A group of countries or states that is ruled by one ruler or country.
legacies	Things that live on after someone dies or after a civilisation or event ends.
democracy	Democracy is a system where the citizens of a country or state are involved in the way it is run.

Timeline



What Was Ancient Greece Famous For?

Ancient Greece is important historically because many things in culture today, especially in modern Europe, have been influenced by the ideas of the ancient Greek civilisation.

The sculptures, architecture, philosophy, arts, politics and the scientific and mathematical ideas of ancient Greece are just some of the things that have had a significant impact on culture today. These things can be referred to as 'legacies' of ancient Greece.

City States

Ancient Greece was not a country. It was made up of city states. There were often battles between these city states but sometimes they would join together against a common enemy. Important city states of ancient Greece included Athens, Corinth and Sparta.

Democracy

Around 508 BC, democracy was introduced to ancient Athens. Listening to the opinions of other people and debating issues was an important part of this system. After debating issues, the ancient Athenians would vote. At that time, the only people allowed to take part in democracy were adult males who were citizens of Athens.

Ancient Greece — UKS2

Alexander the Great's Empire

Independent city states existed for most of the ancient Greek period. However, near the end of this period, King Philip II of Macedonia ruled over all of ancient Greece. Later, his son - Alexander the Great - took over the empire along with other lands that he conquered.

The Olympic Games

- The first recorded Games was in 776 BC, in Olympia.
- The event was part of a festival to honour the Greek god, Zeus.
- Women were not allowed to compete in the Olympics. This was because ancient Greek women were not treated as equals to men and had fewer freedoms.
- Events included boxing, wrestling, running and chariot racing.
- Some of the evidence about the Games comes from paintings discovered on pottery.

The Trojan War

- The Trojan War is a very famous ancient Greek myth.
- Many people believe that it is a myth but that there is some historical truth behind it.
- The Trojan War (which is believed to have lasted for ten years) was between the Greek and the Trojan Armies.
- In the story, the Greeks pretended to surrender, leaving a gift of a giant horse for the Trojans. The gift was brought inside the city walls. In the night, Greek soldiers hiding inside the horse let the Greek army inside Troy's walls and the city was destroyed.
- Many poems were written about the Trojan War during the ancient Greek period. The most famous poems were written by a poet called Homer.

Greek Gods and Goddesses

- The ancient Greeks believed in many different gods and goddesses. Each god/goddess represented a certain aspect of humanity and each was responsible for certain parts of life too.
- Festivals were held to celebrate the gods and goddesses.
- Animal sacrifice was an important part of ancient Greek worship.
- It is believed that the 12 most powerful gods lived on Mount Olympus.
- The ancient Greek gods and goddesses were included in many of the myths that the ancient Greeks told one another.
- Zeus was the most powerful of all the gods. He was god of the sky and the king of Mount Olympus.

Humanities: Term 3a

Trade and Economics — Year 6

Key Vocabulary

trade	Buying and selling **goods** and services.
import	**Goods** or services purchased from one country and brought into the UK.
export	**Goods** or services made in the UK and sold to another country.
goods	Items that can be bought and sold. Sometimes they are called products.
global	Around the world.

What Does the UK Trade?

The UK **trades** a lot of **goods** and services.
Some of the **goods** the UK **exports** are:
scrap iron, whisky, tartan kilts, medicines, aircraft parts, cars, computers, oil and gas.

Some of the **goods** the UK **imports** are:
coffee beans, bananas, medicines, aircraft parts, cars, computers, oil and gas.

Trading with El Salvador

El Salvador is located between the equator and the Tropic of Cancer.

The climate there is hot and humid with very heavy rainfall at times.

There are some very mountainous areas.

There are some issues in El Salvador. The rocky, steep landscape can make growing crops tricky. Growing the same crops every year also means that disease can spread more easily and lead to a poor harvest. In the dry season, water can be very hard to get.

Goods imported from El Salvador include coffee, cotton, sugar, shrimp, fruit and nuts.

Trade and Economics — Year 6

Key Vocabulary

fair trade	A way of buying **goods** designed to make sure that the producers of these **goods** in developing countries are paid a fair and stable price for the **goods** that we buy from them.
globalisation	The spread of **trade** and ideas worldwide.
global supply chain	The different places a product and its parts come from, and travel to, on its way to the consumer (the person who is buying the product).
multinational	Something that operates in more than one country. A **multinational** business is based in more than one country.
economy	The word used to explain how money is made and spent in a particular area. This could be within a country or across the world.

How Does Fair Trade Work?

There are many steps involved in selling **goods**. Bananas, for example, are generally grown on plantations. This means the plantation owner has to make sure that the ground is taken care of and fertilized. They also have to pay for fruit pickers to harvest the fruit and for machinery for the plantation. **Exporters** then transport the bananas by ship and pay for their own fuel, any lost or damaged stock and port fees. **Importers** then transport the bananas from the port to ripening centres and pay for workers and transportation to move them. The ripening centres have to pay for their operating costs, gases used for ripening and staff. Finally, the retailer sells the bananas but also pays for staff to work in shops, advertising and the costs of any stock that goes off or isn't sold. There are lots of steps in the trade process but people involved are not always paid equally or fairly. **Fair trade** exists to make sure that people are not exploited. Look out for the **fair trade** logo when buying things so that you know that people have been paid fairly for their work

How Has Trading Changed through History?

Trade has changed a lot through history. This is partly due to developments in transportation but also due to the changing relationships of the UK with other countries. In Tudor times, the UK **traded** with the the Americas, whereas in Victorian times, the UK mainly **traded** with other countries who were in the British Empire

The Global Economy

Globalisation has meant that more and more **goods** travel around the world before being sold in a shop. Sometimes, parts of a product are made in several different countries before being assembled in another one. Many companies are now recognised worldwide. These are **multinational** companies and they can have both a positive and a negative impact on society. Positives may include the creation of new jobs for people. Negatives may include greater damage to the environment (due to differences in the safety rules and environmental standards of different places).

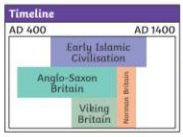
Humanities: Term 3b

Early Islamic Civilisation — UKS2

Key Dates

AD 632	Muhammad (peace be upon him) passes away and Abu Bakr (RA) is chosen as the Caliph. He is known as one of the four khulafaa Raashid, the last being Ali (RA). After the last Ali (RA) was assissinated in AD 661, the Umayyad dynasty of caliphs took over for nearly a century. After that began the reign of the Abbasid caliphs.
AD 752	**Caliph** Al-Mansur builds Baghdad as the new capital of the Islamic empire on the river Tigris. It was close to established trade routes, such as the **Silk Road**, and became known as the cultural and learning capital of the world.
AD 830	The House of Wisdom is built in Baghdad.
AD 1000	Al-Zahrawi finishes his medical book Al Tasrif. It will be used by doctors for another 500 years.
AD 1258	The Siege of Baghdad. Mongols from Asia attacked Islamic lands, destroying the House of Wisdom and burning Baghdad. They threw millions of books into the river. The city never recovered its former glory, but the ideas lived on.

Timeline

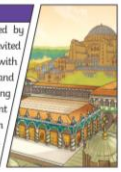


Islamic Art

Islamic art includes architecture, **calligraphy**, painted glass, illustrated patterns, pottery, and textile arts.

The House of Wisdom

Bayt al-Hikma, the 'House of Wisdom', was founded by **Caliph** Harun al-Rashid. He encouraged learning and invited **scholars** of different faiths to his court, treating them with great respect. The House of Wisdom was a library and research facility which collected and translated writing from many cultures, including Persian, Indian, ancient Greek and Roman texts. By AD 900, the House of Wisdom stored more books than anywhere else in the world and was attracting the most brilliant minds to study there.



Early Islamic Civilisation — UKS2

Key Vocabulary

Islam	The word Islam means submission (to Allah). People who practise **Islam** are called Muslims.
caliph	A **caliph** is the leader of a caliphate - a political-religious form of government of a Muslim community. A **caliph** had to be Muslim, male, sane, fair, just and law-abiding.
dynasty	A succession of rulers of a country or civilisation. Generally the next ruler in the **dynasty** inherits the title.
scholar	A person dedicated to learning, often at a high level and in a particular area of study.
calligraphy	Decorative handwritten lettering.
vegetal	Consisting of foliage and flowers.
geometric	Repeating, interlaced or overlapped shapes.
Silk Road	A network of trade routes linking China to the Middle East and Europe, first used to carry Chinese silk.

Islamic Scholars and Their Achievements

Abu Abdullah Muhammad ibn Musa al-Khwarizmi AD 780 – AD 850	• 'Father of algebra' • Introduced Arabic numbers 1-9 and the concept of 'zero'
Muhammad ibn Zakariya al-Razi AD 854 - AD 925	• Treatment of smallpox and measles • Study of eyes • Recognised the importance of doctor/patient relationships
Abu al-Qasim Khalaf ibn al-Abbas al-Zahrawi AD 936 – AD 1013	• New surgical techniques, e.g. cauterisation • New surgical tools, e.g. forceps
Ibn al-Haytham AD 965 – AD 1040	• Proved that light travels in straight lines • Invented the first camera

Baghdad and the Islamic Empire	London and Europe
Baghdad population: over a million	London population: approximately 20,000
Millions of books, many thousands of readers.	Very few books, only very rich or educated people could read.
Clean water and good drainage in cities.	Very little drainage in cities, water supplies were unsafe.
Advanced mathematics used Arabic numbers and the concept of 'zero'.	Basic mathematics, with Roman numerals and no concept of 'zero'
General peace across a huge Islamic empire.	Many wars between Christian kingdoms.

Staying Fit and Healthy

We encourage our pupils to develop healthy habits and stay fit. Here are some tips

School Packed Lunches

Hummus and Salad Wrap

Ingredients

- 2 tbsp reduced-fat hummus
- 1 large wholemeal wrap
- 1 small carrot, grated
- a couple of leaves of lettuce, shredded

Method

1. With a knife, spread the hummus evenly over the wrap.
2. Sprinkle the grated carrot and shredded lettuce on top as well.
3. Fold the bottom and top of the wrap in and roll up the wrap. Cut it in half and store it in an airtight container.

Serve with healthy snacks like a handful of cherry tomatoes and Greek yoghurt with mixed berries.

Always remember to include a drink with your child's lunch.

School Packed Lunches

Salmon Bagel

Ingredients

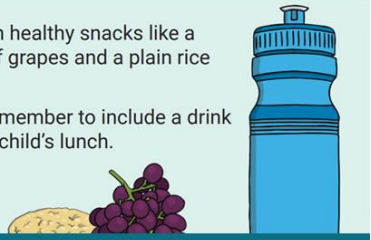
- 1 wholemeal bagel
- half a large can of pink salmon
- 1 level tbsp mayonnaise
- 4 slices of cucumber
- A couple of leaves of lettuce, shredded

Method

1. Slice the bagel in half and toast it. Leave it to cool.
2. Drain all of the water out of the salmon and remove any bones.
3. In a bowl, mix the salmon, mayonnaise and season with pepper.
4. Spread the mixture onto one-half of the bagel pieces.
5. Cover the other side with the cucumber and lettuce.

Serve with healthy snacks like a handful of grapes and a plain rice cake.

Always remember to include a drink with your child's lunch.



We know it's easy to run out of ideas for a healthy packed lunch, so we've put some not so difficult ideas together for you

School Packed Lunches

Spinach, Feta and Beans Quinoa

Ingredients

- 270g quinoa, uncooked
- 2 carrots, peeled and diced
- 150g spinach
- 1 can cannellini beans, drained and rinsed
- 170g feta, crumbled
- 700ml vegetable stock

Dressing

- 200ml olive oil
- 1 tbsp balsamic vinegar
- 2 tbsp lemon juice
- 1 clove garlic, crushed
- 1 tsp honey
- ½ tsp dried oregano

Method

1. In a large saucepan, add in the quinoa, vegetable stock and carrots.
2. Bring to the boil, and then reduce down to a simmer and cover. Keep cooking until the quinoa has absorbed all of the liquid, which should take about 20 minutes.
3. Whilst this is cooking, mix all of the dressing ingredients together. Season with salt and pepper to taste.
4. Chop the spinach and stir it into the quinoa and carrots. Place the lid on again and cook for another 3 minutes, to allow the spinach to wilt.
5. Add in the cannellini beans and dressing, mix well and allow to cool.
6. Stir in the feta cheese.
7. Portion and store in airtight containers.

School Packed Lunches

Tuna and Bean salad

Ingredients

- 3 tsp olive oil
- ½ lemon, juiced
- Pinch of mixed herbs
- Pinch of mustard powder
- Pinch black pepper
- 1/2 bell pepper, chopped
- 2 spring onions, sliced
- 3cm cucumber, chopped
- 1 heaped tbsp mixed beans, drained
- ½ can of tuna, drained

Method

1. In a bowl, combine the oil, lemon juice, mixed herbs, mustard powder and black pepper.
2. Add in the pepper, onions, cucumber, beans and tuna. Mix together well.
3. Serve with a slice of wholemeal bread with a low-fat spread.
4. Include some healthy snacks such as a satsuma and a slice of malt lof, as well as a drink.

School Packed Lunches

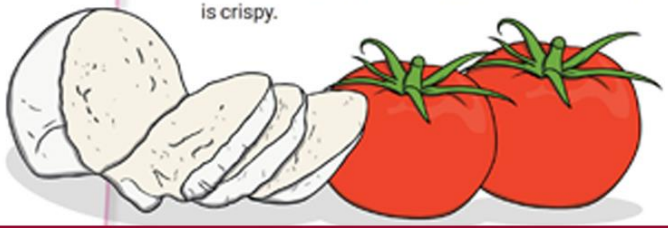
Mozzarella, Pesto and Tomato Paninis

Ingredients

- 2 paninis
- 250g mozzarella cheese, sliced
- 1 tomato, sliced
- 2 tbsp pesto
- 2 tbsp basil leaves
- butter

Method

1. Slice the paninis in halves. Lightly butter on both sides.
2. Spread the pesto onto one half of each panini.
3. On the pesto covered side, place the mozzarella, tomato and basil. Then sandwich together with the other halves.
4. Cook the paninis in a grill or panini press for a few minutes. Alternatively, heat a frying pan and once hot fry the paninis on each side for a couple of minutes until the cheese has melted and the bread is crispy.



School Packed Lunches

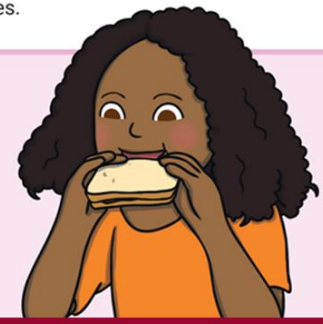
Tuna Mayo Sandwich

Ingredients

- ½ can of tuna, drained
- 1 tbsp mayonnaise
- 1 tbsp sweetcorn
- a handful of lettuce, chopped
- 2 slices of half-and-half bread
- 1 carrot cut into sticks
- 3cm portion of cucumber cut into sticks
- 60g mixed berries

Method

1. In a bowl, mix the tuna, mayonnaise and sweet corn together.
2. Season with black pepper.
3. Spoon the mixture onto a slice of bread and form a sandwich with the other slice.
4. Top with some chopped lettuce.
5. Serve with carrot sticks, cucumber sticks and mixed berries.



We know it's easy to run out of ideas for a healthy packed lunch, so we've put some not so difficult ideas together for you

School Packed Lunches

Spicy Chicken Salad Wrap

Ingredients

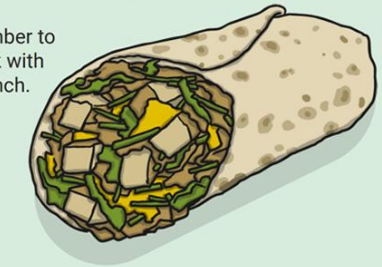
- 1 tbsp Greek yoghurt
- ¼ tsp curry powder
- chilli powder, to taste
- 85g cook chicken breast, cut into small pieces
- 1 large wholemeal wrap
- a couple of leaves of lettuce, shredded
- 3 slices of cucumber, chopped into small pieces
- 1 slice of pepper, chopped into small pieces

Method

1. In a bowl, mix together the yoghurt, curry powder and chilli powder.
2. Throw in the chicken pieces and cover well.
3. In the wrap, spread the chicken mixture. Top with lettuce, cucumber and pepper.
4. Fold the bottom and top of the wrap in and roll up the wrap. Cut it in half and store it in an airtight container.

Serve with healthy snacks like some peach and strawberry slices and a fruit cake.

Always remember to include a drink with your child's lunch.



School Packed Lunches

Egg Mayonnaise Sandwhich

Ingredients

- 1 egg
- 1 tbsp mayonnaise
- 1 large wholemeal roll or 2 wholemeal slices
- a couple of leaves of lettuce, shredded

Method

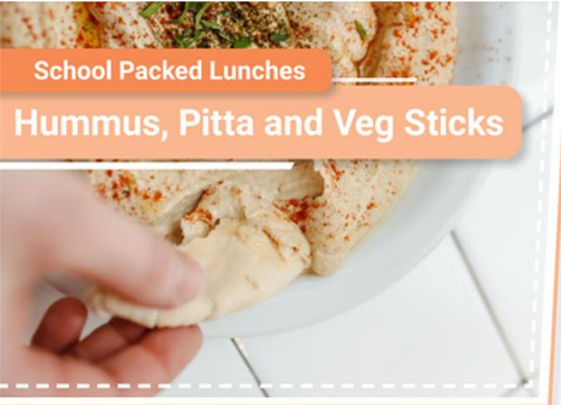
1. Boil a small saucepan of water. Place the egg in the water and cook for 10 minutes.
2. Now, move the egg into cold water and wait for it to cool.
3. Remove all of the shell from the egg.
4. In a bowl, mash the egg with the mayonnaise. Season with pepper.
5. Fill the roll or bread slices with the egg and mayonnaise mixture. Top with the lettuce.

Serve with healthy snacks like some cherry tomatoes and strawberry slices and a fruit snack pot.

Always remember to include a drink with your child's lunch.

School Packed Lunches

Hummus, Pitta and Veg Sticks



Ingredients

- 2 tbsp tinned chickpeas
- ½ lemon, juiced
- 1 tbsp low-fat Greek-style yoghurt
- 1 tbsp olive oil
- ¼ tsp paprika
- 1 clove of garlic, peeled
- 1 large wholemeal pitta bread, sliced into strips
- 1 small carrot, cut into sticks
- 1 stick of celery, cut into sticks

Method

1. In a large bowl, combine the chickpeas, lemon juice, yoghurt, olive oil, paprika, cumin and garlic.
2. With a hand blender, mix together the ingredients until you've formed a smooth paste. Mix this the night before and store it in the fridge, this will save you time in the morning and allows the hummus to develop.
3. Store the pitta, carrot and celery in the fridge overnight as well.

Serve with a banana and yoghurt.

School Packed Lunches

Easy Quesadilla

Ingredients

- 2 tortilla wraps
- a handful of grated cheese
- slice of ham, shredded
- a handful of chargrilled peppers from a jar
- additional vegetables, optional

Method

1. Heat a large frying pan over a stove.
2. Without any oil, add in one of the wraps.
3. Sprinkle in the cheese, ham and peppers onto the wrap.
4. Add the other wrap over the top and press down.
5. Keep cooking until the cheese has melted, and then flip over to brown the other wrap.
6. Remove from the pan and cut into wedges, place in an airtight container and store in the fridge overnight.

Why not try adding in some other vegetables, such as some fried onion, fried mushrooms, tomatoes, sweetcorn, spinach or kidney beans to add to the quesadilla?

Serve with healthy snacks, like a handful of cherry tomatoes and a box of raisins.

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School Packed Lunches

Chicken Pitta Pockets

Ingredients

- ½ avocado, peeled and sliced
- 1 chicken breast
- 40g watercress
- ¼ tbsp balsamic vinegar
- ½ tsp olive oil
- 1 plum tomato, thinly sliced
- 2 pittas

Marinade

- 1 ½ tbsp olive oil
- 2 tsp balsamic vinegar
- 1 tsp soy sauce
- 1 tsp oregano

Method

1. In a bowl, mix all of the marinade ingredients.
2. Score the chicken breasts a few times with a knife and place the chicken into the marinade bowl. Rub the marinade into the chicken and leave for at least half an hour.
3. Drain and keep the marinade.
4. Heat a frying pan and add a tiny amount of oil. Season the chicken with salt and pepper and cook for 8 to 10 minutes, making sure to flip halfway through. Ensure the chicken is cooked all the way through.
5. Take the chicken out of the pan and slice it into strips.
6. Slice the pittas in half and brush with the rest of the marinade.
7. Throw the watercress, balsamic vinegar and olive oil together into a bowl.
8. Add in the chicken, avocado, tomato and watercress into the pittas.

School Packed Lunches

Cheesy Coleslaw Pitta

Ingredients

- 1 tsp mayonnaise
- 1 tbsp low-fat Greek-style yoghurt
- 1 thin slice of white cabbage, shredded (to give a handful)
- 1 small carrot, grated
- 2 spring onions or a slice of onion, chopped
- 20g reduced-fat cheddar cheese, finely chopped or grated
- 1 large wholemeal pitta bread

Method

1. In a small bowl, mix the mayonnaise and yoghurt.
2. Add in the cabbage, carrot, onion and cheese.
3. Slice open a pitta bread and spoon filling into the pocket.

Coleslaw keeps well in the fridge, so why not prepare the coleslaw the night before to save you time in the morning.

Serve with healthy snacks, like a handful of cherry tomatoes and a box of raisins.

School Packed Lunches Snack

Oat and Raisin Cookies

Ingredients

- 85g butter
- 75g soft brown sugar
- 1 tsp vanilla extract
- 75g porridge oats
- 75g raisins
- 40g sunflower seeds
- 50g plain flour
- 1 egg, beaten
- ¼ tsp bicarbonate of soda
- ½ tsp salt

Method

1. Preheat the oven to 180°C.
2. Beat together the butter and sugar. This is best done with a stand mixer but can also be done with an electric hand mixer or with a spoon.
3. Once the butter and sugar are well combined, add in the remaining ingredients until well mixed.
4. Spoon the mixture into small balls, and place them onto a non-stick baking tray. Flatten them down to compact them.
5. Place in the oven and bake for 12 to 14 minutes until golden brown.
6. Remove from the oven and transfer to a wire rack to cool. They will be quite soft when first out of the oven, but will harden as they cool.

School Packed Lunches

Muffin Pizzas

Ingredients

- 4 English muffins
- 80ml tomato sauce
- slices of pepperoni, cut into quarters
- 1 ball mozzarella, cut into small cubes
- 2 handfuls of grated cheese

Method

1. Heat the girl to a high temperature.
2. Slice the muffins in half.
3. Spread the tomato sauce evenly onto the muffins.
4. Top with mozzarella, pepperoni slices and cheddar.
5. Grill for 2 - 3 minutes until the cheese has melted and browning.

Serve with healthy snacks like a few vegetable sticks and a piece of flapjack.

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School Packed Lunches

Veggie Pasties

Ingredients

- 1 tbs olive oil
- 1 onion
- 4 potatoes
- 200ml hot vegetable stock
- 150g frozen peas
- 150g cheddar cheese, grated
- 500g shortcrust pastry
- 1 egg, beaten

Method

1. Preheat the oven to 200°C.
2. Peel and dice the potatoes into small cubes that are about 1cm. Finely chop the onion as well.
3. In a large non-stick pan, heat the olive oil. Once the oil is hot, fry the onions for about 5 minutes.
4. Throw in the potatoes as well and keep stirring. Heat on medium heat for a couple of minutes.
5. Pour in the hot vegetable stock. Cover the pan with a lid and cook on low heat for about 15 minutes.
6. Add in the frozen peas and continue cooking for another 5 minutes.
7. Remove the pan from the heat and stir in the grated cheese.
8. Roll out the shortcrust pastry, using flour so it doesn't stick to the work surface. Use a small plate as a template to cut out 6 circles from the pastry.
9. Evenly spoon the filling into each circle of pastry. Fold the circles in half across the filling and crimp (compress) the edges with a fork. Score the tops of the pasties with small lines to allow heat to escape when cooking.
10. Brush the pasties with the beaten egg, before cooking them in the oven for 20 minutes, or until they're golden brown.

School Packed Lunches

Soft Cheese Salad Sandwich

Ingredients

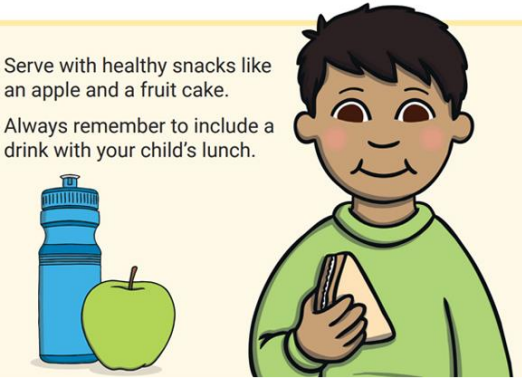
- 2 slices of wholemeal bread
- 2 tbsp soft cheese
- 3cm piece of cucumber, finely chopped
- ⅔ celery stick, finely chopped
- a couple of leaves of lettuce, shredded

Method

1. Spread the soft cheese on both slices of bread.
2. Add all of the vegetables onto the cheese of my side.
3. Season with pepper or paprika if you like.
4. Finish the sandwich simply by combing the two pieces together.

Serve with healthy snacks like an apple and a fruit cake.

Always remember to include a drink with your child's lunch.



Healthy Lunchboxes

A Guide for Parents

NHS guidelines suggest that a balanced lunchbox will contain something from each of the following groups:

- a starchy food such as bread, pasta or rice
- a protein source such as meat, fish, egg or beans
- a source of calcium such as yoghurt, cheese or milk
- fresh vegetables or salad
- fruit (including fresh fruit juice and dried fruit)

Make fruit fun and easy to eat by chopping it into small pieces and including a spoon. You can stop fruit such as apples and bananas from going brown by tossing them in a little water mixed with lemon juice and storing in an airtight container. You can use cookie cutters on fruit that can be cut into larger slices, such as melon or pineapple.

Try not to include foods high in fat and sugar on a daily basis. Make healthy swaps, such as crunchy carrot sticks instead of crisps, or a fruity yoghurt instead of a cake.

Don't forget your leftovers. If you've had a pasta meal, for example, the leftovers can quickly be turned into a nutritious pasta salad with the addition of a few chopped fresh vegetables. Leftovers from the Sunday roast also make fantastic sandwich fillings.

Chiller packs are readily available at the supermarket – pop a couple in the freezer so you always have one ready to slip into the lunchbox to keep things cool and fresh. Alternatively, you could freeze juice boxes and pop one of those in the box – by lunchtime it will have defrosted, all the while keeping the lunch fresh.

Reduce your use of single-use plastics by avoiding plastic spoons and drinks with straws, and using foil instead of plastic wrap. There are lots of reusable plastic food containers available now and it's also more cost-effective to buy larger pots of foods such as yoghurt and decant a portion into a reusable container.

Get your kids involved in making packed lunches – even the youngest can have a go at buttering a piece of bread and adding a filling. Set up a production line and you'll be surprised how quickly the lunches get done!

Plan a week's lunches in advance – try using this handy **Weekly Lunchbox Planner.**

You can make sandwiches more interesting by using different types of breads – try tortilla wraps, chapattis, pitta or bread flavoured with herbs, seeds or cheese. It's also fun to use cookie cutters to cut sandwiches into different shapes.

If your child is bored of sandwiches, try making a colourful pasta or rice salad, or send them with a dip such as hummus and a handful of breadsticks and veggie sticks.

Don't be tempted to include too much in your child's lunchbox, especially for younger children. Think about what you would serve them for a normal lunch at home. Often, children struggle to eat large amounts and they are always keen to finish quickly so that they can go outside to play with their friends!

Weekly Lunchbox Planning Record

Week beginning ______________________

	Monday	Tuesday	Wednesday	Thursday	Friday	Shopping List
Sandwich/Salad 						....
Dairy 						....
Fruit/Veggies 						....
Snack/Treat 						....
Notes/Comments 						....

Recommended Websites to Support Learning

https://www.oxfordowl.co.uk/

https://www.bbc.co.uk/bitesize

https://www.nationalgeographic.org/

https://www.dkfindout.com/uk/

https://www.booktrust.org.uk/

https://www.phonicsplay.co.uk/

https://ed.ted.com/

https://www.youtube.com/c/RuthMiskinTrainingEdu

Educational Apps

The following apps cover a range of activities and support learning in a number of subjects.

- Teach Your Monster to Read (For school-aged children): Covers the first two years of learning to read, from matching letters and sounds to enjoying little books, designed in collaboration with leading academics.
- Navigo Game (For school-aged children): Focuses on developing skills that underpin reading, including phonics, letters and sounds, designed by UCL Institute of Education and Fish in a Bottle.
- Fonetti (For school-aged children): The world's first 'Listening Bookshop' interacting with children by giving visual cues in real-time as they read aloud and highlighting where the most support is needed.
- Cambridge Science: Created by Cambridge University Press, Cambridge Science is an app using 360-degree technology. You'll find 360-degree videos and photos grouped into categories such as: Earth, Water, Plants, Solar System and the Human Body. Visit stunning landscapes and breathtaking places, both real and digital. Learn lots of interesting facts.

School Subscriptions

We have a number of subscriptions we use for school use and for which parents and children have access. These are listed below including some brief guidelines on how to use them.

Classdojo = All Year Groups

ClassDojo is a school communication platform that teachers, pupils, and families use every day to build close-knit communities by sharing what's being learned in the classroom home through photos, videos, and messages.
To login to Classdojo, visit www.classdojo.com and sign in as a parent. If you are new to the school, you will need to be 'connected' to your child's class. We will provide instructions on how this is done.

Read, Write, Inc = Years 2, 3, 4, 5 and 6

Using a proven approach underpinned by phonics, fast–paced lessons and an online subscription, Read Write Inc. Spelling prepares children for the higher demands of the statutory spelling assessments in England. To access your learning platform, please visit: https://www.oxfordowl.co.uk/login?active-tab=students

Ensure you have selected the 'Student' tab

Active Learn = All Year Groups

Your child's teacher will often set work on Active Learn for Maths.
Visit: www.activelearnprimary.co.uk and log in with the details provided by your teacher.

Century = Years 3, 4, 5 and 6

Century is for children in years 3 – 6. Homework is set on Century for English, Maths and Science. Additionally, children can use Century to continue learning as the software uses artificial intelligence to allocate work according to the child's abilities.
Visit: app.century.tech/login and user your username and password to login

School Jam = Reception, Year 1 and 2

Maths Homework and tasks are allocated on School Jam for child in years 1 and 2. School Jam is accessed as a mobile app
School Jam on the App Store (Apple devices): https://apps.apple.com/gb/app/school-jam/id1447069305
School Jam on the Play Store (Android devices): https://play.google.com/store/apps/details?id=com.pearson.android.parentalengagement&hl=en_GB&gl=US

Pickatale = All Year Groups

We use Pickatale to further re-enforce reading. This is open to all year groups.
Download the app and use your username and password to login
Apple Users:
https://apps.apple.com/gb/app/pickatale-school/id1533803381
Android Users:
https://play.google.com/store/apps/details?id=com.Pickatale.PFS&hl=en_GB&gl=US