

# National Curriculum Expectations

## Year 4

### Core Subjects

English				
Spoken Language				
<ul style="list-style-type: none"> <li>Listen to and discuss a wide range of fiction, non-fiction, poetry, plays, reference books and textbooks.</li> <li>Use intonation, tone, volume and action to recite and perform poetry and own texts for clarity of meaning.</li> <li>Take turns discussing and listening to differing opinions</li> <li>Read aloud own writing using intonation, tone and volume to ensure clarity of meaning</li> </ul>				
Reading				
Reading - word reading		Reading - Comprehension		
<ul style="list-style-type: none"> <li>Continue to apply knowledge of root words to read further exception words, identifying differences between spelling and sound</li> <li>Use etymology and morphology to understand meaning of new words.</li> </ul>		<ul style="list-style-type: none"> <li>Read books for specific purpose and identify books for specific needs.</li> <li>Continue to use dictionaries to check meanings of different words</li> <li>Identify themes and conventions in a wide range of books</li> <li>Prepare poems and play scripts to perform showing understanding through intonation, tone, volume and action</li> <li>Recognise different forms of poetry</li> <li>Ask questions to improve own understanding</li> <li>Make predictions about what might happen from details stated and implied</li> <li>Identify how language, structure and presentation contribute to meaning</li> </ul>		
Writing				
Spelling	Handwriting	Composition	Grammar and punctuation	
Revision of Y3 HFW <b>Prefixes</b> <i>dis, mis, in, il, im, ir re, anti, auto super, sub and inter</i> <b>Suffixes</b> - er, est, ier -Double letters (er, est, ed, ing) -ly (all 3 rule exceptions) -'ation' and 'ous' - gue, que (French origin words)	- Word endings with the 'shun' sound- <i>tion, -sion, -ssion, -cian</i> , Suffix- -Word endings - <i>sure, -ture</i> -Word ending - hood, ship <b>Confusing words</b> The short 'i' sound The short 'u' sound The hard 'c' sound Compound words Irregular tense changes Regular verb endings Contractions Dialogue synonyms Time connectives	<ul style="list-style-type: none"> <li>Increase legibility, consistency and quality of handwriting.</li> <li>Ensure ascenders and descenders do not touch</li> <li>Begin to write with pen on the issue of <b>pen license</b>.</li> </ul>	<ul style="list-style-type: none"> <li>Plan writing through discussing structure, grammar and vocabulary</li> <li>Draft and write through oral rehearsal and using a wide and rich vocabulary and increasing a range of sentence structures</li> <li>Organise paragraphs in both fiction and non-fiction writing based on themes</li> <li>Proof read for spelling and punctuation errors</li> <li>Assess own and others writing making suggestions on changes to grammar and vocabulary</li> </ul>	
Revise and build on skills from Y3 <ul style="list-style-type: none"> <li>Use nouns and pronouns appropriately to avoid ambiguity and repetition</li> <li>Standard English noun-verb agreement</li> <li>Noun phrases expanded by modifying adjectives, nouns and prepositional phrases</li> <li>Use fronted adverbials</li> <li>Use of paragraphs to organise ideas around a theme</li> <li>Use commas after fronted adverbials</li> <li>Use possessive apostrophe with singular and plural nouns</li> <li>Use inverted commas for direct speech</li> </ul>				

Mathematics			
Number			
Number and Place Value	Addition and Subtraction	Multiplication and Division	Fractions including decimals
<ul style="list-style-type: none"> <li>count in multiples of 6, 7, 9, 25 and 1000</li> <li>find 1000 more or less than a given number</li> <li>count backwards through zero to include negative numbers</li> <li>recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)</li> <li>order and compare numbers beyond 1000</li> <li>identify, represent and estimate numbers using different representations</li> <li>round any number to the nearest 10, 100 or 1000</li> <li>solve number and practical problems that involve all of the above and with increasingly large positive numbers</li> <li>read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.</li> </ul>	<ul style="list-style-type: none"> <li>add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate</li> <li>estimate and use inverse operations to check answers to a calculation</li> <li>solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</li> </ul>	<ul style="list-style-type: none"> <li>recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math></li> <li>use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers</li> <li>recognise and use factor pairs and commutativity in mental calculations</li> <li>multiply two-digit and three-digit numbers by a one-digit number using formal written layout</li> <li>solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.</li> </ul>	<ul style="list-style-type: none"> <li>recognise and show, using diagrams, families of common equivalent fractions</li> <li>count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.</li> <li>solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number</li> <li>add and subtract fractions with the same denominator</li> <li>recognise and write decimal equivalents of any number of tenths or hundredths</li> <li>recognise and write decimal equivalents to <math>\frac{1}{4}</math>, <math>\frac{1}{2}</math>, <math>\frac{3}{4}</math></li> <li>find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths</li> <li>round decimals with one decimal place to the nearest whole number</li> <li>compare numbers with the same number of decimal places up to two decimal places</li> <li>solve simple measure and money problems involving fractions and decimals to two decimal places.</li> </ul>
Measurement	Geometry- Properties of shapes	Geometry – Position and direction	Statistics
<ul style="list-style-type: none"> <li>Convert between different units of measure [for example, kilometre to metre; hour to minute]</li> <li>measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</li> <li>find the area of rectilinear shapes by counting squares</li> <li>estimate, compare and calculate different measures, including money in pounds and pence</li> <li>read, write and convert time between analogue and digital 12- and 24-hour clocks</li> <li>solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.</li> </ul>	<ul style="list-style-type: none"> <li>compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</li> <li>identify acute and obtuse angles and compare and order angles up to two right angles by size</li> <li>identify lines of symmetry in 2-D shapes presented in different orientations</li> <li>complete a simple symmetric figure with respect to a specific line of symmetry.</li> </ul>	<ul style="list-style-type: none"> <li>describe positions on a 2-D grid as coordinates in the first quadrant</li> <li>describe movements between positions as translations of a given unit to the left/right and up/down</li> <li>plot specified points and draw sides to complete a given polygon.</li> </ul>	<ul style="list-style-type: none"> <li>interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.</li> <li>solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.</li> </ul>

Science				
Working scientifically				
<p>During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <ul style="list-style-type: none"> <li>• asking relevant questions and using different types of scientific enquiries to answer them</li> <li>• setting up simple practical enquiries, comparative and fair tests</li> <li>• making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</li> <li>• gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</li> <li>• recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</li> <li>• reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</li> <li>• using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</li> <li>• identifying differences, similarities or changes related to simple scientific ideas and processes</li> </ul> <p>using straightforward scientific evidence to answer questions or to support their findings.</p>				
Living things and their habitats	Animals including humans	States of matter	Sound	Electricity
<ul style="list-style-type: none"> <li>• recognise that living things can be grouped in a variety of ways</li> <li>• explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment</li> <li>• recognise that environments can change and that this can sometimes pose dangers to living things.</li> </ul>	<ul style="list-style-type: none"> <li>• describe the simple functions of the basic parts of the digestive system in humans</li> <li>• identify the different types of teeth in humans and their simple functions</li> <li>• construct and interpret a variety of food chains, identifying producers, predators and prey.</li> </ul>	<ul style="list-style-type: none"> <li>• compare and group materials together, according to whether they are solids, liquids or gases</li> <li>• observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)</li> <li>• identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</li> </ul>	<ul style="list-style-type: none"> <li>• identify how sounds are made, associating some of them with something vibrating</li> <li>• recognise that vibrations from sounds travel through a medium to the ear</li> <li>• find patterns between the pitch of a sound and features of the object that produced it</li> <li>• find patterns between the volume of a sound and the strength of the vibrations that produced it</li> <li>• recognise that sounds get fainter as the distance from the sound source increases.</li> </ul>	<ul style="list-style-type: none"> <li>• identify common appliances that run on electricity</li> <li>• construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</li> <li>• identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery</li> <li>• recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</li> <li>• recognise some common conductors and insulators, and associate metals with being good conductors.</li> </ul>

## Foundation Subjects

**Art and Design - Key stage 2**

- to create sketch books to record their observations and use them to review and revisit ideas
- to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]
- about great artists, architects and designers in history.

**Computing - Key stage 2**

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- 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
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- 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
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

**Design Technology – Key stage2**

Design	Make	Evaluate	Technical Knowledge	Cooking and nutrition
<ul style="list-style-type: none"> <li>• use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups</li> <li>• generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</li> </ul>	<ul style="list-style-type: none"> <li>• select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</li> <li>• select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</li> </ul>	<ul style="list-style-type: none"> <li>• investigate and analyse a range of existing products</li> <li>• evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</li> <li>• understand how key events and individuals in design and technology have helped shape the world</li> </ul>	<ul style="list-style-type: none"> <li>• apply their understanding of how to strengthen, stiffen and reinforce more complex structures</li> <li>• understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</li> <li>• understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]</li> <li>• apply their understanding of computing to program, monitor and control their products.</li> </ul>	<ul style="list-style-type: none"> <li>• understand and apply the principles of a healthy and varied diet</li> <li>• prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</li> <li>• understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed</li> </ul>

# National Curriculum Expectations

## Year 4

Geography - Key stage 2			
Location Knowledge	Place Knowledge	Human and physical geography	Geographical skills and fieldwork
<ul style="list-style-type: none"> <li>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</li> <li>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</li> <li>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)</li> </ul>	<ul style="list-style-type: none"> <li>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</li> </ul>	<p>Describe and understand key aspects of:</p> <ul style="list-style-type: none"> <li>physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle</li> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied</li> <li>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</li> <li>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.</li> </ul>

**History - 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.
- changes in Britain from the Stone Age to the Iron Age
- the Roman Empire and its impact on Britain
- Britain's settlement by Anglo-Saxons and Scots
- the Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor
- a local history study
- a study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066
- 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
- Ancient Greece – a study of Greek life and achievements and their influence on the western world
- 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.

**Language - Key stage 2**

- listen attentively to spoken language and show understanding by joining in and responding
  - explore the patterns and sounds of language through songs and rhymes and link the spelling, sound and meaning of words
  - engage in conversations; ask and answer questions; express opinions and respond to those of others; seek clarification and help\*
  - speak in sentences, using familiar vocabulary, phrases and basic language structures
  - develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases\*
  - present ideas and information orally to a range of audiences\*
  - read carefully and show understanding of words, phrases and simple writing
  - appreciate stories, songs, poems and rhymes in the language
  - broaden their vocabulary and develop their ability to understand new words that are introduced into familiar written material, including through using a dictionary
  - write phrases from memory, and adapt these to create new sentences, to express ideas clearly
  - describe people, places, things and actions orally\* and in writing
  - understand basic grammar appropriate to the language being studied, including (where relevant): feminine, masculine and neuter forms and the conjugation of high-frequency verbs; key features and patterns of the language; how to apply these, for instance, to build sentences; and how these differ from or are similar to English.
- The starred (\*) content above will not be applicable to ancient languages.

**Music - Key stage 2**

- play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression
- improvise and compose music for a range of purposes using the inter-related dimensions of music
- listen with attention to detail and recall sounds with increasing aural memory
- use and understand staff and other musical notations
- appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians
- develop an understanding of the history of music.

**Physical Education (PE) - Key stage 2**

- use running, jumping, throwing and catching in isolation and in combination
- 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
- develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics]
- perform dances using a range of movement patterns
- take part in outdoor and adventurous activity challenges both individually and within a team
- compare their performances with previous ones and demonstrate improvement to achieve their personal best.

**Swimming - Key stage 2**

- swim competently, confidently and proficiently over a distance of at least 25 metres
- use a range of strokes effectively [for example, front crawl, backstroke and breaststroke]
- perform safe self-rescue in different water-based situations.