



2014 National Curriculum Planning Document

Statutory Requirements

Year 4

This document contains all of the statutory requirements of the National Curriculum (2014) broken down by subject. Please note this document should also be read in conjunction with the English and Maths appendices.

ENGLISH

Spoken Word	Word Reading	Comprehension	Writing – transcription	Writing – Handwriting	Writing – Composition	Writing – Grammar, Vocabulary and Punctuation
<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ▪ listen and respond appropriately to adults and their peers ▪ ask relevant questions to extend their understanding and knowledge ▪ use relevant strategies to build their vocabulary ▪ articulate and justify answers, arguments and opinions ▪ give well-structured descriptions, explanations and narratives for different purposes, including for expressing feelings ▪ maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comments ▪ use spoken language to develop understanding through speculating, 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ▪ apply their growing knowledge of root words, prefixes and suffixes (etymology and morphology), both to read aloud and to understand the meaning of new words they meet ▪ read further exception words, noting the unusual correspondences between spelling and sound, and where these occur in the word. 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ▪ develop positive attitudes to reading and understanding of what they read by: <ul style="list-style-type: none"> ➢ listening to and discussing a 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 ➢ using dictionaries to check the meaning of words that they have read ➢ increasing their familiarity with a wide range of books, including fairy stories, myths and legends, and retelling some of these orally ➢ identifying themes and conventions in a wide range of books preparing poems and play scripts to read aloud and to perform, showing understanding through intonation, tone, volume and action ➢ discussing words and phrases that capture the reader's interest and imagination ➢ recognising some different forms of poetry [for 	<p>Spelling</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ▪ use further prefixes and suffixes and understand how to add them (English Appendix 1) ▪ spell further homophones ▪ spell words that are often misspelt (English Appendix 1) ▪ place the possessive apostrophe accurately in words with regular plurals [for example, girls', boys'] and in words with irregular plurals [for example, children's] ▪ use the first two or three letters of a word to check its spelling in a dictionary ▪ write from memory simple sentences, dictated by the teacher, that include words and punctuation taught so far. 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ▪ use the diagonal and horizontal strokes that are needed to join letters and understand which letters, when adjacent to one another, are best left unjoined ▪ increase the legibility, consistency and quality of their handwriting [for example, by ensuring that the downstrokes of letters are parallel and equidistant; that lines of writing are spaced sufficiently so that the ascenders and descenders of letters do not touch]. 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ▪ plan their writing by: discussing writing similar to that which they are planning to write in order to understand and learn from its structure, vocabulary and grammar discussing and recording ideas ▪ draft and write by: composing and rehearsing sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures (English Appendix 2) organising paragraphs around a theme in narratives, creating settings, characters and plot in non-narrative material, using simple organisational devices [for example, headings and sub-headings] ▪ evaluate and edit by: assessing the effectiveness of their own and others' writing and suggesting improvements proposing changes to grammar and vocabulary to improve consistency, including the accurate use of pronouns in sentences ▪ proof-read for spelling and punctuation errors 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ▪ develop their understanding of the concepts set out in Weeke SPAG progression document. <p>extending the range of sentences with more than one clause by using a wider range of conjunctions, including when, if, because, although</p> <p>using the present perfect form of verbs in contrast to the past tense</p> <p>choosing nouns or pronouns appropriately for clarity and cohesion and to avoid repetition</p> <p>using conjunctions, adverbs and prepositions to express time and cause using fronted adverbials</p> <p>learning the grammar for years 3 and 4 in English Appendix 2</p> <ul style="list-style-type: none"> ▪ indicate grammatical and other features by: using commas after fronted adverbials indicating possession by using the possessive apostrophe with plural nouns using and punctuating direct speech <p>use and understand the grammatical terminology in English Appendix 2 accurately and appropriately when discussing their writing and reading.</p>

<p>hypothesising, imagining and exploring ideas</p> <ul style="list-style-type: none"> ▪ speak audibly and fluently with an increasing command of Standard English ▪ participate in discussions, presentations, performances, role play, improvisations and debates ▪ gain, maintain and monitor the interest of the listener(s) ▪ consider and evaluate different viewpoints, attending to and building on the contributions of others ▪ select and use appropriate registers for effective communication. 		<p>example, free verse, narrative poetry]</p> <ul style="list-style-type: none"> ▪ understand what they read, in books they can read independently, by: <ul style="list-style-type: none"> ➤ checking that the text makes sense to them, discussing their understanding and explaining the meaning of words in context ➤ asking questions to improve their understanding of a text ➤ 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 ➤ identifying main ideas drawn from more than one paragraph and summarising these ➤ identifying how language, structure, and presentation contribute to meaning ▪ retrieve and record information from non-fiction ▪ participate in discussion about both books that are read to them and those they can read for themselves, taking turns and listening to what others say. 			<ul style="list-style-type: none"> ▪ read aloud their own writing, to a group or the whole class, using appropriate intonation and controlling the tone and volume so that the meaning is clear. 	
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Maths

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

Science

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

Non-Core Subjects

Art & Design

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.

Pupils should be taught:

- 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]

Painting

Experiment with different effects and textures inc. blocking in colour, washes, thickened paint creating textural effects

Create different effects and textures with paint according to what they need for the task.

Use more specific colour language

Printing

Create printing blocks using a relief or impressed method

Print with two colour overlays

Textiles

Use a variety of techniques, e.g. printing, dyeing, weaving and stitching to create different textural effects

Develop skills in stitching, cutting and joining

Experiment with paste resist.

3D

Plan, design and make models from observation or imagination

Join clay adequately and construct a simple base for extending and modelling other shapes

Collage

Experiment with a range of collage techniques such as tearing, overlapping and layering to create images and represent textures

Use collage as a means of collecting ideas and information and building a visual vocabulary

Digital Media

Record and collect visual information using digital cameras and video recorders

Present recorded visual images using software e.g. Photostory, PowerPoint

Create shapes by making selections to cut, duplicate and repeat

Experiment with colours and textures by making an appropriate choice of special effects and simple filters to manipulate and create images for a particular purpose

Drawing

Experiment with ways in which surface detail can be added to drawings.

Use sketchbooks to collect and record visual information from different sources.

Draw for a sustained period of time at an appropriate level.

Experiment with different grades of pencil and other implements to create lines and marks.

	<p>Experiment with different grades of pencil and other implements to draw different forms and shapes. Create textures with a wide range of drawing implements. Apply a simple use of pattern and texture in a drawing.</p> <ul style="list-style-type: none"> ▪ about great artists, architects and designers in history. <p>Select and record from first hand observation, experience and imagination, and explore ideas for different purposes. Question and make thoughtful observations about starting points and select ideas to use in their work. Compare ideas, methods and approaches in their own and others' work and say what they think and feel about them. Adapt their work according to their views and describe how they might develop it further. Annotate work in sketchbook.</p> <ul style="list-style-type: none"> ▪ Explore the roles and purposes of artists, craftspeople and designers working in different times and cultures.
<p style="text-align: center;">Computing</p>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ▪ 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.
<p style="text-align: center;">Design & Technology</p>	<p>Designing</p> <p><i>Understanding contexts, users and purposes</i></p> <p>Pupils should:</p> <ul style="list-style-type: none"> • work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment • describe the purpose of their products • indicate the design features of their products that will appeal to intended users • explain how particular parts of their products work <p>Pupils should also:</p> <ul style="list-style-type: none"> • Gather information of the needs and wants of particular groups and individuals. Develop their own design criteria and use these to inform their ideas. <p><i>Generating, developing, modelling and communicating ideas</i></p>

Pupils should:

- share and clarify ideas through discussion
- model their ideas using prototypes and pattern pieces
- use annotated sketches, cross-sectional drawings and exploded diagrams to develop and communicate their ideas
- use computer-aided design to develop and communicate their ideas

Pupils should also:

Generate realistic ideas focusing on the needs of the user.
Make design decisions that take account of the availability of resources.

Making

Planning

Pupils should:

- select tools and equipment suitable for the task
- *explain their choice of tools and equipment in relation to the skills and techniques they will be using*
- select materials and components suitable for the task
- explain their choice

Pupils should also:

Order the main stages of making

Practical skills and techniques

Pupils should:

- follow procedures for safety and hygiene
- use a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components

Pupils should also:

- Measure, mark out, cut and shape materials and components with some accuracy
- Assemble, join and combine materials and components with some accuracy
- Apply a range of finishing techniques including those from art and design with some accuracy.

Evaluating

Own ideas and products

Pupils should:

- identify the strengths and areas for development in their ideas and products
- consider the views of others, including intended users, to improve their work

Pupils should also:

- Refer to their design criteria as they design and make.

Use their design criteria to evaluate their completed product.

Existing Products

Pupils should investigate and analyse:

- how well products have been designed
- how well products have been made
- why materials have been chosen
- what methods of construction have been used
- how well products work
- how well products achieve their purposes
- how well products meet user needs and wants

Pupils should also investigate and analyse:

Who designed and make products?
Where products were designed and made?
When products were designed and made?

Whether products are recycled or reused?

Key Events and individuals

Pupils should know:

- about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products

Technical Knowledge

Making products work

Pupils should know:

- how to use learning from science to help design and make products that work
- how to use learning from mathematics to help design and make products that work
- that materials have both functional properties and aesthetic qualities
- *that materials can be combined and mixed to create more useful characteristics*
- that mechanical and electrical systems have an input, process and output
- *the correct technical vocabulary for the projects they are undertaking*

Pupils should also know:

- how mechanical systems such as levers and linkages or pneumatic systems create movement
- how simple electrical circuits and components can be used to create functional products
- how to program a computer to control their products
- how to make strong, stiff shell structures
- *that a single fabric shape can be used to make a 3D textiles product*
- *that food ingredients can be fresh, pre-cooked and processed*

Cooking and Nutrition

Where food comes from

Pupils should know:

- that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world

Pupils should also know:

- that seasons may affect the food available
- how food is processed into ingredients that can be eaten or used in cooking

*Food preparation,
cooking and nutrition*

Pupils should know:

- how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source
- how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking

Pupils should also know:

- *that recipes can be adapted to change the appearance, taste, texture and aroma*
- that different food and drink contain different substances – nutrients, water and fibre – that are needed for health

<p>Geography</p>	<p>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. Pupils should be taught to:</p> <p><i>Locational knowledge</i> On a world map, locate areas of similar environmental regions, either desert, rainforest or temperate regions.</p> <p>Locate and name the main counties and cities in/around Hampshire.</p> <p><i>Place knowledge</i> 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</p> <p><i>Human and physical geography</i> Describe and understand key aspects of: Physical geography, including: climate zones, biomes and vegetation belts (link to work on Rainforest)</p> <p>Types of settlements in modern Britain: villages, towns, cities.</p> <p><i>Geographical skills and fieldwork</i> Use maps, atlases, globes and digital/computer mapping (Google Earth) to locate countries and describe features studied</p> <p>Learn the eight points of a compass, four-figure grid references.</p> <p>Use fieldwork to observe, measure and record the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies. 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.</p>
<p>History</p>	<p>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. Pupils should be taught about:</p> <ul style="list-style-type: none"> ▪ the Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor
<p>MFL</p>	<p>Across Key Stage 2, pupils should be taught to:</p> <ul style="list-style-type: none"> ▪ 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*

	<ul style="list-style-type: none"> ▪ 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. <p>The starred (*) content above will not be applicable to ancient languages.</p>
<p style="text-align: center;">Music</p>	<p>Across Key Stage 2, pupils should be taught to:</p> <ul style="list-style-type: none"> ▪ 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.
<p style="text-align: center;">PE</p>	<p>Across Key Stage 2, pupils should be taught to:</p> <ul style="list-style-type: none"> ▪ 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.