UPPER BEEDING PRIMARY SCHOOL

National Curriculum 2014 Planning Document

Statutory Requirements

Year 6

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.

The document is to support the long, medium and short term planning processes to ensure both full coverage and progression. In the non-core subjects it is important that Key Stage teams plan for progression as this is not prescribed within the curriculum document. This document will form the start of the planning process and can be used as a monitoring tool to ensure all elements of the core areas are covered within the National Curriculum Year Group.

ENGLISH						
Spoken Word	Word Reading	Comprehension	Writing – transcription	Writing – Handwriting	Writing – Composition	Writing – Grammar, Vocabulary and Punctuation
Pupils should be taught to: ▪ 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-	Pupils should be taught to: 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.	Pupils should be taught to: ▪ 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	**Spelling (see English Appendix 1)** Pupils should be taught to: ▪ use further prefixes and suffixes and understand the guidance for adding them ▪ spell some words with 'silent' letters [for example, knight, psalm, solemn] ▪ continue to distinguish between homophones and other words which are often confused ▪ use knowledge of morphology and etymology in spelling and understand that the spelling of some words needs to be learnt specifically, as listed in English Appendix 1 ▪ use dictionaries to check the spelling and meaning of words ▪ use the first three or four letters of a word to check spelling, meaning or both of these in a dictionary ▪ use a thesaurus.	Pupils should be taught to: 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 little choosing the writing implement that is best suited for a task.	Pupils should be taught to: ▪ 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 ▪ draft and write by: ▪ selecting appropriate grammar and vocabulary, understanding	Pupils should be taught to: ▪ 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,

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		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 ▪ understand what they read by: ▪ checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context			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] ▪ evaluate and edit by: ▪ assessing the effectiveness of their own and others' writing ▪ proposing changes to	whose, that or with an implied (i.e. omitted) relative pronoun ▪ learning the grammar for years 5 and 6 in English Appendix 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 ▪ use and understand the grammatical terminology in English Appendix 2 accurately and appropriately in discussing their writing and reading.

through speculating, hypothesising, imagining and exploring ideas ▪ 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		▪ 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 ▪ discuss and evaluate how authors use language, including figurative language, considering the impact on the reader ▪ distinguish between statements of fact and			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 ▪ proof-read for spelling and punctuation errors ▪ perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear.	

listener(s) ▪ consider and evaluate different viewpoints, attending to and building on the contributions of others ▪ select and use appropriate registers for effective communication.		opinion ▪ retrieve, record and present information from non-fiction ▪ 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 ▪ 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 ▪ provide reasoned justifications for their views.				

Maths								
Number – Number and Place Value	Number – Addition and subtraction, Multiplication and division	Number – fractions inc decimals & %	Ratio & Proportion	Algebra	Measurement	Geometry Properties of shape	Geometry Position & Direction	Statistics
Pupils should be taught to: ▪ read, write, order and compare numbers up to 10 000 000 and determine the value of each digit ▪ round any whole number to a required degree of accuracy ▪ use negative numbers in context, and calculate intervals across zero ▪ solve number and practical problems that involve all of the	Pupils should be taught to: ▪ multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication ▪ divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context ▪ divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context ▪ perform mental	Pupils should be taught to: ▪ use common factors to simplify fractions; use common multiples to express fractions in the same denomination ▪ compare and order fractions, including fractions > 1 ▪ add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions ▪ multiply simple pairs of proper fractions, writing the answer in its	Pupils should be taught to: ▪ solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts ▪ solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison ▪ solve problems involving similar shapes	Pupils should be taught to: ▪ use simple formulae ▪ generate and describe linear number sequences ▪ express missing number problems algebraically ▪ find pairs of numbers that satisfy an equation with two unknowns ▪ enumerate possibilities of combinations of two variables.	Pupils should be taught to: ▪ solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate ▪ use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places ▪ convert between miles and kilometres	Pupils should be taught to: ▪ draw 2-D shapes using given dimensions and angles ▪ recognise, describe and build simple 3-D shapes, including making nets ▪ compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons ▪ illustrate	Pupils should be taught to: ▪ describe positions on the full coordinate grid (all four quadrants) ▪ draw and translate simple shapes on the coordinate plane, and reflect them in the axes.	Pupils should be taught to: ▪ interpret and construct pie charts and line graphs and use these to solve problem ▪ calculate and interpret the mean as an average.

above.	calculations, including with mixed operations and large numbers ▪ identify common factors, common multiples and prime numbers ▪ use their knowledge of the order of operations to carry out calculations involving the four operations ▪ solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why ▪ solve problems involving addition, subtraction, multiplication and division ▪ use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.	simplest form [for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$] ▪ divide proper fractions by whole numbers [for example, $\frac{1}{3} \div 2 = \frac{1}{6}$] ▪ associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$] ▪ 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 ▪ multiply one-digit numbers	where the scale factor is known or can be found ▪ solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.		▪ recognise that shapes with the same areas can have different perimeters and vice versa ▪ recognise when it is possible to use formulae for area and volume of shapes ▪ calculate the area of parallelograms and triangles ▪ calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units [for example, mm^3 and km^3].	and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius ▪ recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.		

		with up to two decimal places by whole numbers ▪ use written division methods in cases where the answer has up to two decimal places ▪ solve problems which require answers to be rounded to specified degrees of accuracy ▪ recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.						

Science					
Working Scientifically	Living things and their habitats	Animals, inc Humans	Evolution & Inheritance	Light	Electricity
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	Pupils should be taught to: ▪ describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals ▪ give reasons for classifying plants and animals based on specific characteristics.	Pupils should be taught to: ▪ identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood ▪ recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function ▪ describe the ways in which nutrients and water are transported within animals, including humans.	Pupils should be taught to: ▪ recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago ▪ recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents ▪ identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.	Pupils should be taught to: ▪ recognise that light appears to travel in straight lines ▪ 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 ▪ 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 ▪ use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.	Pupils should be taught to: ▪ associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit ▪ 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 ▪ use recognised symbols when representing a simple circuit in a diagram.

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.					

Non-Core Subjects							
Art & Design	Computing	Design & Technology	Geography	History	MFL	Music	PE
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] ▪ about great	Pupils should be taught to: ▪ 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	Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment]. When designing and making, pupils should be taught to: ***Design*** ▪ 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 ▪ generate, develop, model and	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: ***Locational knowledge*** ▪ 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 ▪ name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features	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	Pupils should be taught to: ▪ 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;	Pupils should be taught to: ▪ 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	Pupils should be taught to: ▪ 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]

artists, architects and designers in history.	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	communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design ***Make*** ▪ select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately ▪ select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic	(including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time ▪ 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*** ▪ 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*** ▪ describe and understand key aspects of: ▪ physical geography, including:	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: ▪ 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	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	high-quality live and recorded music drawn from different traditions and from great composers and musicians ▪ develop an understanding of the history of music.	▪ 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.

	concerns about content and contact.	qualities ***Evaluate*** ▪ investigate and analyse a range of existing products ▪ evaluate their ideas and products against their own design criteria and consider the views of others to improve their work ▪ understand how key events and individuals in design and technology have helped shape the world ***Technical knowledge*** ▪ apply their understanding of how to strengthen, stiffen and reinforce more complex structures ▪ understand and use mechanical systems in their products [for example, gears,	climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle ▪ 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*** ▪ use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied ▪ use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey	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 –	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		

		pulleys, cams, levers and linkages] ▪ understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] ▪ apply their understanding of computing to program, monitor and control their products. Cooking and nutrition ▪ understand and apply the principles of a healthy and varied diet ▪ prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques ▪ understand seasonality, and know where and	maps) to build their knowledge of the United Kingdom and the wider world 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.	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.	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;		

		how a variety of ingredients are grown, reared, caught and processed.			and how these differ from or are similar to English. The starred (*) content above will not be applicable to ancient languages.		