

Curriculum Overview for Year 5



English - Reading

End of Key Stage objectives:

Pupils will 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
- Increase 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
- Identify and discuss themes and conventions in and across a wide range of writing
- Make comparisons within and across books
- Learn a wider range of poetry by heart
- Prepare 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:
- Check that the book makes sense to them, discussing their understanding and exploring the meaning of words in context
- Apply their growing knowledge of root words, prefixes and suffixes (morphology and etymology) both to read aloud and to understand the meaning of new words that they meet

Year 5 key skills coverage.

Comprehension

- Maintain positive attitudes to reading and understanding of what he/she reads by continuing to read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or textbooks
- Maintain positive attitudes to reading and understanding of what he/she reads by increasing his/her 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
- Maintain positive attitudes to reading and understanding of what he/she reads by recommending books that he/she has read to his/her peers, giving reasons for his/her choices
- Maintain positive attitudes to reading and understanding of what he/she reads by identifying and discussing themes and conventions in writing
- Maintain positive attitudes to reading and understanding of what he/she reads by making comparisons within a book
- Maintain positive attitudes to reading and understanding of what he/she reads by 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 he/she reads by checking that the book makes sense to him/her, discussing his/her understanding and exploring the meaning of words in context
- Understand what he/she reads by asking questions to improve his/her understanding of complex texts
- Understand what he/she reads by drawing inferences, such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence
- Understand what he/she reads in increasingly complex texts by predicting what might happen from details stated and implied
- Discuss and evaluate how authors use language, including figurative language, considering the impact on the reader
- Distinguish between statements of fact and opinion
- Retrieve, record and present information from non-fiction

Word Reading

- Read aloud and understand the meaning of new words that he/she meets linked to the expectations of Year 5 spelling

English - Handwriting and Writing

During handwriting lessons, pupils will be taught to:

- Write legibly, fluently and with increasing speed by:
- Choose which shape of a letter to use when given choices and deciding whether or not to join specific letters
- Choose the writing implement that is best suited for a task

During English lessons, children will 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
 - Writing narratives, considering how authors have developed characters and settings in what pupils have read, listened to or seen performed
 - Drafting and writing by: selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning
- In narratives, describe settings, characters and atmosphere and integrate dialogue to convey character and advance the action
- Write using longer passages
- Use 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 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

Year 5 key skills coverage.

Handwriting

Pupils will be taught to write increasingly legibly, fluently, and with increasing speed:

- Through improving choices of which shape of a letter to use when given choices and deciding whether or not to join specific letters
- By choosing the writing implement that is best suited for a task

Composition

Pupils will be taught to:

- Plan his/her writing by identifying the audience for and purpose of the writing, using other similar writing as models for his/her own
- Plan his/her writing by noting and developing initial ideas, drawing on reading where necessary
- Plan his/her writing of narratives by considering how authors have developed characters and settings in what the class have read, listened to or seen performed
- Draft and write by selecting appropriate grammar and vocabulary, including that within English Appendix 2
- Draft and write narratives, describing settings, characters and atmosphere, and integrating dialogue to convey character

- Draft and write by précising longer passages. Draft and write by using devices to build cohesion within a paragraph e.g. then, after that, this, firstly
- Draft and write by linking ideas across paragraphs using adverbials of time e.g. later, place e.g. nearby and number e.g. secondly or tense choices e.g. he had seen her before
- Draft and write by using further organisational and presentational devices to structure text and to guide the reader e.g. headings, bullet points, underlining
- Evaluate and edit by assessing the effectiveness of his/her own and others' writing
- Evaluate and edit by proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning English Appendix 2
- Evaluate and edit by ensuring mostly consistent and correct use of tense throughout a piece of writing
- Evaluate and edit by ensuring correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing
- Proof-read for spelling errors linked to spelling statements for Year 5
- Proof-read for punctuation errors, including use of brackets, dashes or commas to indicate parenthesis
- Use commas to clarify meaning or avoid ambiguity
- Perform his/her own compositions, using appropriate intonation, volume, and movement so that meaning is clear

English - Grammar and Spelling

Pupils will be taught to:

- Develop their understanding of the grammar and spelling concepts set out in 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
- 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 accurately and appropriately in discussing their writing and reading

Spelling

Pupils will be taught to:

- Spell word endings which sound like 'shus' spelt -cious or -tious e.g. vicious, delicious, ambitious, cautious
- Spell word endings which sound like 'shil' spelt -cial or -tial e.g. official, partial
- Spell words ending in -ant, -ance/-ancy, -ent, -ence/-ency e.g. tolerant/tolerance, transparent/transparency
- Spell words ending in -able and -ible, also -ably and -ibly e.g. adorable, possible, adorably, possibly
- Spell words containing the letter-string 'ough' e.g. bought, rough, through, bough
- Spell some words with 'silent' letters e.g. knight, psalm, solemn
- Use knowledge of morphology and etymology in spelling and understand that the spelling of some words needs to be learnt specifically, as with the word list in English Appendix 1
- Use the first three or four letters of a word to check spelling, meaning, or both of these in a dictionary
- Use a thesaurus

Vocabulary, Grammar & Punctuation

Pupils will be taught to:

- Convert nouns or adjectives into verbs using suffixes e.g. -ate, -ise, -ify.
- Understand verb prefixes e.g. dis-, de-, mis-, over- and re-.
- Use relative clauses beginning with who, which, where, when, whose, that, or an omitted relative pronoun.
- Indicate degrees of possibility using adverbs e.g. perhaps, surely, or modal verbs e.g. might, should, will, must.
- Use devices to build cohesion within a paragraph e.g. then, after that, this, firstly.
- Link ideas across paragraphs using adverbials of time e.g. later, place e.g. nearby, and number e.g. secondly, or tense choices e.g. he had seen her before.

- Use brackets, dashes or commas to indicate parenthesis.
- Use commas to clarify meaning or avoid ambiguity.
- Understand the following terminology: modal verb, relative pronoun, relative clause, parenthesis, bracket, dash, cohesion and ambiguity

Maths - Number and Calculation

Pupils will be taught to:

- Add and subtract whole numbers with more than 4 digits, including using formal written methods (column addition and subtraction)
- Add and subtract numbers mentally with increasingly large numbers
- Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
- Solve addition and subtraction multistep problems in contexts, deciding which operations and methods to use and why
- Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
- Know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers
- Establish whether a number up to 100 is prime and recall prime numbers up to 19
- Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers
- Multiply and divide numbers mentally drawing upon known facts
- Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context
- Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
- Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes
- Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign
- Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.
- Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit
- Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000
- Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000
- Solve number problems and practical problems that involve all of the above
- Read Roman numerals to 1000 (M) and recognise years written in Roman numerals

Year 5 key skills coverage.

Number and Place Value

Pupils will be taught to:

- Read, write, order and compare numbers up to at least 1,000,000 and determine the value of each digit
- Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000
- Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero
- Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000
- Solve number problems and practical problems that involve ordering and comparing numbers up to 1,000,000, counting forwards or backwards in steps, interpreting negative numbers and rounding
- Read Roman numerals up to 1000 (M) and recognise years written in Roman numerals

Addition and Subtraction

Pupils will be taught to:

- Add and subtract whole numbers with more than 4 digits, using formal written methods (columnar addition and subtraction)
- Add and subtract numbers mentally with increasingly large numbers
- Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why

Multiplication and Division

Pupils will be taught to:

- Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
- Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers
- Establish whether a number up to 100 is prime and recall prime numbers up to 19
- Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two-digit numbers
- Multiply and divide numbers mentally, drawing upon known facts
- Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context
- Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
- Recognise and use square numbers and the notation for squared (2)
- Recognise and use cube numbers and the notation for cubed(3)
- Solve problems involving multiplication and division, including using his/her knowledge of factors and multiples, squares and cubes
- Solve problems involving addition, subtraction, multiplication and division, and a combination of these, including understanding the meaning of the equals sign
- Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates

Maths - Measures and Geometry

Pupils will be taught to:

- Identify 3-D shapes, including cubes and other cuboids, from 2D representations know angles are measured in degrees
- Estimate and compare acute, obtuse and reflex angles
- Draw given angles, and measure them in degrees ($^{\circ}$) identify: angles at a point and one whole turn (total 360°), angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°)
- Other multiples of 90°
- Use the properties of rectangles to deduce related facts and find missing lengths and angles
- Distinguish between regular and irregular polygons based on reasoning about equal sides and angles
- Convert between different units of metric measure, for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)
- Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints
- Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
- Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres, (cm^2) and square metres (m^2) and estimate the area of irregular shapes
- Estimate volume [for example, using 1 cm^3 blocks to build cuboids (including cubes)] and capacity [for example, using water]
- Solve problems involving converting between units of time
- Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling
- Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed

Year 5 key skills coverage:

Pupils will be taught to:

- Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)
- Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints
- Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
- Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm^2) and square metres (m^2), and estimate the area of irregular shapes
- Estimate volume e.g. using 1 cm^3 blocks to build cuboids (including cubes) and capacity e.g. using water
- Solve problems involving converting between units of time
- Use all four operations to solve problems involving measure e.g. length, mass, volume, money, using decimal notation, including scaling
- Identify 3-D shapes, including cubes and other cuboids, from 2-D representations
- Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles
- Draw given angles and measure them in degrees ($^{\circ}$)
- Identify angles at a point and one whole turn (total 360°)
- Identify angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°)
- Identify other multiples of 90°
- Use the properties of rectangles to deduce related facts and find missing lengths and angles
- Distinguish between regular and irregular polygons based on reasoning about equal sides and angles
- Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed

Maths - Fractions and Statistics

Pupils will be taught to:

- Compare and order fractions whose denominators are all multiples of the same number
- Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
- Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$]
- Add and subtract fractions with the same denominator and denominators that are multiples of the same number
- Multiply proper fractions and mixed numbers by whole numbers
- Supported by materials and diagrams read and write decimal numbers as fractions [for example, $0.71 = \frac{71}{100}$]
- Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
- Round decimals with two decimal places to the nearest whole number and to one decimal place
- Read, write, order and compare numbers with up to three decimal places
- Solve problems involving number up to three decimal places
- Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal
- Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}, \frac{1}{4}, \frac{1}{5}, \frac{2}{5}, \frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25.
- Solve comparison, sum and difference problems using information presented in a line graph
- Complete, read and interpret information in tables, including timetables

Year 5 key skills coverage.

Pupils will be taught to:

- Compare and order fractions whose denominators are multiples of the same number
- Identify and name equivalent fractions of a given fraction, represented visually, including tenths and hundredths
- Write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
- Recognise mixed numbers and improper fractions and convert from one form to the other, and write mathematical statements
- 1 as a mixed number e.g. $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1$ and $\frac{1}{5}$
- Add and subtract fractions with the same denominator and denominators that are multiples of the same number
- Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
- Read and write decimal numbers as fractions e.g. $0.71 = \frac{71}{100}$
- Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
- Round decimals with two decimal places to the nearest whole number and to one decimal place
- Read, write, order and compare numbers with up to three decimal places
- Solve problems involving numbers with up to three decimal places
- Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}, \frac{1}{4}, \frac{1}{5}, \frac{2}{5}, \frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25
- Solve comparison, sum and difference problems using information presented in a line graph
- Complete, read and interpret information in tables, including timetables

Science - Working Scientifically

Pupils will be:

- 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

Year 5 key skills coverage.

Pupils will be taught to:

- Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary (Year 5 focus)
- Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate (Year 5 focus)
- Record data and results of increasing complexity, using scientific diagrams and labels, classification keys, tables, scatter graphs, and bar and line graphs (Year 5 focus)
- Use test results to make predictions to set up further comparative and fair tests (Year 5 focus)
- Report and present 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 (Year 5 focus)
- Identify scientific evidence that has been used to support or refute ideas or arguments (Year 5 focus)

Science - Biology

Pupils will be taught to:

- Describe the changes as humans develop to old age
- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird
- Describe the life process of reproduction in some plants and animals

Year 5 key skills coverage.

Animals including Humans.

Pupils will be taught to:

- Describe the changes as humans develop into old age

Living Things and their Habitats.

Pupils will be taught to:

- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird
- Describe the life process of reproduction in some plants and animals

Science - Physical

Pupils will be taught to:

- Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- Identify the effects of air resistance, water resistance and friction, that act between moving surfaces
- Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect
- Describe the movement of the Earth, and other planets, relative to the Sun in the solar system
- Describe the movement of
- The Moon relative to the Earth
- Describe the Sun, Earth and Moon as approximately spherical bodies
- Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.

Year 5 key skills coverage.

Forces and Magnets

Pupils will be taught to:

- Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- Identify the effects of air resistance, water resistance and friction, that act between moving surfaces
- Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect

Earth and Space

Pupils will be taught to:

- Describe the movement of the Earth, and other planets, relative to the Sun in the solar system
- Describe the movement of the Moon relative to the Earth.
- Describe the Sun, Earth and Moon as approximately spherical bodies.
- Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.

Science - Chemistry

Pupils will be taught to:

- Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets
- Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution
- Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating
- Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic
- Demonstrate that dissolving, mixing and changes of state are reversible changes
- Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.

Materials

Pupils will be taught to:

- Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets
- Recognise that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution
- Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including by filtering, sieving and evaporating
- Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic
- Demonstrate that dissolving, mixing and changes of state are reversible changes
- Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda

History

Pupils will be taught about:

- 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, pupils will be taught about:
 - Changes in Britain from the Stone Age to the Iron Age the Roman Empire and its impact on Britain
 - 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 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

Year 5 key skills coverage.

Pupils will be taught to:

- Plot events on a timeline with different historical periods, showing key historical events or lives of significant people
- Explain how Britain has influenced and been influenced by the wider world
- Understand why some civilisations have been successful and why others have not
- Explore significant historical figures: Cleopatra, Alexander the Great, Tutankhamen, Charles Dickens
- Understand historical concepts and use them to make connections, draw contrasts, analyse trends, and ask questions about the past
- Compare two or more historical periods, explaining things which changed, and things which stayed the same
- Test out a hypothesis in order to answer questions

Geography

Pupils will be taught to:

- 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.

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 (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 climate zones, rivers, mountains, biomes, vegetation belts
- Describe and understand key aspects of physical geography including rivers and the water cycle
- Explain why an earthquake or volcano occurs using appropriate terminology

Geographical Skills and Fieldwork

- Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied
- 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

Year 5 key skills coverage.

Locational Knowledge

Pupils will be taught to:

- Use a range of geographical resources to give detailed descriptions and opinions of the characteristic features of a location

Place Knowledge

Pupils will be taught to:

- Name and locate some of the countries and cities of the world and their identifying human and physical characteristics

Human and Physical Geography

Pupils will be taught to:

- Describe and understand key aspects of physical geography including climate zones, rivers, mountains, biomes, vegetation belts
- Describe and understand key aspects of physical geography including rivers and the water cycle
- Explain why an earthquake or volcano occurs using appropriate terminology

Geographical Skills and Fieldwork

Pupils will be taught to:

- Use different types of fieldwork sampling to observe, measure and record the human and physical features in the local area. Record results in a range of ways

Art & Design

Pupils will 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.
- 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

Year 5 key skills coverage.

Learning

Pupils will be taught to:

- Develop different ideas which can be used and explain his/her choices for the materials and techniques used
- Confidently and systematically investigate the potential of new and unfamiliar material and use these learnt techniques within his/her work
- Evaluate his/her work against their intended outcome
- Research and discuss various artists, architects and designers and discuss their processes and explain how these were used in the finished product

Techniques

Pupils will be taught to:

- Use line, tone and shading to represent things seen, remembered or imagined in 3 dimensions
- Mix colours to express mood, divide foreground from background or demonstrate tones
- Develop skills in using clay including slabs, coils and slips
- Add collage to a painted, drawn or printed background, using a range of media, different techniques, colours and textures
- Experiment with using layers and overlays to create new colours/textures
- Return to work over longer periods of time and use a wider range of material

Knowledge

Pupils will be taught to:

- Be taught about great artists, architects and designers in history

Computing

Pupils will be taught:

- 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

Year 5 key skills coverage.

Computer Science

Pupils will be taught to:

- Design simple algorithms using repeats, loops, and selection i.e. if statements
- Use arithmetic operators, if statements, and loops, within programs
- Design solutions (algorithms) that use repetition and two-way selection i.e. if, then and else
- Declare and assign variables
- Show an awareness of tasks best completed by humans or computers
- Recognise that different solutions exist for the same problem

Digital Literacy - Online Safety

Pupils will be taught to:

- Demonstrate responsible use of technologies and online services, and know a range of ways to report concerns
- Report concerns about posts or comments on blogs, Apps and websites
- Understand what constitutes a complex password and recognise the importance for using them
- Understand how to comment respectfully
- Understand what the PEGI rating symbols mean and why not all games with the same age rating are identical
- Explain why it is not safe to meet a person they have only ever met online

Digital Literacy—Digital Research & Communication

Pupils will be taught to:

- Effectively use search engines
- Evaluate web sources for quality and bias
- Conduct a video chat with more than one person at a time
- Send and receive messages using Morse code and semaphore
- Add an image, audio or video to a blog post
- Know the difference between physical, wireless and mobile networks
- Understand how search results are selected, including that search engines use 'web crawler programs'
- Understand that blog posts are stored as HTML

Digital Literacy– Technology in the World

Pupils will be taught to:

- Understand why and when computers are used

Information Technology - Basic Skills and Texts

Pupils will be taught to:

- Touch type at a reasonable speed
- Confidently choose the correct page set up option when creating a document
- Confidently use text-formatting tools, including heading and body
- Use the 'hanging indent' tool to help format work where appropriate. (E.g. a play script)
- Incorporate graphics where appropriate, using the most effective text wrapping formats
- Understand the main functions of the operating system
- Discuss the positive and negative aspects of the use of computers in their work

Information Technology - Multimedia

Pupils will be taught to:

- Add special effects to alter the appearance of a graphic and understand these effects need to be selected to match the information being communicated
- Explore the menu options and experiment with my images. (Colour, effects, options, snap to grid, grid settings etc.)
- 'Save as' gif or jpeg wherever possible to make the file size smaller (for email and downloading)
- Use ICT independently to record sounds and capture both still and video images
- Make multimedia presentations that contain: sound, animation, video and buttons to navigate
- Include a home page for a web site that contains links to other pages
- Capture my own sound, video and still images, altering them as appropriate

Information Technology - Data handling, Simulations and Modelling

Pupils will be taught to:

- Create a simple spreadsheet to collect and record data e.g. science investigations, enterprise projects
- Use spreadsheet formulae including = + - x / SUM
- Use sort to interpret data in a spreadsheet
- Search databases for information using symbols such as = > or <
- Create databases, planning the fields, rows and columns carefully
- Create charts, graphs and tables; copy and paste these into other documents

Design & Technology

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 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 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, 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 how a variety of ingredients are grown, reared, caught and processed

Year 5 key skills coverage.

Designing and Making

Pupils will be taught to:

- Use his/her research into existing products and his/her market research to inform the design of an innovative product
- Create prototypes to show his/her ideas

- Make careful and precise measurements so that joins, holes and openings are in exactly the right place
- Produce step by step plans to guide his/her making,, demonstrating that he /she can apply his/her knowledge of different materials, tools and techniques (involving number of steps)
- Build more complex 3D structures and apply his/her knowledge of strengthening techniques to make them stronger or more stable
- Understand how to use more complex mechanical and electrical systems (cams, gears to create movement)

Evaluating

Pupils will be taught to:

- Make detailed evaluations about existing products and his/her own considering the views of others to improve his/her work (look at intended users)

Cooking and Nutrition

Pupils will be taught to:

- Understand the main food groups and the different nutrients that are important for health (nutrients, water and fibre)
- Understand how a variety of ingredients are grown, reared caught and processed to make them safe to eat and palatable/tasty to eat.
- Select appropriate ingredients and use a wide range of techniques to combine them (peeling, chopping, slicing, grating, mixing, spreading, kneading and baking)

Music

Pupils will 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 high-quality live and recorded music drawn from different traditions and from great composers and musicians develop an understanding of the history of music.

Year 5 key skills coverage.

Performing

Pupils will 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
- Sing simple part songs with control and an awareness of phrasing
- Play simple parts with accuracy

- Accurately maintain an independent part within a group

Improvising and Composing

Pupils will be taught to:

- Improvise and compose music for a range of purposes using the inter-related dimensions of music
- Improvise and compose including the use of simple chord structures
- Improvise, compose and refine with an awareness of context and purpose
- Represent sounds with detailed symbols
- Staff notation: recognise and use simple rhythms, rests and a limited number of pitches

Listening and Understanding

Pupils will be taught to:

- Listen with attention to detail and recall sounds with increasing aural memory
- 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
- Listen to music with a variety of textures, noticing different types of harmony
- Compare and contrast different music, with an awareness of the music's context, purpose and the composer's intent
- Identify some of the structural and expressive aspects of music heard (e.g. major or minor chords used)
- Identify different ensemble combinations, instruments heard and their role within the ensemble (e.g. ostinato; melody)

Dimension

Pupils will be taught to:

- Use and understand staff and other musical notations
- Pitch: identify a range of different scale patterns (pentatonic, major and minor, chromatic)
- Duration: understand more complex rhythms and metres, e.g. counting in 6 or 8
- Dynamics: Understand how a wide range of dynamics can be manipulated for expressive effect
- Tempo: Understand how a wide range of tempi can be manipulated for expressive effect
- Timbre: Identify families of instruments and different ensemble combinations (e.g. samba band, orchestra, choir)
- Texture: Begin to understand types of harmony (e.g. simple parts; use of chords as an accompaniment)
- Structure: Understand a wider range of musical structures (e.g. rondo, theme and variations, drone/ostinato, leitmotifs)

Physical Education

Pupils will 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, rounder's 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

Year 5 key skills coverage.

Dance

Pupils will be taught to:

- Compose creative sequences
- Perform and create complex sequences
- Perform expressively and hold a strong, precise body posture
- Express an idea in original and imaginative ways
- Plan to perform with energy, grace or other themes and maintain this
- Perform complex moves (handstands) that combine strength and stamina

Gymnastics

Pupils will be taught to:

- Create complex and well-executed sequences including full range of movements
- Hold shapes that are strong, fluent and expressive
- Include in a sequence set pieces
- Vary speed, direction, level and body rotation during floor performances
- Practice and refine gym techniques in performances
- Demonstrate good kinaesthetic awareness
- Use equipment to vault and swing

Games

Pupils will be taught to:

- Choose and combine techniques in game situations
- Work alone or with team mates to gain points
- Strike a bowled or volleyed ball with accuracy
- Use a forehand and backhand playing racket games
- Field, defend and attack tactically by anticipating direction of play.
- Uphold the spirit of fair play and respect

Athletics

Pupils will be taught to:

- Sprint over short distances up to 60m combined with hurdles.
- Choose best place for running over long distances.
- Throw accurately and analyse performance by analysing body shape.
- Show control in take-off and landing when jumping.
- Complete with others and improve own performance.

Religious Education

Pupils will be taught:

- Why are some places and journeys special
- What do Muslims believe about a good life
- Should we forgive others
- What matter most to believers

Christian Values

- Autumn 1 - Creativity
- Autumn 2 - Generosity
- Spring 1 - Responsibility
- Spring 2 - Service
- Summer 1 - Peace
- Summer 2 - Wisdom

Year 5 key skills coverage.

Why are some places and journeys special?

Pupils will be taught to:

- Describe how special places and journeys make people feel more 'religious'.
- Discuss how the journeys inspire believers and how they offer reflection on their own lives

What do Muslims believe about a good life?

Pupils will be taught to:

- Identify key themes from the stories from the Qur'an
- Recall the key events in religious stories and apply the lessons/morals to their own lives

Should we forgive others?

Pupils will be taught to:

- Use the vocabulary learned in RE, such as reconciliation or forgiveness to show their

understanding of conflict and its resolution

- Apply ideas from the stories and teachings of Jesus to some contemporary questions about forgiveness and reconciliation
- Show understanding of some reasons people might feel sorry
- Show understanding of some reasons why it is hard to 'make up' or apologise in a conflict
- Respond clearly with their own ideas about importance of confession to Christians
- Describe how some modern individuals have faced the challenge of forgiveness
- Understand links between the examples of forgiveness and reconciliation studied to the teaching and example of Jesus
- Make links between Jesus' ideas and Christian teaching and situations faced by 9-10 year olds today

What matters most to believers?

Pupils will be taught to:

- Describe and show that they understand similarities and differences between Humanist, Muslim and Christian values
- Describe and understand links between values and how people choose to live their lives
- Respond clearly with their own ideas about what really matters for themselves, including ideas about love, forgiveness, truth, consequences and honesty

Modern Languages

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;
- 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, and to express ideas

Year 5 key skills coverage.

Listening

Pupils will be taught to:

- Gain an overall understanding of an extended spoken text which includes some familiar language, e.g. summarising in English the key points of what he / she has heard in the target language
- Identify different ways to spell key sounds and select the correct spelling of a familiar word
- Understand simple opinions
- Understand and use negative statements

Reading

Pupils will be taught to:

- Read aloud and understand a short text containing mostly familiar language, using fairly accurate pronunciation
- Learn a song or poem using the written text for support
- Using dictionaries to extend vocabulary on a given topic and develop his / her ability to use different strategies to work out the meaning of unfamiliar words
- Understand and use negative statements
- Use 1st, 2nd and 3rd person forms of familiar verbs

Writing

Pupils will be taught to:

- Write phrases and some simple sentences from memory and write a short text such as an email with support from a word phrase bank
- Use a wide range of adjectives to describe people and things, and use different verbs to describe actions
- Join simple sentences using *et* / *mais*

Grammar

Pupils will be taught to:

- Know how to conjugate some high frequency verbs
- Understand how to make changes to an adjective in order for it to agree with the relevant noun
- Adapt sentence to form negative sentences and begin to form questions

Speech

Pupils will be taught to:

- Take part in conversations and express simple opinions giving reasons
- Adapt known complex sentences to reflect a variation in meaning
- Begin to use intonation to differentiate between sentence types
- Create a short piece for presentation to an audience
- Develop accuracy in pronunciation and intonation

Special Events

- Sports competitions arranged by PE co-ordinator
- Swimming Gala
- Sports Day Summer Term
- Year 5/6 Leavers production July

Possible visits and visitors

- NSPCC Assembly and Workshop
- Remembrance activity at Christ Church, Liversedge
- Fire safety afternoon led by Cleckheaton Fire Service
- Re-wind to Easter at St Andrews
- Manchester museum Egyptian Gallery

PSHCE

Children will be taught:

- What is meant by a healthy lifestyle
- How to maintain physical, mental and emotional health and wellbeing
- How to manage risks to physical and emotional health and wellbeing
- Ways of keeping physically and emotionally safe
- About managing change, including puberty, transition and loss
- How to make informed choices about health and wellbeing and to recognise sources of help with this
- How to respond in an emergency
- To identify different influences on health and wellbeing
- How to develop and maintain a variety of healthy relationships, within a range of social/cultural contexts
- How to recognise and manage emotions within a range of relationships
- How to recognise risky or negative relationships including all forms of bullying and abuse
- How to respond to risky or negative relationships and ask for help
- How to respect equality and diversity in relationships
- About respect for self and others and the importance of responsible behaviours and actions
- About rights and responsibilities as members of families, other groups and ultimately as citizens
- About different groups and communities
- To respect equality and to be a productive member of a diverse community
- About the importance of respecting and protecting the environment
- About where money comes from, keeping it safe and the importance of managing it effectively
- How money plays an important part in people's lives
- A basic understanding of enterprise
- How to manage transition
- How to maintain physical, mental and emotional health and wellbeing
- How to assess and manage risks to health and to stay, and keep others, safe
- How to identify and access help, advice and support
- How to develop and maintain a variety of healthy relationships within a range of social/cultural contexts
- How to recognise and manage emotions within a range of relationships
- How to deal with risky or negative relationships including all forms of bullying (including the distinct challenges posed by online bullying) and abuse, sexual and other violence and online encounters
- About the concept of consent in a variety of contexts
- About managing loss including bereavement, separation and divorce
- To respect equality and be a productive member of a diverse community
- How to identify and access appropriate advice and support.

Year 5 key skills coverage.

Health

Pupils will be taught to:

- Understand which, why and how, commonly available substances and drugs could damage their immediate and future health & safety, some are restricted and some are illegal to own, use and supply to others
- Understand that pressure to behave in an unacceptable, unhealthy or risky way can come from a variety of sources, including people they know and the media
- Recognise their increasing independence brings increased responsibility to keep themselves and others safe

Risk

Pupils will be taught to:

- Understand strategies for keeping physically and emotionally safe including safety in the environment and safety on-line (including the responsible use of ICT and mobile phones)
- Understand about people who are responsible for helping them stay healthy and safe and ways that they can get help
- Recognise and manage 'dares'
- Recognise when and how to ask for help and use basic techniques for resisting pressure to do something dangerous, unhealthy, and that makes them feel uncomfortable, anxious or that they believe to be wrong

Relationships

Pupils will be taught to:

- Be aware of different types of relationship including those between friends & families, civil partnerships and marriage. To recognise & respond appropriately to a wider range of feelings in others
- Recognise what constitutes a positive, healthy relationship and to develop and maintain the skills necessary
- Understand that differences and similarities between people arise from a number of factors including family, cultural, age, sex, gender identity, sexual orientation and disability. (See 'protected characteristics in the Equality Act 2010')
- Understand about human reproduction including conception (and that this can be prevented)
- Understand how their body will change as they approach and move through puberty

Identity

Pupils will be taught to:

- Understand how to make informed choices
- (including recognising that choices can have positive, neutral and negative consequences)
- Begin to understand the concept of a 'balanced lifestyle'
- Recognise opportunities to make their own choices about food, what might influence their choices and the benefit of eating a balanced diet
- Recognise how images in the media do not always reflect reality and can affect how people feel about themselves
- Understand that differences and similarities between people arise from a number of factors including family, cultural, ethnic, racial and religious diversity, age, sex and disability. (See 'protected characteristics in the Equality Act 2010')

Economic

Pupils will be taught to:

- Understand that resources can be allocated in different ways and that these economic choices affect individuals, communities and the sustainability of the environment.
- Recognise that there are different kinds of responsibilities towards the environment
- Recognise the role of voluntary, community and pressure groups
- Learn about enterprise and the skills that make someone 'enterprising'

Citizenship

Pupils will be taught to:

- Understand why & how rules and laws that protect themselves & others are made and enforced, why different rules are needed in different situations
- Understand how to take part in making & changing rules
- Research, discuss and debate topical issues, problems and events concerning health and wellbeing and offer their recommendations to appropriate people
- Realise the consequences of antisocial and aggressive behaviours, such as bullying and discrimination on individuals and communities