

Reading

- maintain positive attitudes to reading and understanding of what they read
- 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, fiction from our literary heritage, and books from other cultures and traditions
- 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 to read aloud and to perform, showing understanding through intonation, tone and volume so that the meaning is clear
- checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context
- 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, identifying key details that support the main ideas
- identifying how language, structure and presentation contribute to meaning
- discuss and evaluate how authors use language, considering the impact on the reader
- distinguish between statements of fact and 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, maintaining a focus on the topic and using notes



Writing

- Select appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning
- Propose changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning
- Use relative clauses beginning with who, which, where, when, whose, that or with an implied (i.e. omitted) relative pronoun (e.g the boy, who was feeling very ill ..., the boy, feeling very ill ...)
- Use modal verbs or adverbs to indicate degrees of possibility (e.g. could, might, should)
- Evidence of the perfect form of verbs to mark relationships of time and cause (e.g. I have/had found a necklace)
- Use precise expanded noun phrases to add interest and detail (e.g. the paisley patterned tie with a Windsor knot...)
- Use commas and hyphens to clarify meaning or avoid ambiguity in writing
- Use a colon to introduce a list
- Select the appropriate form and use other similar writing as models when planning
- In narratives, describe settings, characters and atmosphere and integrating dialogue to convey character and advance the action
- Use further organisational and presentational devices to structure text and to guide the reader (e.g. headings, bullet points, underlining)
- Ensure correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing appropriate register
- Viewpoint (opinion, attitude, position) is expressed, but may not be consistently maintained
- Can redraft a section of writing to strengthen impact

Sentence	Relative clauses beginning with <i>who</i> , <i>which</i> , <i>where</i> , <i>when</i> , <i>whose</i> , <i>that</i> , or an omitted relative pronoun
Text	Indicating degrees of possibility using adverbs [for example, <i>perhaps</i> , <i>surely</i>] or modal verbs [for example, <i>might</i> , <i>should</i> , <i>will</i> , <i>must</i>]
	Devices to build cohesion within a paragraph [for example, <i>then</i> , <i>after that</i> , <i>this</i> , <i>firstly</i>]
	Linking ideas across paragraphs using adverbials of time [for example, <i>later</i>], place [for example, <i>nearby</i>] and number [for example, <i>secondly</i>] or tense choices [for example, he <i>had</i> seen her before]
Punctuation	Brackets, dashes or commas to indicate parenthesis
	Use of commas to clarify meaning or avoid ambiguity



Maths

NUMBER AND PLACE VALUE

- 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
- 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

CALCULATION

- add and subtract whole numbers with more than 4 digits, including 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.
- 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 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.

FRACTIONS AND DECIMALS

- 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: $2/5 + 4/5 = 6/5 = 1 \ 1/5$]
- 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 = 71/100]
- recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
- recognise the percent symbol (%) and understand that percent 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 1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25.

MEASURES

- convert between different units of metric measure (for example, kilometre 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 (cm2) and square metres (m2) and estimate the area of irregular shapes
- estimate volume [for example, using 1 cm3 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

GEOMETRY

- 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 (°)
- identify:
- angles at a point and one whole turn (total 360°)
- angles at a point on a straight line and 2 a turn (total 180°)
- other multiples of 90°



- solve problems involving similar shapes where the scale factor is known or can be found
- solve problems involving unequal sharing and grouping using knowledge of fractions and multiples
- 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.

STATISTICS

- solve comparison, sum and difference problems using information presented in a line graph
- complete, read and interpret information in tables, including timetables.

Science

ANIMALS INCLUDING HUMANS

• Describe the changes as humans develop from birth to old age.

MATERIALS

- 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
- Understand 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.

LIVING THINGS AND THEIR HABITATS

- 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.

FORCES

- 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 either effect.
- Recognise some common conductors and insulators, and associate metals with being



good conductors.

EARTH AND SPACE

- To be able to describe the movement of the Earth, and other planets, relative to the Sun in the solar system.
- To be able to describe the Sun, Earth and Moon as approximately spherical bodies.
- To be able to describe the movement of the Moon relative to the Earth.
- To be able to use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky.

Computing

- Solve problems by decomposing them into smaller parts
- Use selection in programs
- Work with variables
- Use logical reasoning to explain how some simple algorithms work
- Use logical reasoning to detect and correct errors in algorithms
- Understand computer networks, including the internet
- Appreciate how search results are ranked
- Combine a variety of software to accomplish given goals
- Select, use and combine software on a range of digital devices
- Analyse data
- Evaluate data
- Design and create systems
- Understand the opportunities computer networks offer for collaboration
- Be discerning in evaluating digital content

History

- To know and understand significant aspects of the history of the wider world: the achievements of past non-European societies.
- Gain and deploy a historically- grounded understanding of the abstract term: parliament.
- Understand the historical concept of continuity and change. Frame historically-valid questions and create own structured accounts, including narratives and analyses.
- Understand the methods of historical enquiry including how evidence is used rigorously to make historical claims.
- Gain historical perspective by placing growing knowledge into different contexts, understanding the connections between national and international history and between economic and political history.



Geography

Place knowledge:

Have a detailed and extensive framework of knowledge of the world, including places in the news. Awareness of spatial patterns in human and physical geography, the conditions which influence these, and the processes that lead to change. Understanding of the connection between people, places and environments.

Physical geography:

Describe and understand the key aspects of the water cycle.

Geographical skills and fieldwork:

Use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world.

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.

• Carry out investigations using a range of geographical questions, skills and information sources, including a variety of maps, graphs and images. They can express and explain their opinions and recognise why others may think differently.

Art & Design

- use sketch books to collect, record and evaluate ideas
- improve mastery of techniques digital media (computing link), textiles and collage
- learn about great artists, architects and designers

Design & Technology

- use research and criteria to develop products which are fit for purpose and aimed at specific groups
- select from and use a wider range of tools and equipment to perform practical tasks i.e. cutting, shaping, joining and finishing
- evaluate existing products and improve own work
- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products i.e. gears and pulleys
- cook savoury dishes for a healthy, varied diet



PE

- Use running, jumping, throwing and catching in isolation and in combination
- Play competitive games, modified where appropriate such as: badminton, basketball, cricket, football, hockey, netball, rounders and tennis
- Apply basic principles for attacking and defending
- Develop flexibility, strength, control and balance, for example through gymnastics and athletics
- 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
- Complete Survival Level 2

Music

- play and perform in solo and ensemble contexts, using their voices and playing musical
- play instruments with increasing accuracy, fluency, control and expression
- improvise and compose music for a range of purposes using the inter-related
- understand 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

Modern Foreign Languages

- appreciate stories, songs, poems and rhymes in the language
- read carefully and show understanding of words, phrases and simple writing
- broaden their vocabulary and develop their ability to understand new words that are introduced into familiar written material, including through using a dictionary
- describe people, places, things and actions orally and in writing
- write phrases from memory, and adapt these to create new sentences, to express ideas clearly
- present ideas and information orally to a range of audiences
- develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases
- engage in conversations; ask and answer questions; express opinions and respond to those of others; seek clarification and help