



## Reading

- Check that the book makes sense to them and demonstrate understanding e.g. *through discussion, use of reading journals.*
- Demonstrate active reading strategies e.g. *generating questions to refine thinking, noting thoughts in a reading journal.*
- Infer characters' feelings, thoughts and motives from their actions and justify inferences with evidence.
- Through close reading of the text, re-read and read ahead to locate clues to support understanding.
- Scan for key words and text mark to locate key information.
- Justify opinions and elaborate by referring to the text, e.g. using the PEE prompt - **P**oint + **E**vidence + **E**xplanation.
- Explore, recognise and use the terms metaphor, simile, imagery.

### Other important aspects of reading in Year 5

- Listen to and discuss a range of fiction, poetry and non-fiction which they might not choose to read themselves.
- Explore themes within and across texts e.g. *loss, heroism, friendship.*
- Make comparisons within a text e.g. characters' viewpoints of same events.
- Recommend books to their peers with reasons for choices.
- Read books and texts that are structured in different ways for a range of purposes.
- Express preferences about a wider range of books including modern fiction, traditional stories, myths and legends.
- Learn a wider range of poems by heart.
- Prepare poems and play scripts to read aloud and perform, showing understanding through intonation, tone, volume and action so the meaning is clear to an audience.
- Predict what might happen from information stated and implied.



## End of Year Expectations for Year 5

This booklet provides information for parents and carers on the end of year key learning indicators of performance for pupils in our school. The statements in this booklet have been identified as **Key Learning Indicators of Performance** as these have the greatest impact on the further development of skills and subsequent learning. They are not the full curriculum we teach in school. You can find this in the National Curriculum by following this link

<https://www.gov.uk/government/publications/national-curriculum-in-england-primary-curriculum>

All the objectives will be worked on throughout the year and will be the focus of direct teaching. Any extra support you can provide in helping your children to achieve these is greatly valued.

If you have any queries regarding the content of this booklet or want support in knowing how best to help your child please talk to your child's teacher.

## Mathematics

- Read, write, order and compare numbers to at least 1 000 000 & determine the value of each digit.
- Read, write, order and compare numbers with up to 3 decimal places.
- Identify the value of each digit to three decimal places.
- Identify represent and estimate numbers using the number line.
- Find 0.01, 0.1, 1, 10, 100, 100 and other powers of 10 more or less than a given number.
- Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.
- Multiply/divide whole numbers and decimals by 10, 100 and 1000.
- Interpret negative numbers in context, count on and back with positive and negative whole numbers, including through zero.
- Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method).
- Recall and use addition and subtraction facts for 1 and 10 (with decimal numbers to one decimal place).





## Mathematics

- Add and subtract numbers mentally with increasingly large numbers and decimals to two decimal places.
- Add and subtract whole numbers with more than 4 digits and decimals with two decimal places, including using formal written methods (columnar addition and subtraction).
- 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.
- Use partitioning to double or halve any number, including decimals to two decimal places.
- Multiply and divide numbers mentally drawing upon known facts.
- Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.
- 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.
- 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.
- Recognise mixed numbers and improper fractions and convert from one form to the other.
- Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.
- Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.
- Add and subtract fractions with denominators that are the same and that are multiples of the same number (using diagrams).
- 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.
- Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
- Plot specified points and complete shapes.
- 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 half a turn (total 180°).
- Estimate (and calculate) volume ((e.g., using 1 cm<sup>3</sup> blocks to build cuboids (including cubes) and capacity (e.g. using water).
- Convert between different units of metric measure.
- Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.
- Calculate and compare the area of rectangle, use standard units square centimetres (cm<sup>2</sup>) and square metres (m<sup>2</sup>) and estimate the area of irregular shapes
- Use all four operations to solve problems involving measure using decimal notation, including scaling.
- Complete, read and interpret information in tables and timetables

## Writing

- Create complex sentences by using **relative clauses** with **relative pronouns** *who, which, where, whose, when, that* e.g. *Sam, who had remembered his wellies, was first to jump in the river. The thief broke into the house which stood on the top of the hill.*
- Link ideas across paragraphs using adverbials for time, place and numbers e.g. *later, nearby, secondly*
- Use different sentence structures with increasing control
- Use organisation and presentational devices e.g. *underlining, bullet points, headings.*
- Suggest changes to grammar, vocabulary and punctuation to enhance effects and clarify meaning
- Use devices to build **cohesion** within a paragraph e.g. *firstly, then, presently, this, subsequently.*
- Use the first three or four letters of a word to check spelling, meaning or both of these in a dictionary.
- Use a thesaurus
- Write fluently using a joined style as appropriate for independent writing.
- Choose when it is appropriate to print (lower case or upper case) rather than to join writing e.g. *printing for labelling a scientific diagram or data, filling in a form, writing an e mail address.*

### Other important aspects of writing in Year 5

- Recognise and spell words ending in *-able* and *-ible*.
- Recognise and spell words ending in *-ably* and *-ibly*.
- Recognise and spell words with the */i:/* sound spelt *ei* after *c*, e.g. *deceive, receive*.
- Recognise and spell words containing the letter string *ough*.
- To recognise and spell the suffixes *-al, -ary, -ic*.
- To spell further suffixes, e.g. *ll in full becoming l*.
- Spell some words with 'silent' letters, e.g. *knight, psalm, solemn*.



Writing to discuss



to inform



Writing to persuade





## Science

<p>Working Scientifically</p> <p>Set up a fair test when needed e.g. which surfaces create most friction?</p>	<p>Working Scientifically</p> <p>Set up an enquiry based investigation e.g. find out what adults / children can do now that they couldn't when a baby</p>	<p>Working Scientifically</p> <p>Know what the variables are in a given enquiry and can isolate each one when investigating e.g. finding out how effective parachutes are when made with different materials</p>	<p>Working Scientifically</p> <p>Use all measurements as set out in Year 5 mathematics (measurement), including capacity and mass</p>
<p>Working Scientifically</p> <p>Use other scientific instruments as needed e.g. thermometer, rain gauge, spring scales (for measuring Newtons)</p>	<p>Working Scientifically</p> <p>Able to record data and present them in a range of ways including diagrams, labels, classification keys, tables, scatter graphs and bar and line graphs</p>	<p>Working Scientifically</p> <p>Make predictions based on information gleaned from investigations</p>	<p>Working Scientifically</p> <p>Create new investigations which take account of what has been learned previously</p>
<p>Working Scientifically</p> <p>Use diagrams, as and when necessary, to support writing</p>	<p>Working Scientifically</p> <p>Is evaluative when explaining findings from scientific enquiry</p>	<p>Working Scientifically</p> <p>Clear about what has been found out from recent enquiry and can relate this to other enquiries, where appropriate</p>	<p>Working Scientifically</p> <p>Their explanations set out clearly why something has happened and its possible impact on other things</p>
<p>Working Scientifically</p> <p>Able to give an example of something focused on when supporting a scientific theory e.g. how much easier it is to lift a heavy object using pulleys</p>	<p>Working Scientifically</p> <p>Keep an on-going record of new scientific words that they have come across for the first time</p>	<p>Working Scientifically</p> <p>Able to relate causal relationships when, for example, studying life cycles</p>	<p>Working Scientifically</p> <p>Frequently carry out research when investigating a scientific principle or theory</p>
<p>All living things and their habitats</p> <p>Know the life cycle of different living things e.g. mammal, amphibian, insect and bird</p>	<p>All living things and their habitats</p> <p>Know the differences between different life cycles</p>	<p>All living things and their habitats</p> <p>Know the process of reproduction in plants</p>	<p>All living things and their habitats</p> <p>Know the process of reproduction in animals</p>
<p>Animals, including humans</p> <p>Create a timeline to indicate stages of growth in humans</p>	<p>Properties and changes in materials</p> <p>Compare and group materials based on their properties (e.g. hardness, solubility, transparency, conductivity, [electrical &amp; thermal], and response to magnets</p>	<p>Properties and changes in materials</p> <p>Know and explain how a material dissolves to form a solution</p>	<p>Properties and changes in materials</p> <p>Know and show how to recover a substance from a solution</p>
<p>Properties and changes in materials</p> <p>Know and demonstrate how some materials can be separated (e.g. through filtering, sieving and evaporating)</p>	<p>Properties and changes in materials</p> <p>Know and demonstrate that some changes are reversible and some are not</p>	<p>Properties and changes in materials</p> <p>Know how some changes result in the formation of a new material and that this is usually irreversible</p>	<p>Forces</p> <p>Know what gravity is and its impact on our lives</p>
<p>Forces</p> <p>Identify and know the effect of air and water resistance</p>	<p>Forces</p> <p>Identify and know the effect of friction</p>	<p>Forces</p> <p>Explain how levers, pulleys and gears allow a smaller force to have a greater effect</p>	<p>Earth and Space</p> <p>Know about and explain the movement of the Earth and other planets relative to the Sun</p>
<p>Earth and Space</p> <p>Know about and explain the movement of the Moon relative to the Earth</p>	<p>Earth and Space</p> <p>Know and demonstrate how night and day are created</p>	<p>Earth and Space</p> <p>Describe the Sun, Earth and Moon (using the term spherical)</p>	

## Computing

Information Technology I can explain what is meant by a 'hoax'. I can explain why I need to think carefully before I forward anything online	Information Technology I can explain why some information I find online may not be honest, accurate or legal	Information Technology I can explain how many free apps or services may read and share my private information (e.g. friends, contacts, likes, images, videos, voice, messages, and geolocation) with others	Information Technology I can explain how and why some apps may request or take payment for additional content (e.g. in-app purchases) and explain why I should seek permission from a trusted adult before purchasing
Information Technology I can recognise that intellectual property rights and copyright protection carry over into the online world	Information Technology I can identify the features of legal downloads and illegal (pirated) content	Information Technology I understand that if I use material that is not my own, often I need to credit the source	Information Technology I know what an operating system is and why it is important
Information Technology I can identify the key internal parts of a computer - RAM, memory, processor, motherboard	Digital Literacy I can select appropriate tools to add emphasis and effect to my work	Digital Literacy I can explain why I have chosen my layout and formatting	Digital Literacy I can review and edit my work and talk about the changes I made
Digital Literacy I can think about whether my work is suitable for the audience	Digital Literacy I can use a mobile device to film a short clip	Digital Literacy I can consider the effect of camera angles, light and shadow when filming	Digital Literacy I can add titles, credits, transitions and special effects
Digital Literacy I can review and add to, replace and edit clips to make messages clearer	Digital Literacy Can explain my choice of clips, effects and structure in resources I have created	Digital Literacy I can discuss and compare film for effect on audience	Digital Literacy I can create a database structure of my own and enter the data
Digital Literacy I can use spreadsheets to create a graph	Digital Literacy I can decide on the most appropriate form of graph for a data set giving reasons for my choice	Digital Literacy I can interpret graphs of data collected from a variety of sources	Computer Science I can plan and write an algorithm using the following: commands, sequence, selection 'if...then' (conditional statement) and repetition
Computer Science I can detect and debug errors in more complex algorithms and programs	Digital Citizenship I can explain that there are some people I communicate with online who may want to do me or my friends harm. I can recognise that this is not my/our fault	Digital Citizenship I can articulate what constitutes good behaviour online	Digital Citizenship I can recognise when someone is upset, hurt or angry online
Digital Citizenship I can explain how to block abusive users	Digital Citizenship I can describe the helpline services who can support me and what I would say and do if I needed their help (e.g. Childline / CEOP)	Digital Citizenship I can use social networking websites appropriately, keeping an adult informed of my online activity and make good choices when presenting myself online	Digital Citizenship I can protect myself from cyberbullying or causing hurt to others, especially when using social networking
Digital Citizenship I can judge what sort of privacy settings might be relevant to reducing different risks	Digital Citizenship I can judge when to answer a question online and when not to	Digital Citizenship I understand my impact on the online world	

## Art

Drawing, painting and sculpture Know how to use shading to create mood and feeling	Study of great artists Research the work of an artist and use their work to replicate a style	Using Sketchbooks Experiment by using marks and lines to produce texture	Drawing, painting and sculpture Know how to organise line, tone, shape and colour to represent figures and forms in movement
Using Sketchbooks Experiment with shading to create mood and feeling	Drawing, painting and sculpture Know how to express emotion in art	Using Sketchbooks Experiment with media to create emotion in art	Drawing, painting and sculpture Know how to create an accurate print design following given criteria
Using Sketchbooks Know how to use images created, scanned and found; altering them where necessary to create art			

## Design and Technology

<p><b>Designing</b> Come up with a range of ideas after collecting information from different sources</p>	<p><b>Designing</b> Produce a detailed, step-by-step plan</p>	<p><b>Designing</b> Explain how a product will appeal to a specific audience</p>	<p><b>Designing</b> Design a product that requires pulleys or gears</p>
<p><b>Making</b> Use a range of tools and equipment competently</p>	<p><b>Making</b> Make a prototype before making a final version</p>	<p><b>Making</b> Make a product that relies on pulleys or gears</p>	<p><b>Evaluating</b> Suggest alternative plans; outlining the positive features and draw backs</p>
<p><b>Evaluating</b> Evaluate appearance and function against original criteria</p>	<p><b>Technical Knowledge</b> Links scientific knowledge to design by using pulleys or gears</p>	<p><b>Technical Knowledge</b> Uses more complex IT program to help enhance the quality of the product produced</p>	<p><b>Food Technology</b> Know how to prepare a meal by collecting the ingredients in the first place</p>
<p><b>Food Technology</b> Be both hygienic and safe in the kitchen</p>	<p><b>Food Technology</b> Know which season various foods are available for harvesting</p>		

## Geography

<p><b>Geographical skills and fieldwork</b> Know how to use graphs to record features such as temperature or rainfall across the world</p>	<p><b>Geographical skills and fieldwork</b> Use maps and globes to locate the equator, the Tropics of Cancer and Capricorn and the Greenwich Meridian</p>	<p><b>Geographical skills and fieldwork</b> Know and name the eight points of a compass</p>	<p><b>Geographical skills and fieldwork</b> Use six-figure grid references</p>
<p><b>Locational knowledge</b> Know the names of, and locate, a number of South or North American countries</p>	<p><b>Locational knowledge</b> Know where the equator, Tropic of Cancer, Tropic of Capricorn and the Greenwich Meridian are on a world map</p>	<p><b>Locational knowledge</b> Know what is meant by the term 'tropics'</p>	<p><b>Locational knowledge</b> Know about time zones and work out differences</p>
<p><b>Locational knowledge</b> Know the names of four countries from the southern and four from the northern hemisphere</p>	<p><b>Human and physical geography</b> Know what is meant by biomes and what are the features of a specific biome</p>	<p><b>Human and physical geography</b> Label layers of a rainforest and know what deforestation is</p>	<p><b>Human and physical geography</b> Know the names of and locate some of the world's deserts</p>
<p><b>Place knowledge</b> Know key differences between living in the UK and in a country in either North or South America</p>			

## History

<p><b>Chronology</b> Know how Britain changed between the end of the Roman occupation and 1066</p>	<p><b>Chronology</b> Know about how the Anglo-Saxons attempted to bring about law and order into the country</p>	<p><b>Chronology</b> Know that during the Anglo-Saxon period Britain was divided into many kingdoms</p>	<p><b>Chronology</b> Know that the way the kingdoms were divided led to the creation of some of our county boundaries today</p>
<p><b>Chronology</b> Use a time line to show when the Anglo-Saxons were in England</p>	<p><b>Chronology</b> Know where the Vikings originated from and show this on a map</p>	<p><b>Chronology</b> Know that the Vikings and Anglo-Saxons were often in conflict</p>	<p><b>Chronology</b> Know why the Vikings frequently won battles with the Anglo-Saxons</p>
<p><b>Civilizations from 1000 years ago</b> Know about the impact that one of the following ancient societies had on the world: the Mayan civilization; the Islamic civilization; or the Benin</p>	<p><b>Civilizations from 1000 years ago</b> Know why they were considered an advanced society in relation to that period of time in Europe</p>		

Music			
Compose Compose music which meets specific criteria	Compose Choose the most appropriate tempo for a piece of music	History of Music Contrast the work of a famous composer with another and explain preferences	Listening and appreciate Repeat a phrase from the music after listening intently
Listening and appreciate Explain why they think music is successful or unsuccessful	Listening and appreciate Describe, compare and evaluate music using musical vocabulary	Performing Maintain own part whilst others are performing their part	Use and understand Use music diary to record aspects of the composition process

### PE – By the end of KS2

Pupils should continue to apply and develop a broader range of skills, learning how to use them in different ways and to link them to make actions and sequences of movement. They should enjoy communicating, collaborating and competing with each other. They should develop an understanding of how to improve in different physical activities and sports and learn how to evaluate and recognise their own success.

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]
- 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

