



Mathematics

Area and Perimeter

- Your child will be taught how to measure and calculate in both centimetres and metres.
- They will also work on calculating the area of shapes using units such as cm² (square centimetres) and m² (square metres) and also estimate the area of an irregular shape. Children will also do some estimating with volume and capacity.

Multiplication and Division

- Children will learn how to multiply up to four digits by a one or two-digit number using formal methods, including long multiplication for two-digit numbers. They will also work on multiplying and dividing mentally using their knowledge of number facts.
- Regarding division of numbers, children will divide up to four digits by a one digit number using formal written methods of short division, including remainders. They will also work on multiplying and dividing decimals by 10, 100 and 1000.
- Children will then use their knowledge to solve word problems involving multiplication and division.

Fractions (inc. decimals and percentages)

- Read and write decimal numbers as fractions
- Continue to apply their knowledge of multiplication table facts to find equivalent fractions.
- Compare and order fractions whose denominators are all multiples of the same number
- Add and subtract fractions with the same denominator and denominators that are multiples of the same number, including calculations > 1
- Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
- Solve problems involving scaling by simple fractions and involving simple rates
- Know percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those with a denominator of a multiple of 10 or 25
- Recognise and use thousandths and relate them to tenths and hundredths.
- Recognise the per cent symbol and understand that per cent relates to 'number of parts per hundred'
- Recognise mixed numbers and improper fractions and convert from one to the other.
- Read, write, order and compare numbers with up to three decimal places
- Solve problems which require knowing key percentage and decimal equivalents

Science

Working Scientifically

- Science is a great way to find out about the world around us.
- Your child will be encouraged to raise questions, plan and set up fair tests, take accurate measurements, look out for any patterns and record their data in the best way such as tables, scatter graphs or bar graphs.
- They may then use these results to make predictions leading to further tests and finally, reaching conclusions about their original question whilst understanding the level of reliability of their results.

Materials and their properties

- Follow instructions to test a material's properties.
- Explain the uses of thermal and electrical conductors and insulators.
- Order materials according to their electrical conductivity.
- Explain and investigate dissolving.
- Explain the processes used to separate mixtures.
- Explain irreversible changes.
- Identify the variables in an investigation.
- Make observations and conclusions.
- Be able to answer questions based on their learning.

Scientists and Inventors.

- To explain whether evidence supports or refutes ideas;
- To use chromatography to separate mixtures;
- To identify a mixture by analysing its components;
- To explain how Margaret Hamilton's software inventions changed the way computer programmes were used;
- To record their results accurately and explain what they show;
- To use their results to make new predictions;
- To describe the life cycle of bees;
- To identify evidence that supports or refutes the idea that Stonehenge was used as an astronomical calendar;
- To explain their own theories and ideas.



Reading

- Read and discuss a wide range of stories, non-fiction texts, poetry, plays and textbooks in order to understand that texts are structured in different ways and written for different purposes.
- Explore traditional stories, myths, legends and books from other cultures, becoming very clear on the structure and typical features of this style of text.
- Complete book reviews, giving reasons for their opinions and making comparisons with other texts.
- Learn different poems off by heart, showing an understanding of how to perform by using the right tone, volume, timing and intonation so that it can be clearly understood by the audience.
- Check their reading makes sense, discussing their understanding of the meaning of certain vocabulary as they read.
- Ask questions about the text to further develop their understanding of what is going on and draw inference about characters' actions, speech or motives, providing evidence. Inference involves using the clues in the story or picture to make a good guess. It involves figuring something out which isn't fully explained and draws on a child's existing knowledge of the world.
- Make predictions based on what they've already read, summarise key points to show good comprehension and look out for interesting phrases that authors use.
- Distinguish between fact and opinion.
- Answer questions by referring back to the text and supporting answers with evidence.

Writing

Writing - Composition

- Plan writing
- Identify the audience and select the correct style and tone.
- Develop their ideas and use their reading to plan interesting characters and settings.
- Draft and write
- Select the correct grammar and vocabulary to match the reading audience and work on including dialogue and linking paragraphs together so that writing flows well.
- Select the correct structure for their text, including any necessary features such as bullet points, headings or captions.
- Evaluate and edit
- Assess the effectiveness of their own writing and pieces written by others, focusing specifically on punctuation, grammar, vocabulary and spelling.
- Use intonation when reading their writing out loud, varying volume and including movement.

Writing - Vocabulary, Grammar and Punctuation

- Convert adjectives or nouns into verbs using suffixes such as -ify, -ise and -ate.
- Write relative clauses, clauses beginning with relative pronouns such as where, which, whose, that and who, for example, 'The boy, who fell and grazed his knee, cried.'
- Include adverbs such as perhaps and surely as well as modal verbs such as will, must or might in order to indicate degrees of possibility.
- Make sure their writing flows nicely and ideas link cohesively, linking ideas across paragraphs using adverbials of time (later, after), number (secondly, thirdly) or place (in the distance).
- Use parenthesis (brackets), colons (:) and semi-colons (;) and refer to these new grammatical terms correctly.

Writing and Spelling

- Spell a wider range of homophones (words which sound the same but have different meanings), ensuring they use the correct form based on the context of their writing, for example practise/practice, stationary/stationery.
- Use dictionaries to check spellings and a thesaurus to further develop the use of vocabulary.
- Spell words ending in the following suffixes: -ity, -ness, -ship.
- Convert nouns or adjectives into verbs using the suffixes: -ate, -ise, -ify, -en.
- Complete self-correction activities and dictation passages.