

Year 5

The learner

Year 5 children are now securely established in Key Stage 2. The end of Year 4 assessment provides a clear benchmark of their attainment in literacy and mathematics and helps to determine the progress children need to make to reach age-related expectations by the end of the key stage. Using the assessment profile, together with ongoing teacher assessment, enables teachers to identify and plan how to address any gaps in learning within literacy and mathematics and across the broader curriculum. Helping children to recognise their progress sustains their motivation and involvement and a careful balance of support and increasing independence develops children's sense of responsibility as learners.

Effective daily literacy and mathematics teaching fosters new learning, consolidation through practice and opportunity to use and apply learning when solving problems and pursuing enquiries in all areas of the curriculum and beyond the school day. Children learn to build links to other curriculum areas and to recognise how their literacy and mathematics skills contribute to their overall development. The home-school link is sustained through homework and information that children are given about their next steps in learning.

At the start of Year 5 the majority of children have gained independent control of literacy. The challenge in Year 5 is to use this increased fluency and confidence to read and write extended texts in all curricular areas. Children need to widen their range of reading so they develop new tastes as well as pursuing established personal preferences.

Most children, as they enter Year 5, identify and summarise evidence from a text to support a hypothesis. They deduce characters' reasons for behaviour from their actions and explain how ideas are developed in non-fiction texts. They explain how writers use figurative and imaginative language to create images and atmospheres and compare how a common theme is presented in poetry, prose and other media.

Children learn to develop and refine their ideas in writing and are able to summarise and shape material and ideas from different sources to write convincing and informative non-narrative texts. They organise their writing into paragraphs and start to use adverbs and conjunctions to organise cohesion within them. They use language to create specific effects such as emphasis, humour, atmosphere, and settings and characterisations to engage readers' interests.

At the start of Year 5 most children have an understanding of numbers that include negative whole numbers, decimal numbers and fractions. They have a growing understanding of many mathematical concepts, including equivalence, estimation, proportion, scaling and angle. They are confident at calculating mentally and use place value to manipulate and partition numbers. During Year 5, children continue to consolidate and apply their knowledge of number facts to include numbers with up to two decimal places, and refine their written methods of calculation for all four operations so that they recognise and use more efficient methods. They continue to use calculators as a calculating tool when solving problems or to look for patterns, and continue to practise mental methods of calculation.

The majority of children develop and use their understanding of properties of polygons to sort and classify them. They have a broad range of vocabulary to describe position, movement and direction which they extend to include parallel and perpendicular lines and the coordinate system. They identify angles and measure these angles to a suitable degree of accuracy. Children read timetables and part-numbered scales accurately, and use 24-hour clock notation and a calendar to calculate time intervals. They learn how to use mathematics to answer a set of related questions, collecting, sorting and organising relevant information, including by using ICT.

Children recognise how they use and continue to develop the key aspects of learning identified in *Excellence and enjoyment: learning and teaching in the primary years*.

Speaking and listening

Speaking and listening, as well as being critical skills in their own right, continue to be the foundation of reading and writing skills. They support the development of mathematical thinking and ideas and promote learning across a broad and rich curriculum. Collaborative group work continues to provide opportunities to develop speaking and listening skills in a structured context. Children refine their understanding of the role and responsibilities of different participants. They plan and manage group tasks and understand different ways to lead and support others within the group. They understand how to move towards decision making in a collaborative way. When solving problems, children discuss how to and why they select the information and resources and decide on the approaches they plan to use to engage with the problem.

In Year 5, most children consciously vary their use of language to match different contexts, purposes and audiences, including recognising the need for more formal standard English. They experiment with ways of using spoken language to persuade and influence an audience in debates and role-play. Children have opportunities for performing both improvised and scripted performances, plays and poetry, as well as watching live and media performances. They describe and reflect on dramatic conventions, authors' style and effects.

Children's mathematical language extends to include the vocabulary of factors, chance, likelihood and percentages. Their communication skills are strengthened through increasing access to written methods of calculation and associated mental strategies and their social skills are developed through discussion as they explain their extension questions, reasoning and decisions.

Literacy

The reading curriculum in Year 5 must be soundly based on a wide range of high-quality fiction, poetry and non-fiction, including ICT and other visual and multimodal texts, and must provide opportunities for children to apply their developing reading skills appropriately. It introduces children to a range of genres they may not choose for themselves, for example longer novels by significant and classic children's authors, stories from other traditions and cultures and longer classic poetry. A planned read-aloud programme maintains the interest and motivation of struggling readers, giving them access to texts well beyond their own reading ability. Including non-fiction on a regular basis helps learners to understand and internalise text organisation and exposes them to the linguistic features of non-chronological reports, explanation, discussion and persuasive texts. Hearing texts read aloud helps to embed the transition from writing based on spoken language to a more formal, impersonal style. Hearing complex sentences explaining cause and effect in explanations or alternative viewpoints in argument and persuasion gives children access to forms of sentence construction rarely used in their everyday speech.

Teachers continue to plan to teach reading skills and develop comprehension explicitly through shared, guided and independent reading with frequent opportunities for reading linked to other curricular areas and life outside school. Children also need opportunities to choose their own books and other reading materials and time to read silently for extended periods to develop fluency and stamina. Teachers encourage a questioning, active response to texts that is based on personal response and empathy, with a growing awareness of possible multiple meanings. Most children begin to understand how perceptions can change with a different viewpoint and over time, as teachers encourage rereading. They help children recognise how authors create dramatic and humorous effects. Close analysis of the text deepens children's understanding of the significance of author's conscious (and sometimes unconscious) choices.

The majority of children have a repertoire of reading skills for different texts and vary them consciously to suit different reading purposes. Year 5 children access and use a range of non-fiction print and ICT resources to compare and explore information and ideas. They consolidate their research and study skills so they can locate and retrieve information efficiently. They are increasingly proficient at evaluating the usefulness of a range of materials, critically appraising them for bias and accuracy.

As children's reading capacity increases to meet the demands of the wider curriculum, they read more and more words they have not previously encountered. Decoding these words should present no problems and children will be able to deduce the meaning of some unknown words from the context the structure of word. There will, however, be other words that are embedded in more complex sentence structures which are more difficult to comprehend. Some children, satisfied that they are able to decode the word, will not recognise that the meaning has eluded them.

A minority of children in Year 5 may still be reading below age-related expectations. They continue to need support in applying the range of reading skills and strategies and in maintaining interest and enthusiasm. As in Year 4, listening to high-quality texts, guided reading and targeted intervention programmes are essential elements for this group.

Year 5 is marked by growing confidence, control and fluency in writing fiction and non-fiction. Talking and reading continue to provide the foundation for writing. At the same time, Year 5 learners are able to draw on a range of secondary sources. Teachers emphasise the purpose and audience for all forms of writing. They encourage children to be experimental and adventurous and, wherever possible, give them choice and control over their writing.

Teachers introduce children to oral and written planning tools. As extended writing develops, cumulative rereading over several writing sessions, sometimes with partner support, is an essential skill. ICT is increasingly the tool of choice for planning, revising and editing. Narrative writing develops beyond a chronological, linear structure. Children are increasingly confident in organising their work through paragraphs, extending into correct layout and punctuation of dialogue and reported speech. Extended writing allows time for developing consistency and complexity in characters, using a range of linguistic techniques experienced through hearing good models, storytelling and drama. In poetry and narrative, children use ambitious vocabulary and vary sentence construction and sentence order to engage the reader and create specific effects. They review the features of different text-types, and choose and adapt forms to fit the purpose and audience.

Most children make notes to support their reading and writing. They explore persuasion and its use of emotive language in depth, comparing it with the more balanced, rational style of argument, with its presentation of differing viewpoints. They are increasingly confident with the structure and internal organisation of different non-fiction text-types, further developing paragraphing, sentence construction and connectives to provide coherence and cohesion. Children learn to manipulate sentences in a controlled way to achieve particular effects and to adapt their sentences to the needs of differing readers and purposes. They learn to use a wide range of subordinators within complex sentences.

In Year 5, spelling and punctuation are generally accurate and automatic. Most children start to enquire into the origins of words and recognise how words from other languages have been imported and their meanings retained or slightly altered. They see relationships between words that share a root, which aids their understanding and spelling of new words. Systematic teaching of spelling and punctuation conventions and strategies continues, and these are applied in all writing across the curriculum.

Children use joined handwriting for all writing, including drafting. They concentrate on increasing handwriting speed and continue to develop increasing speed and accuracy in typing. They use a range of ICT programs to present texts, making informed choices of which electronic tools to use for different purposes. Teachers demonstrate and expect accurate spelling and punctuation, combined with legibility, modelling these three technical aspects of writing as a major aid to meaning, as well as a courtesy to the reader.

Further guidance and support on planning to meet the needs of Year 5 learners in literacy can be found in the planning section of the electronic Framework.

Mathematics

Children in Year 5 solve one-step and two-step problems involving all four operations and decimal numbers, and problems involving fractions. They choose and use the method of calculation they think is most appropriate for the calculations involved. Most children use a calculator to find fractions of quantities and measures that may involve a decimal answer which they interpret and decide whether to round up or down. When solving a mathematical puzzle children apply a systematic approach, using some of the information they are given to see what possibilities this allows or using simple cases or examples and building these up in the light of their observations.

Building on their understanding of place value developed in Year 4, most children state the value of the digits in numbers such as 10.08 and 10.8 and explain why 10.8 is the larger number. They partition decimal numbers and round them up or down, and relate fractions to their decimal representation. Teachers provide practical examples to help children understand percentage as the number of parts in every 100 and find simple percentages and fractions of amounts, for example calculating 10% of 5 kg and using this to work out other percentages such as 5% and 20%, halving and doubling and scaling up or down.

Children consolidate and apply their knowledge of addition and subtraction facts involving single-digit and two-digit whole numbers to decimal numbers. They continue to secure their speed of recall of multiplication tables to 10×10 . Some children may need additional opportunities to develop their recall of these key facts. Children use their knowledge to calculate mentally, for example, 6 squared, the seventh multiple of 6 and related families of calculations such as: 6×3 , 60×3 , 600×3 and 6×300 , 6×30 , 60×30 and 60×300 . They find common multiples of two numbers.

Children continue to determine whether a calculation can be done mentally. They use multiples of 1, 10, 100 and 1000 as landmark numbers to carry out mental and informal calculations. They multiply and divide numbers by 10, 100 and 1000 and describe the effect, recognising the transition between whole and decimal numbers. Children draw on their knowledge of number facts and place value to refine their use of the expanded methods and use efficient written methods to add and subtract whole numbers and decimals with one or two places. They begin to express a remainder as a whole number, a fraction or a decimal, for example that $33 \div 4$ is: 8 remainder 1, $8\frac{1}{4}$, or 8.25. Teachers provide opportunities for children to consider when the context of a division problem requires rounding. The majority of children refine and use efficient written methods to multiply whole numbers and decimal numbers, and to divide whole numbers to 1000 by a single-digit number.

Children construct and visualise shapes with increasingly accurate representation. They use coordinates in the first quadrant to read and plot points that form the vertices of shapes. They identify a point to complete a shape and determine the position of points and shapes after a translation or a reflection. They complete patterns with two perpendicular lines of symmetry.

Children identify acute and obtuse angles and estimate the size of angles. They measure and draw acute and obtuse angles with increasing accuracy. Children read scales accurately and interpret a reading that lies between two unnumbered divisions, for example when reading time on an analogue clock, capacity of liquid in a jug, or frequencies on a bar chart. Children choose, use and record standard metric units within mathematics lessons and across the broader curriculum. They convert larger units to smaller units such as 0.6 litres to 60 centilitres or 10.5 cm to 105 mm.

Children describe the likelihood of particular events. They know that the most frequently occurring event is the mode and find it from frequency tables and bar charts. They represent data on bar charts using scales labelled in different intervals. They know which table, chart or graph to use to enhance the visual representation and precision, and use and interpret line graphs appropriately. Teachers provide opportunity for children to explore cases where lines joining points on a graph do and don't have meaning.

Embedding key aspects of learning

In Year 5, thinking, communication and social skills continue to develop through literacy and mathematics. Reading and writing narrative and poetry develop skills in questioning, reasoning, evaluating and empathy. In mathematics, children use reasoning to propose general statements and determine if examples meet the statement sometimes, never or always. They decide and confirm that their solutions to problems are sensible and justify their choices.

Literature expands self-awareness and is increasingly a window on other worlds and other people's lives and emotion. Non-fiction reading and writing develops clarity and precision of expression. Children develop enquiry, information processing and communication skills as they retrieve information from a wide range of sources, including ICT, graphic and multimodal texts. In mathematics, making suggestions for extensions to a line of enquiry and further questions they can answer from the data they have collected, organised and presented develops children's information processing skills.

Children use texts as evidence, applying their own knowledge and experience to interpret and understand them. Evaluating other people's writing provides them with criteria and tools to judge the effectiveness of their own. Children evaluate possible approaches to calculation they might use and the role of the calculator as a tool for solving problems.

Speaking, listening, reading and writing promote creative thinking by encouraging children to visualise the past and to project into the future. Children become better at initiating and sustaining their own mathematical activity and use, for example, their knowledge of shape and measures to be increasingly creative when following a line of enquiry and generating patterns and shapes of their own. This independence of mind is enhanced by sharing their thinking with others and listening to their ideas during collaborative activity. Children's increasing use of ICT offers them access to a tool that they can use to access more and increasingly diverse information and to organise and present their work.

During Year 5 children's understanding of how they learn continues to grow. They use this self-awareness to set their own literacy and mathematics challenges and evaluate their successes in meeting these challenges.

Inclusion

Children with SEN and/or learning difficulties or disabilities

Where possible through the use of appropriate access strategies and support, Year 5 children with SEN will be working towards the same learning objectives as their peers. From time to time those working well below the level of the whole class may be working towards related objectives chosen from the relevant progression strand from an earlier year.

Children who are gifted and talented

Children who are working well above the overall level of their class or group will be engaging with a range of experiences designed to broaden or deepen their learning while working on the same learning objectives as their peers. From time to time they may also be accelerating the pace of their learning by working towards objectives chosen from the relevant progression strand from a later year.

Children learning EAL

Year 5 children learning EAL will be accessing curriculum content while also developing cognitive and academic language within whole-class, group and independent contexts. Through the use of appropriate access strategies and support, they will be experiencing a level of cognitive challenge consistent with that provided for their peers. Those Year 5 children who have become conversationally fluent will continue to receive support to develop the academic language and vocabulary associated with the subject and the language and grammar used to express ideas and thinking within the subject.

Further guidance and support on planning for inclusion to meet the needs of Year 5 learners in literacy and mathematics can be found in the planning section of the electronic Framework.