

Year 6

The learner

Year 6 children are coming to the end of the primary phase of their education. The end of Year 5 assessment provides a clear benchmark of their attainment in literacy and mathematics, enabling teachers and children to identify how much progress they have made and what they still need to do to meet end of key stage expectations. These assessments will identify both the achievements children have made and those areas or aspects where gaps in understanding remain and need to be addressed in order to secure the necessary progression in learning. Use of the assessment profile, together with ongoing teacher assessment, informs planning and teaching across the broader curriculum. Helping children to recognise their progress maintains their motivation and desire to improve.

Teachers balance the provision of support and the promotion of increasing independence in order to develop children's sense of responsibility as learners. Children are increasingly involved in making decisions about their learning. As children come to the end of Key Stage 2 they select appropriate strategies, techniques and skills to complete an activity or solve a problem and suggest ways tasks or problems could be extended. By posing 'What if...?' questions, children identify lines of enquiry for themselves and for others to follow. The home-school link continues to play a critical role and regular homework provides opportunities to consolidate and extend learning.

Effective daily literacy and mathematics teaching provides new learning, consolidation through practice and opportunities for children to use and apply their learning as they solve problems, research, interpret, analyse and present information. Teachers provide regular opportunities for children to apply their learning to practical experiences in all areas of the curriculum and beyond the school day. This strengthens children's knowledge, skills and understanding and emphasises the role that literacy and mathematics play in securing effective communication, thinking and reasoning skills.

At the start of Year 6, reading and writing are rapidly becoming confident, automatic skills for the majority of children. This gives children greater choice and control over what and how they learn as well as access to an ever-expanding range of printed and ICT resources. The challenge in Year 6 is to embed the skills and knowledge acquired over the primary years into learning that transfers to the next key stage – and lasts a lifetime.

Entering the final year of their primary education, the majority of children bring well-developed counting skills, secure knowledge of number facts and a range of calculation strategies, mental and written. They break down complex calculations into simpler steps and make informed decisions to use one or more calculation strategies in the process of solving a problem. They use mental and written methods of calculation and use a calculator efficiently and accurately where appropriate. Children's understanding of numbers and the number system includes positive and negative whole numbers, common fractions and decimal numbers with up to three places. They use their knowledge of the relationships between fractions, decimals, percentages, ratio and proportion to express quantities in a variety of ways and to solve problems. Mathematics lessons provide an opportunity to develop the skills of analysing patterns, relationships and information that will prove useful to children throughout their lives.

Children's growing ability to select, use and apply their learning in literacy and mathematics and across the broader curriculum ensures that they are acquiring many of 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 underpin reading and writing in a broad and rich curriculum. Oral and mental work in mathematics continues to help children to derive and use number facts, to extend their thinking and understanding as they offer

explanations and justify their decisions and choices, to work collaboratively on planning and to develop a chosen line of enquiry.

The Year 5 work in literacy on persuasion informs whole-class debates in Year 6. Improvised and scripted drama reaches a high standard of polished performance, using a range of dramatic techniques and conventions acquired from play-reading and watching live or recorded performances.

In mathematics, children take part in whole-class discussions and debates on the accuracy of measurement and the most efficient way to undertake a range of calculations. They evaluate and agree strategies and solutions to a problem. Children draw on appropriate techniques, images, vocabulary and resources to illustrate their ideas and conclusions. They use their knowledge of presentation styles and techniques to put forward their views to others with clarity.

Group work provides social opportunities to speak and listen in a structured context, developing the ability to give and receive constructive feedback. Negotiating, resolving conflicts and reaching agreements using effective communication skills are key aspects of speaking and listening in Year 6, practised in formal and informal situations.

Literacy

The reading curriculum in Year 6 remains soundly based on a wide range of high-quality fiction, poetry and non-fiction, including ICT and other visual and multimodal texts, and continues to provide opportunities for children to extend and apply their repertoire of reading skills. Teachers choose from the full range of fiction and poetry available. They include longer novels, classic texts and significant authors as well as sophisticated picture books appropriate for this age group. A planned read-aloud programme continues to support and extend independent reading and keep up the interest and motivation of struggling and less-able readers, giving them access to texts well beyond their own reading ability. Including non-fiction regularly in the read-aloud programme immerses children in the linguistic features of non-chronological reports, explanation, discussion and persuasive texts. It helps to consolidate the transition to the formal, impersonal style needed for mature expression in some non-fiction genres.

Hearing examples of complex sentences, which capture cause and effect in explanations and alternative viewpoints in argument and persuasion, gives learners access to forms of sentence construction less frequently used in everyday speech. Teachers continue to plan to teach reading skills and comprehension explicitly through shared, guided and independent reading of paper-based and ICT texts. Teachers plan frequent opportunities for reading in literacy lessons, for cross-curricular purposes and outside school. In Year 6, readers will be integrating and applying the whole range of independent skills gained over the primary years across all areas of the curriculum.

Teachers encourage an active and critical response to texts, with a growing awareness of multiple themes and meanings. Children compare and contrast texts in order to find patterns and to make links. They understand how perceptions can change with differing viewpoints and over time, through for example reading biographies and autobiographies or rereading familiar texts. Most children recognise how authors use sophisticated devices such as rhetorical questions to influence readers and they identify themes and viewpoints within texts.

They have acquired a developed repertoire of reading skills for different texts and adapt them consciously to suit different reading purposes. The majority of children are able to decode effortlessly so that unfamiliar words are read with little or no hesitation. Their active attention is on the content of their reading and writing, not the individual words. When writing, children give most of their attention to what they want to say and how they can express it most effectively.

In Year 6, children begin to increase their knowledge of morphemes and the origins of words so that they are able to access the meanings of words they have not yet encountered in print and words that are not even in their spoken vocabulary. They access and use a wide range of non-fiction print and

ICT resources to compare and explore information and ideas in depth. They consolidate their research and study skills so they can locate, retrieve and record information efficiently. They are proficient at evaluating the usefulness of a range of materials for specific purposes, critically appraising them for bias and accuracy.

Children with insecure reading skills benefit from carefully targeted group and individual intervention programmes, alongside guided reading. To avoid disillusionment and disaffection, learners must access and enjoy texts at their language comprehension level, for example through picture books and graphic texts, and listen to high-interest texts beyond their reading level.

Year 6 is marked by confidence, control and fluency in writing fiction and non-fiction. Talking, first-hand experience, the read-aloud programme and personal reading continue to provide the foundation for writing. Children draw on a range of secondary sources. Writing still needs to be firmly located in a relevant, motivating context including those in other curriculum subjects and themes. 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 the content and organisation of their writing. Children use ICT and a range of multimodal devices to create both fiction and non-fiction texts.

By the end of Year 6, the majority of children are secure in the different stages of the writing process and can review their own work critically. They choose different planning tools for a range of writing. They understand the need for re-drafting at organisational level for a whole text as well as surface revision of spelling and punctuation. They work consciously at writing as a reader.

Narrative structure continues to develop in an adventurous way, for example including stories within stories, flashbacks, beginning in the middle or at the end of events. Year 6 writers are confident in organising their work through paragraphs, including correct layout and punctuation of dialogue and reported speech. Extended writing allows time for developing complexity in narrative structure, characters and settings, using a range of linguistic techniques experienced through hearing and reading good models, storytelling and drama. Children are competent in the main non-fiction genres and extend their range into journalistic writing, biography and autobiography. They are able to adapt and combine genres effectively.

This is the year for gaining control over the use of a range of complex sentences and their internal punctuation to create subtle effects of meaning. Children revise the linguistic and grammatical features of non-fiction text-types and ways of ensuring coherence through paragraphs and cohesion through connectives. They write consistently in their chosen form, with the appropriate degree of formality for their purpose and audience. They learn the difference between active and passive voice, and use the terms 'active' and 'passive' in discussing those forms. They use conditionals to signal or hint at possibilities, uncertainty, doubt or ambiguity.

In Year 6, the majority of children routinely spell the majority of words correctly and have a range of strategies to apply to difficult or unfamiliar words. They use dictionaries, spellcheckers and ICT confidently to proofread their work. They have developed a personal, legible handwriting style which they can adapt to suit different purposes.

Further guidance and support on planning to meet the needs of Year 6 learners in literacy can be found in the planning section of the electronic Framework.

Mathematics

In Year 6 children solve multi-step problems, including those that involve fractions, decimals and percentages. Through discussion and application, they develop and refine their strategies to solve increasingly complex problems, recognising that to simplify a problem is a helpful starting point. Teachers ensure that children have frequent opportunities to use and apply mathematics across the

curriculum. This develops children's understanding and enjoyment of mathematics and their ability to use mathematics as a problem-solving tool.

The majority of children work more systematically and independently. They organise their work clearly, interpreting results and reflecting on the efficiency of their methods. They recognise that representing a problem may require a diagram, numbers or calculations, and that after solving the problem, the solution needs to be interpreted and checked in the original context.

Children describe, interpret and use patterns and relationships which they observe. Most use words then letters as symbols to construct and use simple expressions or formulae. Children make and test predictions and general statements. They make deductions from given statements or information. They explain their reasoning and justify their choices and conclusions.

The majority of children manipulate a range of types of numbers. They order positive and negative whole numbers and decimal numbers with up to three decimal places and position these on number lines. They find the difference between positive and negative numbers in context. They partition whole and decimal numbers, using place value to compare and order them. Children understand how to simplify fractions by cancelling, dividing the numerator and denominator by a common factor. They order a set of fractions by converting them to equivalent fractions with a common denominator. They express a larger whole number as a fraction of a smaller whole number and convert it to a mixed number. They find fractions and percentages of numbers and quantities. They solve problems involving direct proportion. They scale quantities up or down, such as the ingredients in a recipe. Teachers embed these experiences in practical contexts and activities so that children develop an understanding of the kinds of situations where proportional thinking is applicable.

In Year 6, children continue to consolidate their knowledge of number facts involving all four operations and use known facts to derive related facts. The majority use these facts to add and subtract mentally whole numbers and numbers with one decimal place. They apply their knowledge of multiplication and division facts to multiplication and division of two-digit numbers that include decimals. They use their knowledge of place value to multiply whole numbers by 1000, 100, 10, 0.1 and 0.01 and by multiples of these.

Most children have a secure, reliable method of written calculation for each operation and recognise when one method may be more efficient than another, for both whole numbers and decimals. They recognise when mental methods are more appropriate and use a calculator to solve problems where sequences of addition and subtraction calculations are involved. They continue to approximate first and check their answers. They are able to explain the method they use and the steps involved.

Children make and draw shapes with increasing accuracy. They recognise, describe and visualise solids with parallel and perpendicular edges or faces. They use this knowledge to recognise how the nets of these solids are formed and how a solid can be made from a given net. Children use their growing understanding of angles to classify and describe 2-D shapes. They measure the angles in shapes they draw to check estimates and to test statements. They know that a complete turn is four right angles or 360° and use this to calculate the size of angles around a point.

Children use the coordinate system to identify and plot points in the first quadrant. They draw shapes on grids of different types, determine and describe the positions of the shapes after a transformation, including a reflection, a translation or a rotation through a quarter or half turn about its centre or a vertex. The majority of children recognise that the shape remains identical after one of these transformations and use this knowledge to identify congruent shapes in patterns, pictures and diagrams.

Teachers plan practical problems that give children hands-on experience of reading and interpreting the scales on measuring instruments where the intervals are large, few or mostly unlabelled. Children recognise that taking a measurement involves a comparison to agreed standard units and that the measurement made is approximate. They record their results using an appropriate unit and to a

required degree of accuracy. Children calculate the perimeter and area of a rectangle and compound shapes that can be split into squares, half squares or rectangles.

Children develop their understanding of the language of chance and likelihood by describing situations where outcomes are equally likely. They begin to place outcomes from observed events and from experiments onto a numbered probability scale to indicate the chances of occurrence, using 0 to represent 'impossible' and 1 to represent 'certain'.

Children solve problems by collecting data, processing the data using tables or lists and presenting it to show findings and to draw conclusions. They use the mode, range, median and mean to represent and describe a set of data. They construct frequency tables with single and grouped data items and represent these as bar charts. They extend their use of line graphs to interpret graphs where intermediate points have meaning, for example on a conversion graph. Children interpret tables, charts and databases they have generated using ICT or taken from a secondary source such as another subject area. The majority of children interpret pie charts and use their knowledge of fractions and percentages to estimate the size of sectors in a pie chart. They recognise that pie charts that look similar can represent different totals and that a small sector in one pie chart can represent more items than a big sector on another.

Embedding key aspects of learning

In Year 6, thinking, communication and social skills continue to develop through literacy and mathematics. For example, reading and writing narrative and poetry develop skills in questioning, reasoning, evaluating and empathy. Literature expands self-awareness and gives insights into other worlds and other people's lives and emotions. Non-fiction reading and writing develops clarity and precision of expression. In mathematics, many Year 6 children have the knowledge and confidence to talk in depth about mathematical concepts and to explain their solutions, decisions and reasoning.

Children develop enquiry, information processing and communication skills as they retrieve information from a wide range of texts, including ICT, graphic and multimodal texts. They learn how to locate information across texts and plan how to present it effectively, orally or in writing, for a specific audience. In mathematics, children plan and carry out a cycle of handling data, predicting possible and unlikely outcomes and making judgements about the quality of their enquiries. They consider how to present their results most effectively and discuss how confident they are in their conclusions, giving a rationale for their beliefs and taking into account the opinions of others.

Most children use texts as evidence, applying their own knowledge and experience to interpret and understand them. They critically evaluate usefulness for specific purposes, bias and accuracy. Evaluating other people's writing provides them with criteria and tools to judge the effectiveness of their own. In mathematics, children discuss and compare alternative approaches to solving a problem. They try different approaches and strategies when struggling to solve a problem or to explain a concept to others. They modify their steps towards a solution in the light of feedback. Children challenge their own and others' assumptions.

Literacy and mathematics offer children ideas and access to real and imaginary worlds that they can explore with endless possibilities. As they leave Key Stage 2, the majority of children evaluate progress in their learning and offer ideas for improvement. They use this self-awareness to set their own literacy and mathematics targets.

Inclusion

Children with SEN and/or learning difficulties or disabilities

Where possible through the use of appropriate access strategies and support, Year 6 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 6 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 6 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 6 learners in literacy and mathematics can be found in the planning section of the electronic Framework.