The new national curriculum in English Primary schools

A guide for parents

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Introduction

For generations, parents have found themselves visiting primary schools with their children only to hear themselves saying, "It's not like when I was at school." Things change quickly in education, and at no time in the past 25 years has that been truer than September 2014 when the whole school curriculum changes for maintained schools throughout England.

This guide is intended to support parents of primary school children. Obviously it would be impossible to set out in detail everything your child would learn during their six years of statutory primary education, but by providing an outline of typical content and some background information about how the curriculum and assessment works, hopefully it will help parents support their children in making the most of their education.

What's changed?

English, Maths and Science remain very important and are considered the core subjects in both primary and secondary education. The National Curriculum sets out in some detail what must be taught in each of these subjects, and they will take up a substantial part of your child's learning week. Alongside these are the familiar foundation subjects: Art, Computing, Design & Technology, Foreign Languages (age 7+ only), Geography, History, Music, and Physical Education. For these foundation subjects, the details in the curriculum are significantly briefer: schools have much more flexibility regarding what they cover in these subjects.

Much of the publicity about the changes to the curriculum has focussed on 'higher expectations' in various subjects, and it is certainly the case that in some areas the content of the new primary curriculum is significantly more demanding than in the past. For example, in mathematics there is now much greater focus on the skills of arithmetic and also on working with fractions. In science, a new unit of work on evolution is introduced for Year 6; work which would have previously been studied in secondary school. In English lessons there will now be more attention paid to the study of grammar and spelling; an area which was far less notable in previous curricula.

High Achievers
If your child is achieving well, rather than moving on to the following year group's work many schools will encourage more in-depth and investigative work to allow a greater mastery and understanding of concepts and ideas.

The new curriculum begins in schools from September 2014. However, for children in Year 2 and Year 6, the new curriculum won't become statutory until 2015. This is because these children are in the last year of the Key Stages. At this age, children are formally assessed to judge their progress against the requirements of the curriculum. Because the 2014 curriculum will only have been in place for nine months, these children will be assessed against the requirements of the old curriculum in the National Curriculum Tests. New tests will be produced for the summer of 2016 to assess work from the new curriculum.

Tests your child will take

Lots of schools use tests at all stages of their work. For the most part, these are part of a normal classroom routine, and support teachers' assessment. However, at certain stages of schooling there are also national tests which must be taken by all children in state schools. Often informally known as 'SATs', the National Curriculum Tests are compulsory for children at the end of Year 2 and Year 6. Children in these year

groups will undertake tests in Reading, Mathematics, and Grammar, Punctuation & Spelling. The tests will be sent away for marking, and results will be reported to schools and parents at the end of the year.

The new National Curriculum Tests for children in Year 2 and Year 6 will take place each summer from 2016. Schools may also choose to have internal tests for other year groups around the same time.

Where previously these tests – and other teacher assessments – were graded in levels (normally numbering between Level 1 and Level 6 in primary school), from 2016 the tests will be reported as a scaled score, with a score of 100 representing the expected level for each age group. It will be up to teachers and schools to decide how to measure progress in the intervening years. Schools will then provide accompanying information to parents to explain how children are progressing – it makes attending those parents' evenings all the more important!

Using this guide

The content in this guide is set out – based on the National Curriculum – in year groups. However, all schools are different: some have mixed year groups, some may only have one or two classes overall. Consequently, schools are allowed to reorganise content between year groups as long as the material is covered by the end of primary school. Schools may therefore make some changes to the teaching sequence set out here – check your child's school's website for details on how they organise their curriculum.

Mathematics in Year 1

As children begin their compulsory schooling in Year 1, schools will naturally work to build on the learning that takes place in the Reception year. Here are some of the main things your child is likely to be taught during their time in Year 1.

Number and Place Value

Place value is central to mathematics. Recognising that the digit '5' in the number 54 has a different value from the number 5 or the '5' in 504 is an important step in mathematical understanding.

- Count, both forwards and backwards, from any number, including past 100
- Read and write numbers up to 100 as digits
- Count in 2s, 5s and 10s
- Find 'one more' or 'one less' than a number
- Use mathematical language such as 'more', 'less', 'most', 'least' and 'equal'

Calculations

- Use the +, — and = symbols to write and understand simple number calculations
- Add and subtract one- and two-digit numbers, up to 20
- Solve missing number problems, such as 10 – ? = 6
- Begin to use simple multiplication by organising and counting objects

Fractions

- Understand $\frac{1}{4}$ and $\frac{1}{2}$ to explain parts of an object or number of objects

Measurements

- Use practical apparatus to explore different lengths, weights and volumes
- Use language such as 'heavier', 'shorter' and 'empty' to compare things they have measured
- Recognise the different coins and notes of British currency
- Use language of time, such as 'yesterday', 'before', days of the week and months of the year
- Tell the time to the hour and half-hour, including drawing clock faces

Shape

- Recognise and name some common 2-d shapes, such as squares, rectangles and triangles
- Recognise and name some common 3-d shapes, such as cubes, cuboids and spheres
- Describe movements, including quarter turns

Parent Tip

There are plenty of opportunities for maths practice at home, from counting objects to simple games, such as dominoes and Snakes & Ladders. You can also begin to explore using money and clocks both in play at home and when out and about.

Mathematics in Year 2

During Key Stage 1, there is a big focus on developing basic number skills. That means securing a good understanding of place value, and recognising number bonds to 20. Practising these skills frequently will help children's mathematical thinking throughout school.

Number bonds are essential to the understanding of maths. Children in Year 2 learn their number bonds to 20, that is being able to quickly recall the total of any two numbers up to 20, e.g. 5 + 9 = 14, rather than having to count on to find the answer.

At the end of Year 2, all children will sit the National Curriculum Tests for Key Stage 1. This will include a short arithmetic test of 15 questions, and a second paper of broader mathematics which will last around 35 minutes.

Number and Place Value

- Recognise place value in two-digit numbers, e.g. knowing that the 1 in 17 represents 10
- Read and write numbers up to 100 as words
- Count in 2s, 3s and 5s
- Compare and order numbers up to 100
- Use the < and > symbols to represent the relative size of numbers

Calculations

- Recall number bonds up to 20 fluently
- Add and subtract numbers mentally and using objects, including two-digit numbers
- Show that adding two numbers can be done in any order, but subtracting cannot
- Recognise that addition and subtraction are inverse operations
- Learn the multiplication and division facts for the 2x, 5x and 10x tables
- Show that multiplying two numbers can be done in any order, but dividing cannot
- Solve problems using the x and ÷ symbols

Fractions

- Find $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of an object or set of objects
- Find the answer to simple fraction problems, such as finding $\frac{1}{2}$ of 6

Measurements

- Use standard units to measure length (centimetres and metres), mass (grams and kilograms), temperature (degrees Celsius) and capacity (millilitres and litres)
- Use the £ and p symbols for money amounts
- Combine numbers of coins to make a given value, for example to make 62 pence
- Tell the time to the nearest five minutes on an analogue clock
- Know the number of minutes in an hour and hours in a day

Parent Tip

Parents can always take a lead role in practical maths. Encouraging your child to help with the purchasing of small items at the newsagent, or measuring themselves and others, is a great way to start exploring number relationships.

Shape

- Identify the number of sides and a line of symmetry on 2-d shapes
- Identify the number of faces, edges and vertices on 3-d shapes
- Use mathematical language to describe position and direction, including rotations and turns

Graphs and Data

- Construct and understand simple graphs such as bar charts and pictograms

Mathematics in Year 3

During the years of lower Key Stage 2 (Year 3 and Year 4), the focus of mathematics is on the mastery of the four operations (addition, subtraction, multiplication and division) so that children can carry out calculations mentally, and using written methods. In Year 3 your child is likely to be introduced to the standard written column methods of addition and subtraction.

Number and Place Value

- Count in multiples of 4, 8, 50 and 100
- Recognise the place value of digits in three-digit numbers (using 100, 10s and 1s)
- Read and write numbers up to 1,000 using digits and words
- Compare and order numbers up to 1,000

Calculations

- Add and subtract numbers mentally, including adding either 1s, 10s or units to a 3-digit number
- Use the standard column method for addition and subtraction for up to three digits
- Estimate the answers to calculations, and use inverse calculations to check the answers
- Learn the 3x, 4x and 8x tables and the related division facts, for example knowing that $56 \div 8 = 7$
- Begin to solve multiplication and division problems with two-digit numbers

Fractions

Equivalent fractions are fractions which have the same value, such as $\frac{1}{2}$ and $\frac{3}{6}$ or $\frac{1}{4}$ and $\frac{2}{8}$.

- Understand and use tenths, including counting in tenths
- Recognise and show equivalent fractions with small denominators
- Add and subtract simple fractions worth less than one, for example $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$
- Put a sequence of simple fractions into size order

Measurements

- Solve simple problems involving adding and subtracting measurements such as length and weight
- Measure the perimeter of simple shapes
- Add and subtract amounts of money, including giving change
- Tell the time to the nearest minute using an analogue clock
- Use vocabulary about time, including a.m. and p.m., hours, minutes and seconds
- Know the number of seconds in a minute and the number of days in a year or leap year

Parent Tip

Most schools will have a calculation policy which sets out the order in which calculation strategies are taught. Check on your child's school's website to see if they have one for parents that shows what methods are used in school and when they are usually introduced.

Shape and Position

- Draw familiar 2-d shapes and make familiar 3-d shape models
- Recognise right angles, and know that these are a quarter turn, with four making a whole turn
- Identify whether an angle is greater than, less than or equal to a right angle
- Identify horizontal, vertical, perpendicular and parallel lines

Parallel lines are those which run alongside each other and never meet. Perpendicular lines cross over each other meeting exactly at right angles.

Graphs and Data

- Present and understand data in bar charts, tables and pictograms
- Answer questions about bar charts that compare two pieces of information

Mathematics in Year 4

By the end of Year 4, children will be expected to know all of their times tables up to 12 x 12 by heart. This means not only recalling them in order but also being able to answer any times table question at random, and also knowing the related division facts. For example, in knowing that 6 x 8 = 48, children can also know the related facts that 8 x 6 = 48 and that 48 ÷ 6 = 8 and 48 ÷ 8 = 6. This expertise will be particularly useful when solving larger problems and working with fractions.

Parent Tip
Playing traditional games, such as battleships or even draughts and chess, is great for exploring coordinates and movements across the coordinate grid.

Number and Place Value

- Count in multiples of 6, 7, 9, 25 and 1,000
- Count backwards, including using negative numbers
- Recognise the place value in numbers of four digits (1000s, 100s, 10s and 1s)
- Put larger numbers in order, including those greater than 1,000
- Round any number to the nearest 10, 100 or 1,000
- Read Roman numbers up to 100

Roman Numerals' Basics:
I = 1 ; V = 5 ; X = 10 ; L = 50 ; C = 100
Letters can be combined to make larger numbers. If a smaller value appears in front of a larger one then it is subtracted, e.g. IV (5 – 1) means 4. If the larger value appears first then they are added, e.g. VI (5 + 1) means 6.

Calculations

- Use the standard method of column addition and subtraction for values up to four digits
- Solve two-step problems involving addition and subtraction
- Know the multiplication and division facts up to 12 x 12 = 144
- Use knowledge of place value, and multiplication and division facts to solve larger calculations
- Use factor pairs to solve mental calculations, e.g. knowing that 9 x 7 is the same as 3 x 3 x 7
- Use the standard short multiplication method to multiply three-digit numbers by two-digit numbers

Fractions

- Use hundredths, including counting in hundredths
- Add and subtract fractions with the same denominator, e.g. $\frac{4}{7} + \frac{5}{7}$
- Find the decimal value of any number of tenths or hundredths, for example $\frac{7}{100}$ is 0.07
- Recognise the decimal equivalents of $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$
- Divide one- or two-digit numbers by 10 or 100 to give decimal answers
- Round decimals to the nearest whole number
- Compare the size of numbers with up to two decimal places

Measurements

- Convert between different measures, such as kilometres to metres or hours to minutes
- Calculate the perimeter of shapes made of squares and rectangles
- Find the area of rectangular shapes by counting squares
- Read, write and convert times between analogue and digital clocks, including 24-hour clocks
- Solve problems that involve converting amounts of time, including minutes, hours, days, weeks and months

Shape and Position

- Classify groups of shapes according to the properties, such as sides and angles
- Identify acute and obtuse angles
- Complete a simple symmetrical figure by drawing the reflected shape
- Use coordinates to describe the position of something on a standard grid
- Begin to describe movements on a grid by using left/right and up/down measures

Graphs and Data

- Construct and understand simple graphs using discrete and continuous data

Discrete data is data which is made up of separate values, such as eye colour or shoe size. Continuous data is that which appears on a range, such as height or temperature.

Mathematics in Year 5

During the years of upper Key Stage 2 (Year 5 and Year 6), children use their knowledge of number bonds and multiplication tables to tackle more complex problems, including larger multiplication and division, and meeting new material. In Year 5, this includes more work on calculations with fractions and decimals, and using considerably larger numbers than previously.

Number and Place Value

- Recognise and use the place value of digits in numbers up to 1 million (1,000,000)
- Use negative numbers, including in contexts such as temperature
- Round any number to the nearest 10, 100, 1,000, 10,000 or 100,000
- Read Roman numerals, including years

Calculations

- Carry out addition and subtraction with numbers larger than four digits
- Use rounding to estimate calculations and check answers are of a reasonable size
- Find factors of multiples of numbers, including finding common factors of two numbers
- Know the prime numbers up to 19 by heart, and find primes up to 100
- Use the standard methods of long multiplication and short division
- Multiply and divide numbers mentally by 10, 100 or 1,000
- Recognise and use square numbers and cube numbers

Factors are numbers which multiply to make a product, for example 2 and 9 are factors of 18.
Common factors are numbers which are factors of two other numbers, for example 3 is a factor of both 6 and 18.

Fractions and Decimals

- Put fractions with the same denominator into size order, for example recognising that $\frac{3}{5}$ is larger than $\frac{2}{5}$
- Find equivalents of common fractions
- Convert between improper fractions and mixed numbers, for example recognising that $\frac{5}{4}$ is equal to $1\frac{1}{4}$
- Add and subtract simple fractions with related denominators, for example $\frac{2}{3} + \frac{1}{6} = \frac{5}{6}$
- Convert decimals to fractions, for example converting 0.71 to $\frac{71}{100}$
- Round decimals to the nearest tenth
- Put decimals with up to three decimal places into size order
- Begin to use the % symbol to relate to the 'number of parts per hundred'

In a fraction, the numerator is the number on top; the denominator is the number on the bottom.

Parent Tip
Much of the knowledge in Year 5 relies on number facts being easily recalled. For example, to find common factors or to make simple conversions, knowledge of multiplication tables is essential. Any practice at home to keep these skills sharp will certainly be appreciated by your child's class teacher!

Measurements

- Convert between metric units, such as centimetres to metres or grams to kilograms
- Use common approximate equivalences for imperial measures, such as 2.5cm ≈ 1 inch
- Calculate the area of rectangles using square centimetres or square metres
- Calculate the area of shapes made up of rectangles
- Estimate volume (in cm^3) and capacity (in ml)

Shape and Position

- Estimate and compare angles, and measure them to the nearest degree
- Know that angles on a straight line add up to 180°, and angles around a point add up to 360°
- Use reflection and translation to change the position of a shape

Graphs and Data

- Read and understand information presented in tables, including timetables
- Solve problems by finding information from a line graph

Mathematics in Year 6

By the end of Year 6, children are expected to be confident with the use of all four standard methods for written calculations, and to have secured their knowledge of the key number facts for the four operations. Their work will focus more on fractions, ratio, proportion and the introduction of algebra.

In May of Year 6, children will take an arithmetic test of thirty minutes, and two broader mathematics tests of forty minutes each. These will be sent away for marking, with the results coming back before the end of the year. Your child's teacher will also make an assessment of whether or not your child has reached the expected standard by the end of the Key Stage.

Parent Tip
Playing traditional games, such as battleships or even draughts and chess, is great for exploring coordinates and movements across the coordinate grid.

Number and Place Value

- Work with numbers to up ten million (10,000,000) including negative numbers
- Round any number to any required number of digits or magnitude

Calculations

- Use the standard method of long multiplication for calculations of four-digit numbers by two-digit numbers
- Use the standard method of long division for calculations of four-digit numbers by two-digit numbers
- Identify common factors, common multiples and prime numbers
- Carry out complex calculations according to the mathematical order of operations
- Solve complex problems using all four operations

The mathematical order of operations requires that where calculations are written out in long statements, first calculations in brackets are completed, then any multiplication or division calculations, and finally any addition or subtraction. So, for example, the calculation 4 + 3 x (6 + 1) has a solution of 25, not 43 or 49.

Fractions and Decimals

- Use common factors to simplify fractions, or to add fractions with different denominators
- Place any group of fractions into size order
- Multiply pairs of fractions together
- Divide fractions by whole numbers, for example $\frac{1}{3} \div 2 = \frac{1}{6}$
- Use division to calculate the decimal equivalent of a fraction
- Know and use common equivalences between fractions, decimals and percentages, such as $\frac{1}{2} = 0.5 = 50\%$

Ratio and Proportion

- Find percentages of quantities, such as 15% of £360
- Use ratio to explain relationships and solve problems
- Use simple scale factors for drawings, shapes or diagrams

Ratio is represented using the colon symbol. For example, if £100 is shared in a ratio of 1:3 between two people, then the first person receives £25 (one part), with the other receiving £75 (three parts).

Algebra

- Use simple formulae
- Describe sequences of numbers where the increase between values is the same each time
- Solve missing number problems using algebra
- Find possible solutions to problems with two variables, such as a + b = 10

Measurements

- Convert between any metric units and smaller or larger units of the same measure
- Convert between miles and kilometres
- Use a given formula to find the area of a triangle or parallelogram

Shape and Position

- Draw 2-d shapes using given sizes and angles
- Use knowledge of 2-d shapes to find missing angles in triangles, quadrilaterals and other regular shapes
- Name and label the radius, diameter and circumference of a circle
- Find missing angles in problems where lines meet at a point or on a straight line
- Use a standard grid of coordinates including negative values

Graphs and Data

- Construct and understand pie charts and line graphs
- Calculate the mean average of a set of data

Mean average is calculated by adding up all the values and dividing by the number of items. For example, the mean average of 3, 5, 8, 9 and 10 is 7 (3 + 5 + 8 + 9 + 10 = 35, then 35 ÷ 5 = 7)

English in Year 1

During the early years of compulsory schooling, much of the focus is to develop confident readers, mainly using the phonics approach. Many schools will follow a programme of phonics teaching, so it is well worth finding out from your child's school if they have any parent support materials.

Phonics is the relationship between printed letters and the sounds they make. Children will first learn the most common letter sounds, and then look at more difficult patterns such as recognising that 'ow' sounds different in 'cow' than in 'low', or that both 'ai' and 'ay' make the same sound in different words.

Speaking and Listening

The Spoken Language objectives are set out for the whole of primary school, and teachers will cover many of them every year as children's spoken language skills develop. In Year 1, some focuses may include:

- Listen and respond to adults and other children
- Ask questions to extend their understanding
- Learn new vocabulary related to topics or daily life

Reading Skills

- Learn the 40+ main speech sounds in English and the letters that represent them
- Blend sounds together to form words
- Read aloud when reading books that contain familiar letter sound patterns
- Listen to, and talk about a range of stories, poems and non-fiction texts
- Learn about popular fairy tales and folk stories, and retell the stories
- Join in with repeated phrases in familiar books
- Make predictions about what might happen next in a book
- Explain clearly what has happened in a book they've read or listened to

Writing Skills

- Hold a pen or pencil in the correct and comfortable way
- Name the letters of the alphabet in order
- Write lower-case letters starting and ending in the right place
- Write capital letters, and the digits 0 to 9
- Spell simple words containing the main sounds they've learned in reading
- Spell the days of the week
- Learn to write words with common endings, such as –ed, –ing, –er and –est
- Plan out sentences aloud before writing them
- Write simple sentences, and those using joining words such as 'and'
- Begin to use full stops and capital letters for sentences
- Combine some sentences to make short descriptions or stories

Parent Tip

Many schools will offer books to read at home; these will range from a mix of books which your child can read to you, and those which are more complex that they can listen to you read to them – both are important skills. Children can also join the local library service and choose books of their own.

English in Year 2

As children move through Key Stage 1, the new curriculum intends that almost all children will secure the basic skills of decoding so that they can become fluent readers. As their reading confidence grows they can begin to write their own ideas down.

Decoding is the ability to read words aloud by identifying the letter patterns and matching them to sounds. Once children are able to 'decode' the writing, they can then start to make sense of the words and sentences in context. Watch out for hard-to-decode words such as 'one' and 'the'. These just have to be learned by heart.

At the end of Year 2, all children will sit the National Curriculum Tests for Key Stage 1. These will include two short reading tests, a grammar and punctuation test, and a spelling test of ten words.

Speaking and Listening

The Spoken Language objectives are set out for the whole of primary school, and teachers will cover many of them every year as children's spoken language skills develop. In Year 2 some focuses may include:

- Articulate and justify answers and opinions
- Give well-structured explanations and narratives, for example in show-and-tell activities

Reading Skills

- Read words aloud confidently, without obvious blending or rehearsal
- Learn letter patterns so that decoding becomes fluent and secure by the end of Year 2
- Blend letter sounds, including alternative patterns, e.g. recognising 'ue' as the 'oo' sound
- Read aloud words which contain more than one syllable
- Recognise common suffixes, such as –ing and –less
- Read words which don't follow phonetic patterns, such as 'one' and 'who'
- Become familiar with a wide range of fairy stories and traditional tales
- Discuss favourite words and the meaning of new words
- Check that what has been read makes sense, and self-correct reading where necessary
- Make predictions about what might happen next in a story

Children will be expected to read aloud books which are appropriate for their reading ability. During Year 2 their increasing knowledge of decoding should allow them to read a wide range of children's books.

Writing Skills

- Form letters of the appropriate size, using capital letters where appropriate
- Use appropriate spaces between words when writing
- Begin to use joins between letters where needed

Parent Tip

Reading aloud at home continues to be vitally important at this age. You may even get your child to read their own writing aloud, attempting to add expression appropriate to the sentence.

- Spell longer words by breaking them into their sound parts
- Learn to spell some common homophones, recognising the difference between them
- Use the possessive apostrophe in simple phrases, such as 'the boy's football'.
- Write about real events and personal experiences
- Plan out writing in advance, including by writing down key words
- Re-read writing to check that it makes sense and to make corrections, including punctuation
- Use question marks, exclamation marks, apostrophes and commas in lists
- Use the present and past tenses correctly in writing
- Begin to write longer sentences by using conjunctions, such as 'and',' but', 'if' or 'because'

Homophones are words which sound the same, such as 'blue' and 'blew', or 'one' and 'won'

English in Year 3 and Year 4

In lower Key Stage 2, your child will build on their work from the infants to become more independent in both their reading and their writing. Most children will be confident at decoding most words – or will have extra support to help them to do so – and so now they will be able to use their reading to support their learning about other subjects.

They will begin to meet a wider range of writing contexts, including both fiction and non-fiction styles and genres.

Speaking and Listening

The Spoken Language objectives are set out for the whole of primary school, and teachers will cover many of them every year as children's spoken language skills develop. In Years 3 and 4, some focuses may include:

- Use discussion and conversation to explore and speculate about new ideas
- Begin to recognise the need to use Standard English in some contexts
- Participation in performances, plays and debates
- Explain thinking and feeling in well-structured statements and responses

Reading skills

- Extend skills of decoding to tackle more complex words, including with unusual spelling patterns
- Read a wide range of fiction, non-fiction and literary books
- Recognise some different forms of poetry
- Use dictionaries to find the meanings of words
- Become familiar with a range of traditional and fairy tales, including telling some orally
- Identify words which have been chosen to interest the reader
- Ask questions about what they have read
- Draw simple inferences about events in a story, such as how a character might be feeling
- Make predictions about what might happen next in a story
- Summarise ideas from several paragraphs of writing
- Find and record information from non-fiction texts
- Take part in discussions about reading and books

Children begin to identify how authors choose words for effect, for example by selecting 'wailed' instead of 'cried', or 'enraged' rather than 'cross'. They may begin to make such choices in their own writing, too.

Writing skills

- Write with joined handwriting, making appropriate join choices
- Spell words that include prefixes and suffixes, such as anticlockwise
- Spell some commonly misspelt words correctly, taken from the Y3/4 list
- Use a dictionary to check spellings

Parent Tip

When children are writing outside of school – or when you are looking at school work with them – why not discuss their choices of vocabulary? Some common words, such as 'went' and 'said' can often be replaced by more specific words that give a sense of the action, such as 'raced' or 'yelled'. You can also take opportunities to look at words like this that crop up in books you read with your child, considering how the choice of word affects your understanding of a story.

- Use possessive apostrophes correctly in regular and irregular plurals, such as children's and boys'
- Use examples of writing to help them to structure their own similar texts
- Plan out sentences orally to select adventurous vocabulary
- Use paragraphs to organise ideas
- Use description and detail to develop characters and settings in story-writing
- Write interesting narratives in stories
- In non-fiction writing, use features such as sub-headings and bullet points
- Review their own work to make improvements, including editing for spelling errors
- Read others' writing and suggest possible improvements
- Read aloud work that they've written to be clearly understood
- Extend sentences using a wider range of conjunctions, including subordinating conjunctions
- Use the present perfect verb tense
- Use nouns and pronouns with care to avoid repetition
- Use conjunctions, adverbs and prepositions to add detail about time or cause
- Use fronted adverbials
- Use direct speech, with correct punctuation

Young children have a tendency to repeat nouns or pronouns, leading to several sentences containing 'He' or 'They'. They can use alternatives to make writing more interesting. For example, alternatives for describing an individual character might include: he, the burglar, Mr Smith, John, the criminal, the villain, etc.

To add information to a sentence about its location, children might use conjunctions ("Although it was still early…"), adverbs ("Early that morning…") or prepositions ("At about six-thirty that morning…"). Often these techniques allow children to write more complex sentences.

Grammar Help

For many parents, the grammatical terminology used in schools may not be familiar. Here are some useful reminders of some of the terms used:

- Present perfect tense: a tense formed using the verb 'have' and a participle, to indicate that an action has been completed at an unspecified time, e.g. The girl has eaten her ice-cream
- Fronted adverbial: a word or phrase which describes the time, place or manner of an action, which is placed at the start of the sentence, e.g. "Before breakfast,…" or "Carrying a heavy bag,…"
- Direct speech: words quoted directly using inverted commas, as opposed to being reported in a sentence

English in Year 5 and Year 6

In upper Key Stage 2, your child will increasingly meet a wider range of texts and types of writing, and will be encouraged to use their skills in a broader range of contexts. Their knowledge of grammar will also increase as they prepare for the National Curriculum Tests to be taken in the summer term of Year 6.

Year 6 children will take a reading test of about one hour, a grammar and punctuation test of about forty-five minutes, and a spelling test of twenty words. These will be sent away for marking, with the results coming back before the end of the year. Your child's teacher will also make an assessment of whether or not your child has reached the expected standard by the end of the Key Stage.

Speaking and Listening

The Spoken Language objectives are set out for the whole of primary school, and teachers will cover many of them every year as children's spoken language skills develop. In Years 5 and 6, some focuses may include:

- Speak clearly in a range of contexts, using Standard English where appropriate
- Monitor the reactions of listeners and react accordingly
- Consider different viewpoints, listening to others and responding with relevant views
- Use appropriate language, tone and vocabulary for different purposes

Reading Skills

- Read a wide range of fiction, non-fiction, poetry, plays and reference books
- Learn a range of poetry by heart
- Perform plays and poems using tone, volume and intonation to convey meaning
- Use knowledge of spelling patterns and related words to read aloud and understand new words
- Make comparisons between different books, or parts of the same book
- Read a range of modern fiction, classic fiction and books from other cultures and traditions
- Identify and discuss themes and conventions across a wide range of writing
- Discuss understanding of texts, including exploring the meaning of words in context
- Ask questions to improve understanding of texts
- Summarise ideas drawn from more than one paragraph, identifying key details
- Predict future events from details either written in a text or by 'reading between the lines'
- Identify how language, structure and presentation contribute to meaning
- Discuss how authors use language, including figurative language, to affect the reader
- Make book recommendations, giving reasons for choices
- Participate in discussions about books, building on and challenging ideas
- Explain and discuss understanding of reading
- Participate in formal presentations and debates about reading

Parent Tip

As children get older, they will increasingly take responsibility for their own work and homework tasks. That's not to say that parents can't help though. Encourage your child to work independently on their homework, but also take the opportunity to discuss it with them and to have them explain their understanding to you.

- Provide reasoned justifications for views

Figurative language includes metaphorical phrases such as 'raining cats and dogs' or 'an iron fist', as well as using language to convey meaning, for example by describing the Sun as 'gazing down' upon a scene.

Themes & Conventions
As children's experience of a range of texts broadens, they may begin to notice conventions, such as the use of first person for diary-writing, or themes such as heroism or quests.

Writing Skills

- Write with increasing speed, maintaining legibility and style
- Spell some words with silent letters, such as knight and solemn
- Recognise and use spellings for homophones and other often-confused words from the Y5/6 list
- Use a dictionary to check spelling and meaning
- Identify the audience and purpose before writing, and adapt accordingly
- Select appropriate grammar and vocabulary to change or enhance meaning
- Develop setting, atmosphere and character, including through dialogue
- Write a summary of longer passages of writing
- Use a range of cohesive devices
- Use advanced organisational and presentational devices, such as bullet points
- Use the correct tense consistently throughout a piece of writing
- Ensure correct subject and verb agreement
- Perform compositions using appropriate intonation, volume and movement
- Use a thesaurus
- Use expanded noun phrases to convey complicated information concisely
- Use modal verbs or adverbs to indicate degrees of possibility
- Use relative clauses
- Recognise vocabulary and structures that are appropriate for formal use
- Use passive verbs to affect the presentation of information
- Use the perfect form of verbs to mark relationships of time and cause
- Recognise the difference in informal and formal language
- Use grammatical connections and adverbials for cohesion
- Use ellipses, commas, brackets and dashes in writing
- Use hyphens to avoid ambiguity
- Use semi-colons, colons and dashes between independent clauses
- Use a colon to introduce a list
- Punctuate bullet points consistently

Cohesive devices are words or phrases used to link different parts of writing together. These may be pronouns such as 'he' or 'it' to avoid repeating a name, or phrases such as 'After that…' or 'Meanwhile' to guide the reader through the text.

Grammar Help

For many parents, the grammatical terminology used in schools may not be familiar. Here are some useful reminders of some of the terms used:

- Noun phrase: a group of words which takes the place of a single noun. Example: The big brown dog with the fluffy ears.
- Modal verb: a verb that indicates possibility. These are often used alongside other verbs. Example: will, may, should, can.
- Relative clause: a clause which adds extra information or detail. Example: The boy who was holding the golden ticket won the prize.
- Passive verb: a form of verb that implies an action being done to, rather than by, the subject. Example: The boy was bitten by the dog.
- Perfect form: a form of verb that implies that an action is completed. Example: The boy has walked home.

Science in Year 1

In the first years of schooling, much of the science curriculum is based around real-life experiences for children. This includes everyday plants and animals, as well as finding out about different materials and the four seasons. There are likely to be lots of opportunities for exploring scientific ideas both in the classroom and the local surroundings.

Scientific Investigation

Children are encouraged to carry out their own observations and experiments to further their scientific understanding. In Year 1 this may include learning to:

- Ask scientific questions
- Carry out simple tests, and make observations
- Collect information to answer questions
- Group together objects according to their properties or behaviours

Plants and Animals

- Name a selection of common plants, including deciduous and evergreen trees
- Name the main parts of plants and trees, such as roots, stems, trunks and leaves
- Name a variety of common animals, including mammals, fish, birds, reptiles and amphibians
- Name some common animals which are carnivores, herbivores and omnivores
- Name the main parts of the human body, including those related to the five senses

Herbivores: animals which feed only on plants, e.g. rabbits
Carnivores: animals which feed on other animals, e.g. eagles
Omnivores: animals which eat both plants and animals, e.g. humans

Deciduous trees are those which lose their leaves in autumn, whereas evergreen trees – as the name implies – are those which retain their green colour all year round.

Everyday Materials

- Recognise that objects are made of materials
- Name some everyday materials such as wood, metal, glass and plastic
- Describe some of the properties of materials, e.g. that wood is hard
- Group together items based on the materials they're made from, or their properties, for example by grouping heavy objects or shiny objects

Seasonal Change

- Observe changes across the four seasons
- Observe and describe how the day and weather changes with the seasons

Parent Tip

There are always plenty of ways in which families can support children at home with science. There may be a park or gardens near you which you can visit over the year and see how the flora changes with the seasons. You may also be able to visit a farm or nature park which provides plenty of opportunity for discussing the wide variety of the animal kingdom.

Science in Year 2

In the first years of schooling, much of the science curriculum is based around real-life experiences for children. This includes everyday plants and animals, as well as finding out about different materials and the four seasons. There are likely to be lots of opportunities for exploring scientific ideas both in the classroom and the local surroundings.

Scientific Investigation

Children are encouraged to carry out their own observations and experiments to further their scientific understanding. In Year 2 this may include learning to:

- Use scientific apparatus to make observations, such as magnifying glasses
- Collect information about what they have seen
- Make links between observations and their scientific understanding

Living Things and their Habitats

- Compare the difference between things which are alive, which are dead, and which have never been alive
- Understand that different animals are suited to different habitats
- Identify some plants and animals in different habitats
- Describe how animals feed on other plants or animals

Habitats are simply the different types of places living things are found. This can range from the vast, such as oceans and rainforests, through to local features such as rock pools, or to the small, such as under a single log.

Plants

- Describe how seeds or bulbs grow into plants
- Understand that plants need water, light and a suitable temperature to grow

Animals including Humans

- Notice that all animals have offspring which grow into adults, including humans
- Know about the basic survival needs of animals, such as food, water and air
- Describe the importance of exercise, healthy diet and hygiene to humans

Everyday Materials

- Identify and compare the uses of different materials including wood, metal, plastic, glass, brick, rock, paper and cardboard
- Find out how some solid objects can be changed by squashing, bending or stretching

Parent Tip

Growing your own plants or flowers at home can be an exciting – if slow – process for children to take part in. Why not try some quick-growing seeds such as cress or mustard, as well as something more substantial planted in the garden, and watch how the processes of growth are similar for all plants?

At certain times of year you may also be lucky enough to witness some of the growth cycle in animals, such as tadpoles in a pond, or lambing season at the local farm.

Science in Year 3

During Key Stage 2 (Years 3 to 6), the strands of science begin to become more recognisable as biology, chemistry and physics, although they will usually be grouped together in primary school. Children will continue to carry out their own experiments to find out about the world around them, and to test their own hypotheses about how things work.

Scientific Investigation

Investigation work should form part of the broader science curriculum. During Year 3, some of the skills your child might focus on include:

- Set up simple comparative tests, ensuring that they are carried out fairly
- Make systematic observations, using appropriate equipment and standard units
- Gather and record information to help to answer scientific questions
- Use results to draw simple conclusions or to raise further questions
- Use straightforward scientific evidence to answer questions

Plants

- Identify the basic functions of a plant's roots, stem/trunk, leaves and flowers
- Understand that plants need air, light, water, nutrients and room to grow
- Understand the role of flowers in the life cycle, including pollination and seed dispersal

Pollination is the act of reproduction in which pollen is transferred – usually to another plant – to make seeds. Seed dispersal is the distribution of seeds by actions such as sprinkling, through the wind, or by being eaten as part of a fruit.

Animals including Humans

- Know that animals get their nutrition from food, and need the right types and amounts of nutrition
- Identify that humans and some other animals have skeletons and muscles, and know their basic functions

Rocks

- Compare and group different types of rocks based on their appearance and properties
- Describe how fossils are formed
- Recognise that soils are made from rocks and organic material

At this level, rocks are often grouped into one of three categories:
Igneous: rocks formed from magma under the Earth's surface, often after a volcano, or deep underground.
Metamorphic: rocks formed under great heat or pressure under the Earth's surface, such as slate or marble.
Sedimentary: rocks formed where sediment builds up in deposits under lakes or oceans.

Parent Tip

Many families will have a magnet of some form about the house, and this makes a great tool for scientific investigation. A fun experiment is to compare whether household objects are attracted to magnets, such as keys, tins, cans, and even different denominations of coin.

Light

- Recognise that we need light to see things
- Notice that light is reflected from surfaces
- Know how shadows are formed, and identify how the size of a shadow changes

Forces and Magnets

- Notice that some forces need contact to act, but that magnetic forces can act at a distance
- Observe how magnets attract or repel each other, describing magnets as having two poles
- Compare and group objects according to whether or not they are magnetic

Science in Year 4

During Year 4, children begin to use more scientific vocabulary to describe objects and processes, such as describing solids, liquids and gases, or erosion. Vocabulary is a key part of any area of study, and particularly in science. Learning new words – and their spellings – can often be fun when they relate to experiments and science investigations.

Scientific Investigation

Investigation work should form part of the broader science curriculum. During Year 4, some of the skills your child might focus on include:

- Carry out fair tests, using control tests where appropriate
- Take accurate measurements using a range of scientific equipment, including thermometers
- Organise and presenting data to help answer scientific questions
- Record findings using scientific vocabulary, diagrams, charts and tables
- Report on findings using oral and written explanations of results and conclusions

Living Things and their Habitats

- Use classification keys to group, identify and name a variety of living things
- Recognise that environments can change

A common example of classification is the grouping of vertebrates into fish, amphibians, reptiles, mammals and birds.

Animals including Humans

- Describe the basic functions of the parts of the digestive system, such as mouth, oesophagus, stomach and intestines
- Identify the different types of teeth in humans, and their functions
- Construct a variety of food chains to show producers, predators and prey

States of Matter

- Group materials as solids, liquids and gases
- Observe that some materials change state when heated or cooled
- Know the part of evaporation and condensation in the water cycle

The water cycle is the process of water being evaporated from the Earth's surface, and then condensing to form clouds and rain before falling back to Earth.

Sound

- Understand that sounds are caused by vibrations reaching the ear
- Find what affects the pitch and volume of a sound

Parent Tip

Children may make simple musical instruments in school to explore sound. You could also make some at home using elastic bands stretched over an open box, seeds or grains in a sealed box, or even a simple drum from a saucepan!

Electricity

- Construct a simple electrical circuit using cells, wires, bulbs and switches
- Understand that a complete circuit is needed to power a lamp or buzzer
- Recognise some common conductors and insulators

Science in Year 5

As children get older, they begin to meet more abstract concepts in science – things which are not so easily tested in the classroom, such as the bodies of the solar system, or changes of state. They will continue to carry out experiments but may also use more secondary resources for research or investigation.

Scientific Investigation

Investigation work should form part of the broader science curriculum. During Year 5, some of the skills your child might focus on include:

- Plan different types of scientific investigation, including controlling variables
- Take measurements with increasing accuracy and precision
- Record data and results using diagrams, labels, keys, tables and graphs
- Use test results to make predictions and to set up more testing
- Identify the evidence that has been used to support or refute ideas

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 processes of reproduction in some plants and animals

Life cycles include different stages for the main vertebrate groups, such as eggs, larvae and pupae. These can be seen in tadpoles and frogs, caterpillars and butterflies, and of course the chicken and the egg.

Animals including Humans

- Describe the changes as humans develop to old age, including puberty

Properties and Changes of Materials

- Compare the various properties of materials such as hardness, solubility and conductivity
- Use knowledge of solids, liquids and gases to separate mixtures and solutions through filtering or evaporation
- Know that dissolving, mixing and changes of state are reversible changes
- Know that some changes cannot be reversed, such as burning, rusting or chemical reactions

Earth and Space

- Describe the movement of the planets, including Earth, around the Sun
- Describe the movement of the Moon around the Earth
- Use these ideas to explain how day and night occur, and why the Sun appears to move across the sky

Since 2006, scientists have defined Pluto as only a dwarf planet. Consequently, children are now taught that there are only eight planets orbiting the Sun (Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune), although many will also explain the history of Pluto's past.

Parent Tip

Plenty of exciting experiments can take place at home looking at reversible and irreversible changes. Try searching online for the 'vinegar bomb' experiment, or the now-famous 'Coke and Mentos' experiment.

Forces

- Explain that gravity is a force which acts on objects pulling them towards the Earth
- Identify the effects of air resistance, water resistance and friction
- Recognise that some mechanisms, such as levers, pulleys and gears, can be used to increase the work of a force

Science in Year 6

Again in Year 6, many of the scientific concepts that children meet are more abstract, such as the study of evolution, or the behaviour of light. There are still plenty of opportunities for investigation, and also to find out about the work of some great scientists of today and the past.

There are no statutory tests for students in Science at Key Stage 2, although a very small number of children from any given school may be selected to be part of the bi-annual science sample testing. This involves taking three short tests of about twenty-five minutes each. The results of these tests are not shared with parents or schools, but are used to get a sense of the national picture.

Scientific Investigation

Investigation work should form part of the broader science curriculum. During Year 6, some of the skills your child might focus on include:

- Plan a range of scientific investigations and managing the variables effectively
- Take precise measurements, and repeat tests where appropriate to improve the validity of the results
- Present results using tables, scatter graphs, line graphs and other diagrams
- Explain the conclusions drawn from results, including their limitations

Living Things and their Habitats

- Describe how living things are classified into groups, including micro-organisms
- Give reasons for the classification of plants and of animals according to their characteristics

At this age, invertebrate animals can be grouped into categories such as insects, spiders, snails and worms.

Animals including Humans

- Know the functions of the main parts of the circulatory system such as the heart, lungs, blood vessels and blood
- Describe how nutrients and water are transported within animals
- Recognise the impact of diet, exercise, drugs and lifestyle on the way bodies function

Evolution and Inheritance

- Recognise that fossils provide information about life on Earth millions of years ago
- Understand that offspring are not normally identical to their parents
- Identify that plants and animals are adapted to their environments, and that this adaptation leads to evolution over long periods of time

Evolution is not a planned process of adaptation, but rather the unintended result of more random changes which led to animals being better-suited to the environments in which they lived.

Parent Tip

Conversations about evolution and inheritance often lead to interesting discussions at home. Some traits which are inherited are not always passed on, such as hair or eye colour. Interestingly, you can also compare whether members of your family have attached or detached earlobes, or whether they can roll their tongues.

Light

- Recognise that light appears to travel in straight lines
- Understand that we see things because light is reflected off objects and into the eye
- Explain how shadows are formed

Electricity

- Compare the variation in performance of bulbs and buzzers by changing the number of cells in a circuit
- Use the recognised scientific symbols to draw a simple circuit diagram

The Foundation Subjects

At primary school, English, Maths and Science are the core subjects which make up the bulk of the timetable. That said, the other foundation subjects play a key part in providing a broad and balanced curriculum. All eight of these subjects are a compulsory part of the National Curriculum. In addition, all schools are required to include some Religious Education in their broader curriculum, although the content of this is agreed locally.

Here is a very brief outline of what will be covered in the foundation subjects during primary school:

Art

Schools will be largely free to design their own curriculum in Art, while providing a broad experience for their students. Children will explore a range of different techniques such as drawing, painting and sculpture, and will use a variety of materials, from pencil and paint to charcoal and clay, to create their own art pieces. In addition, during Key Stage 2, children will study the works of some great artists, architects and designers from history.

Computing

There are three main strands of the new Computing curriculum: information technology, digital literacy and computer science.

Information technology is about the use of computers for functional purposes, such as collecting and presenting information, or using search technology. Digital literacy is about the safe and responsible use of technology, including recognising its advantages for collaboration or communication. Finally, computer science will introduce children of all ages to understanding how computers and networks work. It will also give all children the opportunity to learn basic computer programming, from simple floor robots in Years 1 and 2, right up to creating on-screen computer games and programmes by Year 6. Many schools will use programming software which is freely available online, such as Scratch or Kodu.

All schools will also include regular teaching of e-safety to ensure that children feel confident when using computers and the Internet, and know what to do if they come across something either inappropriate or uncomfortable. Many schools will also invite parents to work with them on this aspect of the curriculum.

Design and Technology

This subject includes cooking, which will be taught in all primary schools from 2014, with children finding out about a healthy diet and preparing simple meals. It also includes the more traditional design elements in which children will design, make and evaluate products while learning to use a range of tools and techniques for construction. There may also be some cross-over with Science here as children incorporate levers, pulleys or electrical circuits into their designs for finished products.

Geography

Across primary school, children will find out about different places in the UK, Europe and the Americas through studying small regions in each, and comparing these to other areas, including their own locality.

In Key Stage 1, children will learn the names of the continents and oceans as well as the names of the four home nations and their respective capital cities. They will use the four main compass directions and simple maps and photographs to explore the local area.

In Key Stage 2, the children will locate the countries of the world, focussing particularly on Europe and the Americas, as well as naming the counties, regions and major cities of the United Kingdom. They will begin to explore geographical features such as volcanoes and tectonic plates, as well as features of human geography such as trade links and land use. They will also learn to use grid references on Ordnance Survey maps to describe locations.

History

In Key Stage 1, the focus of history is very much on locally significant events or events within their own memories, as well as key events of great significance such as Bonfire Night. In addition, children will find out about important historical people and events, such as Florence Nightingale or The Great Fire of London.

In Key Stage 2, there are nine main areas of study that are required, some of which have optional strands. The first four are units relating to British history and are intended to begin the development of a clear chronological understanding. In many schools these will be taught in chronological order.

1. Britain in the Stone, Bronze and Iron Ages
2. Roman Britain
3. Anglo-Saxons and Scots in Britain
4. Anglo-Saxons and Vikings
5. Local history
6. A study of a period after 1066 of the school's choice
7. Ancient Greece
8. A choice from Ancient Egypt, Ancient Sumer, Ancient Egypt, or the Shang Dynasty of Ancient China
9. A choice from 10th-century early Islamic civilisation, Mayan civilisation or Benin in West Africa

Languages

For the first time, foreign languages will be compulsory in schools for children in Key Stage 2 (Years 3 to 6). Schools can choose any language to study, although they should bear in mind the languages available in partner secondary schools. Over the course of their four years in Key Stage 2, children will be expected to make good progress in the main language chosen, learning to ask and answer questions, present ideas to an audience both in speaking and writing, read a range of words, phrases and sentences, and write simple phrases, sentences and descriptions. If the school chooses a modern language, such as French or Spanish, then children will also learn about the appropriate intonation and pronunciation of the language.

Music

Over the course of primary school, children will listen to and perform a range of music. In the first years of schooling this will often include singing songs and rhymes, and playing untuned instruments such as tambourines or rainmaker sticks.

In Key Stage 2, children will perform pieces both alone and as part of a group using their own voice and a range of musical instruments, including those with tuning such as glockenspiels or keyboards. They will both improvise and compose pieces using their knowledge of the different dimensions of music such as rhythm and pitch. During the later years they will also begin to use musical notation, and to learn about the history of music.

Physical Education

Physical Education lessons will continue to include a range of individual disciplines such as dance and athletics, with team sports and games. Through these sports, children should learn the skills of both cooperation and competition.

During Key Stage 2, the range of games and sports taught will be broader, and the children will also take part in outdoor and adventurous activities such as orienteering. They will perform dances, take part in athletics and gymnastics, and attempt to achieve personal bests in various activities.

In addition, all children should learn to swim at some point during their primary school career.

This guide has been developed for schools by Michael Tidd and Rising Stars
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For more information on the National Curriculum please visit
www.gov.uk/government/collections/national-curriculum