Together We Achieve

End of Year Expectations for Year 6

The following pages outline the national expectations for children in Year 6 by the end of the academic year.

These replace the old system of levels and provide you as parents with a clear idea of what the children should be achieving at the end of the year.

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

We have also produced ‘deepening’ targets for parents to show you the targets that the children will be working towards if they have met all of the ‘expected’ targets.

If you have any queries regarding the content or would like support in knowing how best to help your child please talk to your child’s class teacher.

Assessing Mathematics: Meeting Year 6 Expectations

• demonstrate an understanding of place value, including large numbers and decimals (e.g. what is the value of the '7' in 276,541?; find the difference between the largest and smallest whole numbers that can be made from using three digits; 8.09 = 8 + 9/?; 28.13 = 28 +•+ 0.03)	• calculate using fractions, decimals or percentages (e.g. knowing that 7 divided by 21 is the same as 7/21 and that this is equal to 1/3; 15% of 60; 11/2 + 3/4; 7/9 of 108; 0.8 x 70)
• calculate mentally, using efficient strategies such as manipulating expressions using commutative and distributive properties to simplify the calculation (e.g. 53 – 82 + 47 = 53 + 47 – 82 = 100 – 82 = 18; 20 × 7 × 5 = 20 × 5 × 7 = 100 × 7 = 700; 53 ÷ 7 + 3 ÷ 7 = (53 + 3) ÷ 7 = 56 ÷ 7 = 8)	• use mathematical reasoning to find missing angles (e.g. the missing angle in an isosceles triangle when one of the angles is given; the missing angle in a more complex diagram
• use formal methods to solve multi-step problems (e.g. find the change from £20 for three items that cost £1.24, £7.92 and £2.55; a roll of material is 6m long: how much is left when 5 pieces of 1.15m are cut from the roll?; a bottle of drink is 1.5 litres, how many cups of 175ml can be filled from the bottle, and how much drink is left?)	• calculate with measures (e.g. calculate length of a bus journey given start and end times; convert 0.05km into m and then into cm)
• recognise the relationship between fractions, decimals and percentages and can express them as equivalent quantities (e.g. one piece of cake that has been cut into 5 equal slices can be expressed as 1/5 or 0.2 or 20% of the whole cake)	• substitute values into a simple formula to solve problems (e.g. perimeter of a rectangle or area of a triangle)

Assessing Mathematics: Deepening Year 6 Expectations

Read, write, order and compare numbers beyond 10 000 000	Use a greater range of imperial and metric conversions for length, mass and capacity
Round decimals to the nearest whole number and know prime numbers up to 100 with confidence.	Be fluent in using, reading, writing and converting between standard units.
Record number sentences using negative numbers for intervals across zero	Solve increasingly complex problems involving unequal sharing and grouping using knowledge of fractions and multiples.
Use common factors to simplify fractions with increasingly larger numerators and denominators, recognising and justifying when fractions are in their lowest possible terms.	Draw and translate increasingly complex shapes on the coordinate plane, and reflect them in the axes, justifying a solution through the use of correct mathematical vocabulary without prompts
Solve increasingly complex problems involving addition, subtraction, multiplication and division in both familiar and unfamiliar contexts.	Use the language of circles including radius, diameter and circumference with confidence and accuracy. Begin to explore the formula for the circumference of circles.
Multiply and divide numbers by any power of 10	Read and interpret algebraic notation consistently
Recognise when to use formal methods of short and long multiplication and division, calculate accurately, interpreting remainders appropriately.	Choose an appropriate method to solve problems involving the calculation and conversion of units of measure and recognise the most efficient method
Explain and justify mental methods used to solve a problem and recognise the most efficient method	Justify the missing angles of a diagram through use of correct mathematical vocabulary without prompts
Have and be able to explain systematic strategies to find common factors and multiples.	Recognise, describe and build increasingly complex 3-D shapes, including making nets accurately
Solve multi-step problems for addition and subtraction of mixed fractions with different denominators in a range of contexts	Find the area and volume of compound 2d and 3d shapes and explain decisions made Solve problems using missing lengths for triangles and parallelograms
Use order of operations with increasingly complex calculations accurately, including squares and cubes.	Compare sets of data presented in different formats and be able to justify my reasons when solving a problem

Assessing Reading: Meeting Year 6 Expectations
•Read age-appropriate books with confidence and fluency (including whole novels).
•Applies a growing knowledge of root words, prefixes and suffixes both to read aloud and to understand the meaning of new words that are met.
•Read aloud with intonation that shows understanding.
• Work out the meaning of words from the context.
• Explain and discuss their understanding of what they have read, drawing inferences and justifying these with evidence.
• Provides reasoned justifications for their views about a book.
• Predict what might happen from details stated and implied.
• Retrieve information from non-fiction texts.
• Summarise main ideas, identifying key details and using quotations for illustration.
• Evaluate how authors use language, including figurative language, considering the impact on the reader
• Make comparisons within and across books.
•Learns a wider range of poetry by heart.
•Retrieves, records and presents information from non-fiction.

Assessing Reading: Deepening Year 6 Expectations

- Explain and comment on the structural devices used to organise a text.
- Read several texts on the same topic to find and compare information.
- Explain the main purpose of a text and summarise it succinctly.
- Draw inferences from subtle clues across a complete text.
- Recognise the impact of social, historical and cultural on the themes in a text.
- Comment on the development of themes in longer novels.
- Compare and contrast the style of different writers with evidence and explanation.
- Compare and contrast the language used in two different texts.
- Identify the grammatical features / techniques used to create mood, atmosphere, key messages, attitudes
- Explain the author's viewpoint in a text and present an alternative point of view.

Assessing Writing: Meeting Year 6 Expectations

write effectively for a range of purposes and audiences, selecting language that shows good awareness of the reader (e.g. the use of the first person in a diary; direct address in instructions and persuasive writing):	
in narratives, describe settings, characters and atmosphere using adventurous vocabulary	
integrate dialogue in narratives to convey character and advance the action – punctuate accurately	
select vocabulary and grammatical structures that reflect what the writing requires, doing this mostly appropriately	apostrophes: using contractions in dialogues in narrative and expanded in formal writing
	using passive verbs to affect how information is presented
	using modal verbs to suggest degrees of possibility
	range of sentence structures including parenthesise for embedded subordinate and relative clauses
	expanded noun phrases
use a range of devices to build cohesion within and across paragraphs	conjunctions – subordinating and coordinating (BOA)
	adverbials (groups of words) of time and place, included fronted adverbials
	prepositional phrases
	pronouns to refer to previously mentioned nouns
	adventurous synonyms of previously mentioned words
use the range of punctuation taught at key stage 2 mostly correctly	inverted commas and other punctuation to indicate direct speech
	commas (expanded noun phrases, lists, extra information, to make sentences clear, etc)
	Colons for lists or to add further detail to a sentence
	semi-colons to mark boundaries between main clauses

	dashes
	hyphens
	ellipses …
use verb tenses consistently and correctly throughout their writing	
spell correctly most words from the year 5 / year 6 spelling list,* and use a dictionary to check the spelling of uncommon or more ambitious vocabulary	
maintain legibility in joined handwriting when writing at speed.	

Assessing Writing: Deepening Year 6 Expectations

write effectively for a range of purposes and audiences, selecting the appropriate form and drawing independently on what they have read as models for their own writing (e.g. literary language, characterisation, structure):
distinguish between the language of speech and writing[3] and choose the appropriate register
exercise an assured and conscious control over levels of formality, particularly through manipulating grammar and vocabulary to achieve this
use the range of punctuation taught at key stage 2 correctly (e.g. semi-colons, dashes, colons, hyphens) and, when necessary, use such punctuation precisely to enhance meaning and avoid ambiguity.^

Assessing Science: Meeting Year 6 Expectations

Year 6 Expectations: Working Scientifically	Year 6 Expectations: Science Content (continued)
• describe and evaluate their own and others' scientific ideas related to topics in the national curriculum (including ideas that have changed over time), using evidence from a range of sources	• use the basic ideas of inheritance, variation and adaptation to describe how living things have changed over time and evolved [year 6]; and describe how fossils are formed [year 3] and provide evidence for evolution [year 6]
• ask their own questions about the scientific phenomena that they are studying, and select the most appropriate ways to answer these questions, recognising and controlling variables where necessary (i.e. observing changes over different periods of time, noticing patterns, grouping and classifying things, carrying out comparative and fair tests, and finding things out using a wide range of secondary sources)	• group and identify materials [year 5], including rocks [year 3], in different ways according to their properties, based on first-hand observation; and justify the use of different everyday materials for different uses, based on their properties [year 5] • identify, with reasons, whether changes in materials are reversible or not [year 5]
• use a range of scientific equipment to take accurate and precise measurements or readings, with repeat readings where appropriate	• describe the requirements of plants for life and growth [year 3]; and explain how environmental changes may have an impact on living things [year 4]
• record data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs	• describe the characteristics of different states of matter and group materials on this basis; and describe how materials change state at different temperatures, using this to explain everyday phenomena, including the water cycle [year 4]

• draw conclusions, explain and evaluate their methods and findings, communicating these in a variety of ways	• identify and describe what happens when dissolving occurs in everyday situations; and describe how to separate mixtures and solutions into their components [year 5]
• raise further questions that could be investigated, based on their data and observations.	• use the idea that light from light sources, or reflected light, travels in straight lines and enters our eyes to explain how we see objects [year 6], and the formation [year 3], shape [year 6] and size of shadows [year 3]
Year 6 Expectations: Science Content	• use the idea that sounds are associated with vibrations, and that they require a medium to travel through, to explain how sounds are made and heard [year 4]
• name, locate and describe the functions of the main parts of plants, including those involved in reproduction [year 5] and transporting water and nutrients [year 3]	• describe the relationship between the pitch of a sound and the features of its source; and between the volume of a sound, the strength of the vibrations and the distance from its source [year 4]
• describe the effects of diet, exercise, drugs and lifestyle on how the body functions [year 6]	• describe the effects of simple forces that involve contact (air and water resistance, friction) [year 5], that act at a distance (magnetic forces, including those between like and unlike magnetic poles) [year 3], and gravity [year 5]
• name, locate and describe the functions of the main parts of plants, including those involved in reproduction [year 5] and transporting water and nutrients [year 3]	• identify simple mechanisms, including levers, gears and pulleys, that increase the effect of a force [year 5]
• use the observable features of plants, animals and micro-organisms to group, classify and identify them into broad groups, using keys or other methods [year 6]	• use simple apparatus to construct and control a series circuit, and describe how the circuit may be affected when changes are made to it; and use recognised symbols to represent simple series circuit diagrams [year 6]

• construct and interpret food chains [year 4]	• describe the shapes and relative movements of the Sun, Moon, Earth and other planets in the solar system; and explain the apparent movement of the sun across the sky in terms of the Earth's rotation and that this results in day and night [year 5].