Year 6

End of Year Expectations

This document provides information for parents and carers on the end of year expectations for children in our school. The National Curriculum outlines these expectations as being the minimum requirements your child must meet in order to ensure continued progress.

All the objectives will be worked on and revised throughout the year and will be the focus of direct teaching. Any extra support you can provide in helping your children to achieve these is greatly received.

If you have any queries regarding the content of this information or want support in knowing how to best help your child please talk to your child's class teacher.

Maths

Number:

- read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
- round any whole number to a required degree of accuracy
- use negative numbers in context, and calculate intervals across zero
- solve number and practical problems that involve all of the above
- multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
- divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders
- divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context
- perform mental calculations, including with mixed operations and large numbers
- identify common factors, common multiples and prime numbers
- use their knowledge of the order of operations to carry out calculations involving the four operations
- solve problems involving addition, subtraction, multiplication and division
- use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
- use common factors to simplify fractions; use common multiples to express fractions in the same denomination
- compare and order fractions, including fractions > 1
- add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions

- multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, ¼ x ½ = $^1/_8$]
- divide proper fractions by whole numbers [for example, $^1/_3 \div 2 = {}^1/_6$]
- associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8]
- identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places
- multiply one-digit numbers with up to two decimal places by whole numbers
- use written division methods in cases where the answer has up to two decimal places
- solve problems which require answers to be rounded to specified degrees of accuracy
- recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

Ratio and propertion:

- solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
- solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison
- solve problems involving similar shapes where the scale factor is known or can be found
- solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

Algebra:

- use simple formulae
- generate and describe linear number sequences
- express missing number problems algebraically
- find pairs of numbers that satisfy an equation with two unknowns

Measurement:

- solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
- use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places
- convert between miles and kilometres

- recognise that shapes with the same areas can have different perimeters and vice versa
- recognise when it is possible to use formulae for area and volume of shapes
- calculate the area of parallelograms and triangles
- calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units [for example, mm^3 and km^3].

Geometry:

- draw 2-D shapes using given dimensions and angles
- recognise, describe and build simple 3-D shapes, including making nets
- compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons
- illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
- recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.

- describe positions on the full coordinate grid (all four quadrants)
- draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

Statistics:

- interpret and construct pie charts and line graphs and use these to solve problems
- calculate and interpret the mean as an average.

<u>Reading</u>

- To continue to read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or textbooks
- To read books that are structured in different ways and reading for a range of purposes
- To increase their familiarity with a wide range of books, including myths, legends and traditional stories, modern fiction, fiction from our literary heritage, and books from other cultures and traditions
- To recommend books that they have read to their peers, giving reasons for their choices
- To identify and discussing themes and conventions in and across a wide range of writing
- To make comparisons within and across books

- To learn a wider range of poetry by heart
- To prepare poems and plays to read aloud and to perform, showing understanding through intonation, tone and volume so that the meaning is clear to an audience
- To check that a book makes sense to them, discussing their understanding and exploring the meaning of words in context
- To ask questions to improve their understanding
- To draw inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence
- To predict what might happen from details stated and implied
- To summarise the main ideas drawn from more than one paragraph, identifying key details that support the main ideas
- To identify how language, structure and presentation contribute to meaning
- To distinguish between statements of fact and opinion
- To retrieve, record and present information from non-fiction
- To participate in discussions about books that are read to them and those they can read for themselves, building on their own and others' ideas and challenging views courteously
- To explain and discuss their understanding of what they have read, including through formal presentations and debates, maintaining a focus on the topic and using notes where necessary
- To provide reasoned justifications for their views

Writing

Sentence:

- To use the **passive** to affect the presentation of information in a **sentence** [for example, *I broke the window in the greenhouse* versus *The window in the greenhouse was broken (by me)*]
- To know the difference between structures typical of informal speech and structures appropriate for formal speech and writing [for example, the use of question tags: *He's your friend*, *isn't he?*, or the use of **subjunctive** forms such as *If I were* or *Were they to come* in some very formal writing and speech]

Word:

- To know the difference between vocabulary typical of **informal** speech and vocabulary appropriate for **formal** speech and writing [for example, *find out – discover; ask for – request; go in – enter*]

- To know how words are related by meaning as **synonyms** and **antonyms** [for example, *big, large, little*] and to show shades of meaning
- To use all **nine parts of speech**

Text and Composition:

- To linking ideas across paragraphs using a wider range of cohesive devices: repetition of a word or phrase, grammatical connections [for example, the use of adverbials such as *on the other hand*, *in contrast*, or *as a consequence*], and ellipsis
- To use layout devices [for example, headings, sub-headings, underlining columns, bullets, or tables, to structure text]
- To organise ideas, key words, new vocabulary and required skills ready for writing (planning)
- To proof read for punctuation, grammar and spelling errors
- To use correct tense in 1st, 2nd and 3rd person.

Punctuation:

- To use the semi-colon, colon and dash to mark the boundary between independent clauses [for example, *It's raining; I'm fed up*]
- To use of the colon to introduce a list and use of semi-colons within lists
- To use bullet points to list information
- To know how hyphens can be used to avoid ambiguity [for example, *man eating shark* versus *man-eating shark*, or *recover* versus *re-cover*]

Spelling

- To use further prefixes and suffixes and understand the guidance for adding them
- To spell some words with 'silent' letters [for example, knight, psalm, solemn]
- To continue to distinguish between homophones and other words which are often confused
- To use knowledge of morphology and etymology in spelling and understand that the spelling of some words needs to be learnt specifically
- To use dictionaries to check the spelling and meaning of words
- To use the first three or four letters of a word to check spelling, meaning or both of these in a dictionary
- To use a thesaurus