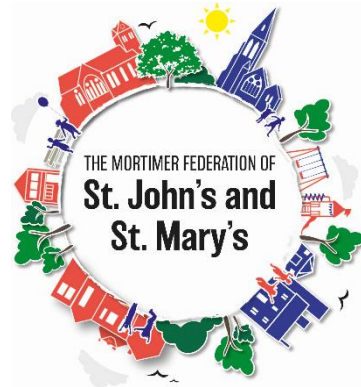


The Mortimer Federation of St. John's and St. Mary's



Helping Your Child to Achieve

- Year 6 -

Helping Your Child Achieve in Y6

This booklet provides information for parents and carers on the end of year expectations for children in this year group. All the objectives will be worked on throughout the year and will be the focus of direct teaching. If you have any queries regarding the content of this booklet or want support in knowing how best to help your child, please talk to your child's teacher.

Supporting Maths at Mortimer St. Mary's Junior School

The overall aim is that when children leave our school they:

- have a secure knowledge of number facts and a good understanding of the four operations;
- are able to use this knowledge and understanding to carry out calculations mentally and to apply general strategies when using one-digit and two-digit numbers and particular strategies to special cases involving bigger numbers;
- make use of diagrams and informal notes to help record steps and part answers when using mental methods that generate more information than can be kept in their heads;
- have an efficient, reliable, compact written method of calculation for each operation that children can apply with confidence when undertaking calculations that they cannot carry out mentally;
- use a calculator effectively, using their mental skills to monitor the process, check the steps involved and decide if the numbers displayed make sense.

Mathematics in Year 6

- Use negative numbers in context and calculate intervals across zero.
- Read, write and compare and order numbers up to 10,000,000.
- Identify common factors, common multiples and prime numbers.
- Round any whole number to a required degree of accuracy.
- Identify the value of each digit to 3 decimal places.
- Use knowledge of order of operations to carry out calculations involving four operations - BIDMAS.
- Multiply and divide - 4-digit by 2-digit using formal written methods of long multiplication or division.
- Add and subtract fractions with different denominators and mixed numbers.
- Multiply simple pairs of proper fractions, writing the answer in the simplest form.
- Divide proper fractions by whole numbers.
- Calculate % of whole number.
- Compare and order fractions greater than 1.
- Recall and use equivalences between fractions, decimals and percentages.

Y6 Addition

- Add several numbers of increasing complexity using columnar addition.

$$\begin{array}{r}
 23.361 \\
 9.080 \\
 59.770 \\
 + 1.300 \\
 \hline
 93.511 \\
 \begin{array}{cccc}
 2 & 1 & & 2
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 81,059 \\
 3,668 \\
 15,301 \\
 + 20,551 \\
 \hline
 120,579 \\
 \begin{array}{cccc}
 1 & 1 & 1 & 1
 \end{array}
 \end{array}$$

- Use estimation to check answers to calculations and to determine, in the context of a problem, levels of accuracy.
-
- Solve addition multi-step problems in context.

Y6 Subtraction

- Continue with compact columnar subtraction, including subtraction of decimals.

$$\begin{array}{r}
 \cancel{10}^9 \cancel{5}^9, \cancel{6}^9 9 9 \\
 - 89,949 \\
 \hline
 60,750
 \end{array}$$

$$\begin{array}{r}
 \cancel{10}^5 \cdot \cancel{14}^1 9 \text{ kg} \\
 - 36 \cdot 08 \text{ kg} \\
 \hline
 69 \cdot 339 \text{ kg}
 \end{array}$$

- Use estimation to check answers to calculations and to determine, in the context of a problem, levels of accuracy.
- Solve subtraction multi-step problems in context.

Y6 Multiplication

- Recall and use multiplication tables up to 12x12 (Including multiplying by 0 and 1).
- Continue to practise short multiplication.
- Continue to practise long multiplication.

$$\begin{array}{r} 3652 \\ \times 8 \\ \hline 29216 \end{array}$$

$$\begin{array}{r} 1234 \\ \times 16 \\ \hline 7404 \\ 12340 \\ \hline 19744 \end{array}$$

- Multiply decimals using the grid method and progressing on to short multiplication.
- Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

Y6 Division

- Consolidate short division.
- Children should be able to interpret remainders as whole number remainders, fractions or by rounding, as appropriate for the context.

98 ÷ 7 becomes

$$\begin{array}{r} 14 \\ 7 \overline{) 98} \end{array}$$

- Answer: 14

432 ÷ 5 becomes

$$\begin{array}{r} 86 \text{ r } 2 \\ 5 \overline{) 432} \end{array}$$

Answer: 86 remainder 2

496 ÷ 11 becomes

$$\begin{array}{r} 45 \text{ r } 1 \\ 11 \overline{) 496} \end{array}$$

Answer: 45 $\frac{1}{11}$

- Introduce long division.

432 ÷ 15 becomes

$$\begin{array}{r} 28 \text{ r } 12 \\ 15 \overline{) 432} \\ \underline{300} \\ 132 \\ \underline{120} \\ 12 \end{array}$$

Answer: 28 remainder 12

432 ÷ 15 becomes

$$\begin{array}{r} 28 \\ 15 \overline{) 432} \\ \underline{300} \\ 132 \\ \underline{120} \\ 12 \end{array} \begin{array}{l} 15 \times 20 \\ 15 \times 8 \end{array}$$

$$\frac{12}{15} = \frac{4}{5}$$

Answer: 28 $\frac{4}{5}$

432 ÷ 15 becomes

$$\begin{array}{r} 28.8 \\ 15 \overline{) 432.0} \\ \underline{300} \\ 132 \\ \underline{120} \\ 120 \\ \underline{120} \\ 0 \end{array}$$

Answer: 28.8

Reading in Y6 – pupils need to be able to

- Apply a growing knowledge of root words, prefixes and suffixes when reading aloud and independently.
- Read age-appropriate books with confidence and fluency.
- Read aloud with intonation that shows their understanding.
- Explain and discuss their understanding of what they have read, drawing inferences and justifying these with evidence.
- Provide reasoned justifications for their views about a book.
- Predict what might happen from details stated and implied.
- Summarise main ideas, identifying key details and using quotations.
- Evaluates how authors use language. Including figurative language, considering the impact on the reader.
- Makes comparisons within and across books.
- Learns a wider range of poetry by heart.
- Retrieve, record and present information from non-fiction.

Activities to support reading development

- ❖ **Encourage your child to read every day, use a text type that they are interested in and are keen to read**
- ❖ **Listen to your child read as often as possible, as this develops fluency and confidence with reading aloud**
- ❖ **Encourage your child to choose a different genre**

Writing in Y6 – pupils need to be able to

Plan their writing by:

- identifying the audience for and purpose of writing, selecting the appropriate form and using other similar writing as models for their own
- noting and developing initial ideas, drawing on reading and research
- in writing narratives, considering how authors have developed characters and settings in what pupils have read, listened to or seen performed

Draft and write by:

- selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning
- in narratives, describing settings, characters and atmosphere and integrating dialogue to convey character and advance the action
- précising longer passages
- using a wide range of devices to build cohesion within/across paragraphs
- using further organisational and presentational devices to structure text and to guide the reader [for example, headings, bullet points, underlining]

Evaluate and edit by:

- assessing the effectiveness of their own and others' writing
- proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning
- ensuring the consistent and correct use of tense throughout a piece of writing
- ensuring correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing the appropriate register

Proof-read for spelling and punctuation errors

Literacy text types covered in Y6 – Narrative (Fiction Genres, Authors and texts, Short stories with flashbacks, Diary Entries), Non-Narrative (Biography & Autobiography, Journalistic Writing, Persuasion and Argument, Formal and Impersonal Writing) and a range of poetry

Key grammar features in Y6

- Adverbial phrases
- Varied sentence structures for effect – simple, compound and complex sentences
- Variety of punctuation
- Conjunctions
- Words and phrases to signal time sequences
- Use of dialogue, speech punctuation, reported and direct speech
- Similes, alliteration, metaphors, onomatopoeia, personification
- Passive voice, formal language

Spelling - pupils are given opportunities to:

- Develop a range of personal strategies for spelling at the point of composition and for learning new and irregular words
- Develop a range of strategies for checking and proof reading spellings after writing
- Use dictionaries to check the spelling and meaning of words
- Use a thesaurus
- Proof-read for spelling errors

The following areas are a focus in Y6

- Revise use of hyphen e.g. co-ordinate, co-operate
- Words containing the letter-string -ough.
- Revise apostrophe for contraction and possession.
- Adding suffixes beginning with vowel letters to words ending in -fer.
- Revise words with the /i:/ sound spelt ei after c.
- Revise words with 'silent' letters e.g. knight, psalm, solemn
- Revise words with unusual spellings e.g. bruise, guarantee, queue, immediately, vehicle, yacht
- Endings -cious or -tious e.g. precious, ambitious.
- Endings -ial e.g. official, special, artificial, partial, confidential, essential.
- Words ending in -ant, -ance/-ancy, -ent, -ence/-ency, -able, -ible

Homophones

advice/advise device/devise licence/license practice/practise prophecy/prophesy
compliment/complement, desert/dessert, principal/principle, profit/prophet,
stationery/stationary, draft/draught, dissent/descent, precede/proceed

Useful Terms

Conjunction

A conjunction is a word or phrase that links clauses or sentences.

e.g. addition *also, furthermore, moreover*
opposition *however, nevertheless, on the other hand*
reinforcing *besides, anyway, after all*
explaining *for example, in other words, that is to say*
listing *first(ly), first of all, finally*
indicating result *therefore, consequently, as a result*
indicating time *just then, meanwhile, later*

Sentences

A sentence can be **simple, compound or complex**.

A **simple sentence** consists of one **clause**: *It was late*.

A **compound sentence** has two or more clauses joined by *and, or, but* or *so*. The clauses are of equal weight (they are both main clauses): *It was late but I wasn't tired*.

A **complex sentence** consists of a main clause which itself includes one or more subordinate clauses: *Although it was late, I wasn't tired*.

(The subordinate clause beginning with *although* is underlined and is used to add more detail into the sentence)

Clause

A clause is a group of words that expresses an event (*she drank some water*) or a situation (*she was thirsty/she wanted a drink*). It usually contains a **subject** (*she* in the examples) and **verb** (*drank/was/wanted*)

Simile – comparing one thing with another using the words “like” or “as” e.g. as cold as ice

Metaphor – comparing two things by saying that one thing is the other (not using the words like or as) e.g. the morning was a blanket of warmth wrapped around me.

Personification – describing non-human things in a human way e.g. The tree waved its arms in the wild wind.

Alliteration – using the same sound at the beginning of words – five friendly fish

Onomatopoeia – when the sound of the word reflects its meaning e.g. zoom

Adverbials

A word or group of words that explain “when”, “how” or “where” the action takes place. They can come before or after a verb e.g. “when” – The train **finally** left the station, “how” – The boy ran **quickly** through the field, “where” – The children ran **outside**.

Adverbials can also be used to compare the way in which actions are done e.g. Fiona painted **more carefully** than Tom.