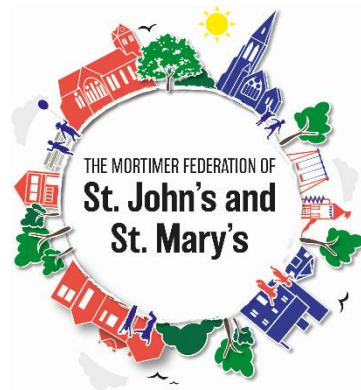


The Mortimer Federation of St. John's and St. Mary's



Helping Your Child to Achieve

- Year 4 -

Helping Your Child Achieve in Y4

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;

Mathematics in Year 4

- Count backwards through zero to include negative numbers.
- Compare and order numbers beyond 1,000. Compare and order numbers with up to 2 decimal places.
- Read Roman numerals to 100.
- Find 1,000 more/less than a given number.
- Count in multiples of 6, 7, 9, 25 and 1000.
- Recall and use multiplication and division facts for all tables to 12x12.
- Recognise the place value of any 4-digit number.
- Round any number to the nearest 10, 100 or 1,000.
- Round decimals with 1dp to nearest whole number.
- Add and subtract numbers with up to 4-digits using written columnar method.
- Multiply 2-digit by 1-digit and 3-digit by 1-digit using formal written layout
- Count up/down in hundredths.
- Recognise and write equivalent fractions. Add and subtract fractions with same denominator.
- Recognise and write decimal equivalent or any number of tenths or hundredths.
- Read, write and convert time between analogue and digital 12 and 24 hour clocks.

Y4 Addition

Continue with columnar addition.

	H T O		H T O		Th H T O
+	3 7 1	+	3 7 6	+	2 3 8 8
	<u>4 8 5</u>		<u>4 8 5</u>		<u>1 1 2 4</u>
	8 5 6		8 6 1		3 5 1 2
	1		1 1		1 1

Children should also be able to add numbers with up to 2 decimal places (at this stage, both numbers should have the same number of decimal places):

1 3 6.4 2	3 9.8	6 4 2 2.5 3
+ 3 4 4.5 9	+ 2 7.4	+ 7 4 2 6.6 7
<u>4 8 1.0 1</u>	<u>6 7.2</u>	<u>1 3 8 4 9.2 0</u>

Children must remember to keep the **decimal point** in the same place.

They should also be able to use the same method to add up more than two numbers with different numbers of digits:

2 7 5 1	4 3 9 8	3 1 7.7
+ 6 4 3	+ 8 7 4	+ 8 4.6
+ 3 8 3	<u>5 2 7 2</u>	<u>4 0 2.3</u>
<u>3 7 7 7</u>		

- Estimate and use inverse operations to check answers to a calculation.
- Add money using both £ and pence in practical contexts.
- Solve addition two-step problems in context.

Y4 Subtraction

Continue with partitioned columnar subtraction progressing to compact columnar subtraction up to 4 digits.

7 7 5 4	2 2 0 1	5 8 9 3
- 2 4 9 8	- 1 6 0 2	- 4 6 2 8
<u>5 3 6 6</u>	<u>1 6 0 9</u>	<u>1 2 7 5</u>

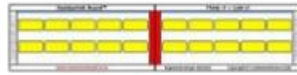
They should revert to the expanded columnar method and/or use place value counters/dienes if they experience difficulties.



- Estimate and use inverse operations to check answers to a calculation.
- Solve subtraction two-step problems in context.
- Subtract amounts of money using columnar method

Y4 Multiplication

- Recall and use multiplication tables up to 12x12 (Including multiplying by 0 and 1).
Maths games including ICT, chanting and number link boards may be used to support this.



- Continue using grid method and expanded method as appropriate, progressing to short multiplication.

$$453 \times 6 = 2718$$

	400	50	3	
6	2400	300	18	2718

69	
x 7	
63	(7 x 9)
420	(7 x 60)
483	

Children may find it helpful to record the calculations they are doing in order to keep track.

453	
x 6	
18	(6 x 3)
300	(6 x 50)
2400	(6 x 400)
2718	

- Short Multiplication.

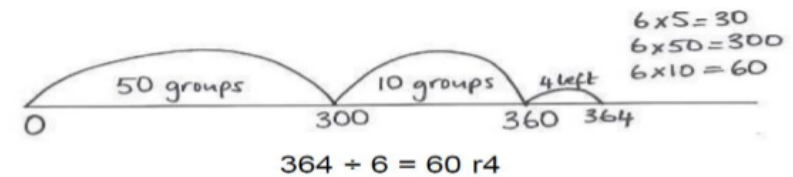
No carrying	Extra digit	Carrying	Zeros	Ext.
$\begin{array}{r} \text{TO} \\ 32 \\ \times 3 \\ \hline 96 \end{array}$	$\begin{array}{r} \text{HTO} \\ 51 \\ \times 2 \\ \hline 102 \end{array}$	$\begin{array}{r} \text{HTO} \\ 38 \\ \times 7 \\ \hline 266 \\ 5 \end{array}$	$\begin{array}{r} \text{HTO} \\ 202 \\ \times 4 \\ \hline 808 \end{array}$	$\begin{array}{r} \text{HTO} \\ \square 5 \square \\ \times 4 \\ \hline 612 \\ 21 \end{array}$

Y4 Division

- Recall and use all division facts for all tables up to 12 (Including dividing by 1).

Until children have a secure understanding of division as sharing and grouping children should continue to explore the concept of division using a number line including the use of remainders.
E.g.

$$364 \div 6 = ?$$



- Continue with short division method (bus stop method).

$$\begin{array}{r} 18 \\ 4 \overline{) 732} \end{array}$$

$$\begin{array}{r} 037 \\ 5 \overline{) 185} \end{array}$$

$$\begin{array}{r} 218 \\ 4 \overline{) 872} \end{array}$$

- Progressing to short division with remainders.

$$\begin{array}{r} 204 \\ 4 \overline{) 816} \end{array}$$

$$\begin{array}{r} 141 \text{ r}1 \\ 3 \overline{) 424} \end{array}$$

Reading in Y4 – pupils need to be able to

- Listen to and discuss a wide range of fiction, poetry, plays, non-fiction and reference books. Read books that are structured in different ways and are read for a range of purposes
- Check that the text makes sense to them, discussing their understanding and explaining the meaning of words in context
- Ask questions to improve their understanding of a text
- Draw inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence
- Predict what might happen from details stated and implied
- Identify main ideas drawn from more than one paragraph and summarising these
- Identify how language, structure, and presentation contribute to meaning
- Use knowledge of different organisational features of texts to find information effectively
- Discuss words and phrases that capture the reader's interest and imagination and what effect they create for the reader
- Prepare poems and play scripts to read aloud and to perform, showing understanding through intonation, tone, volume and action
- Explore why and how writers write, including through face-to-face and online contact with authors

Activities to support reading development

- ❖ Encourage your child to read everyday, 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 read a range of different genres

Writing in Y4 – pupils need to be able to

Plan their writing by:

- discussing writing similar to that which they are planning to write in order to understand and learn from its structure, vocabulary and grammar
- discussing and recording ideas

Draft and write by:

- composing and rehearsing sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures
- organising paragraphs around a theme
- in narratives, creating settings, characters and plot
- in non-narrative material, using simple organisational devices [for example, headings and sub-headings]

Evaluate and edit by:

- assessing the effectiveness of their own and others' writing and suggesting improvements
- proposing changes to grammar and vocabulary to improve consistency, including the accurate use of pronouns in sentences
- proof-read for spelling and punctuation errors

Read aloud their own writing, to a group or the whole class, using appropriate intonation and controlling the tone and volume so that the meaning is clear.

Literacy text types covered in Y4 – Narrative (Folk tales, stories set in fantasy/other worlds, stories with issues and dilemmas, stories with a historical setting, diary entries), Non-Narrative (persuasive adverts, explanation texts, non-chronological reports travel brochures, newspaper reports) and figurative and descriptive poetry.

Key grammar features in Y4

- Adjectives, descriptive language
- Adverbial phrases/openers
- Varied sentence structures – simple, compound and complex sentences
- Conjunctions
- Use words and phrases to signal time sequences (time adverbials)
- Use a range of punctuation
- Dialogue, speech verbs and speech punctuation
- Similes, alliteration, metaphors

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 the first two or three letters of a word to check its spelling in a dictionary
- Write from memory simple sentences, dictated by the teacher, that include words and punctuation taught so far
- Proof-read for spelling errors

The following areas are a focus in Y4

- Revise prefixes from Y3: un-dis-, mis-, re-, pre-, sub-, tele-, super-, auto
- Explore new prefixes in-, il-, im-, ir-, inter-, anti-
- Adding suffixes beginning with vowel letters to words of more than one syllable – ing, -en, -er, -ed.
- The suffix –ation e.g. sensation, preparation.
- The suffix –ly. Teach the exceptions e.g. y changed to i, le ending changed to ly, ic ending changed to –ally
- The suffix –ous e.g. poisonous, outrageous
- Endings which are spelt –tion, –sion, –ssion, –cian e.g. invention, comprehension, expression, magician, division, confusion
- Revise contractions e.g. can't, didn't, hasn't, couldn't, it's, I'll
- Place the possessive apostrophe accurately in words with regular plurals [e.g. girls', boys'] and in words with irregular plurals [e.g. children's]
- Possessive apostrophe with plural words e.g. girls', boys', babies'.
- Possessive apostrophe with singular proper nouns e.g. Cyprus's population.

Homophones

peace/piece, main/mane, affect/effect, scene/seen, male/mail, bawl/ball, whether/weather, fair/fare, medal/meddle

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.

