

Reading

Reading includes a focus on key reading comprehension skills: vocabulary, inference, predicting, explaining, retrieval and summarising.

Children will learn strategies and recognise when to apply these to corresponding skills whilst also improving their reading fluency with exposure to an engaging, vocabulary-rich text.

A reading teaching and learning cycle will include:

- the text as a whole (where context and understanding as whole is applied to achieve higher order thinking)
- exploring and analysing extracts of a text (with a skill focus primarily being word meaning, retrieval and inference)
- understanding the themes and conventions of a text and understanding its purpose
- applying learnt strategies to multi-skills lesson

Writing

Text Structure, Sentence, Useful

Vocabulary, Word Classes, Punctuation

Story

Year 6

Text Structure	Sentence	Useful Vocabulary	Word Classes	Punctuation
The story is well constructed and raises intrigue. Dialogue is used to move the action on to heighten empathy for central character. Deliberate ambiguity is set up in the mind of the reader until later in the text.	Viewpoint is well controlled and precise, e.g. Maggie stared dejectedly at the floor; her last chance had slipped from her grasp. Modifiers are used to intensify or qualify, e.g. insignificant amount, exceptionally. Sentence length and type varied according to purpose. Fronted adverbials used to clarify writer's position, e.g. As a consequence of his selfish actions... Figurative language used to build up description, e.g. everyone charged like a deer pack under threat. Complex noun phrases used to add detail, e.g. The distinctive sapphire ring is slowly removed from her slender hand. Prepositional phrases used cleverly. e.g. In the messy scramble for the bag.	Year 6 ambitious vocabulary used	<u>Noun</u> Expanded noun phrases to convey complicated information concisely. <u>Verbs</u> Use modal verbs. Prefixes for verbs; dis, de, mis, over, ise, ify. Convert adjectives into verbs using suffixes; ate, ise, ify. <u>Adjectives</u> Choose appropriate adjectives. <u>Connectives/conjunctions</u> Use a wide range of connectives. <u>Tense</u> Change tense according to features of the genre. <u>Adverbs</u> Link ideas across a text using cohesive devices, such as adverbials.	Use a wide range of punctuation throughout the writing.

Year 6 Autumn 1

Spelling list

Word list – years 5 and 6

accommodate	embarrass	persuade
accompany	environment	physical
according	equip (–ped, –ment)	prejudice
achieve	especially	privilege
aggressive	exaggerate	profession
amateur	excellent	programme
ancient	existence	pronunciation
apparent	explanation	queue
appreciate	familiar	recognise
attached	foreign	recommend
available	forty	relevant
average	frequently	restaurant
awkward	government	rhyme
bargain	guarantee	rhythm
bruise	harass	sacrifice
category	hindrance	secretary
cemetery	identity	shoulder
committee	immediate(ly)	signature
communicate	individual	sincere(ly)
community	interfere	soldier
competition	interrupt	stomach
conscience*	language	sufficient
conscious*	leisure	suggest
controversy	lightning	symbol
convenience	marvellous	system
correspond	mischievous	temperature
criticise (critic + ise)	muscle	thorough
curiosity	necessary	twelfth
definite	neighbour	variety
desperate	nuisance	vegetable
determined	occupy	vehicle
develop	occur	yacht
dictionary	opportunity	
disastrous	parliament	

Key vocabulary:

Multiplication and division vocabulary list

Year 6 - Multiplication and division	Definition	Example
Common factor	A factor of two (or more) given numbers.	A common factor of 12 and 9 is 3 because $3 \times 4 = 12$ and $3 \times 3 = 12$.
Common multiple	A multiple of two (or more) given numbers.	A common multiple of 3 and 6 is 12 because $3 \times 4 = 12$ and $6 \times 2 = 12$.
Distributive law	The process whereby adding some numbers and then multiplying the sum gives the same answer as multiplying the numbers separately and then adding the products.	$3 \times (2 + 4) = (3 \times 2) + (3 \times 4)$ $3 \times 12 = (3 \times 10) + (3 \times 2)$
Dividend	The amount that you want to divide.	In ' $12 \div 3 = 4$ ', 12 is the dividend.
Divisor	The number you divide by.	In ' $12 \div 3 = 4$ ', 3 is the divisor.
Divisible	A number is said to be divisible by another if it can be divided by that number without a remainder	24 is divisible by 8. When divided by 8 it gives a quotient of 3, with no remainder.
Formal written methods	As well as including columnar addition and subtraction, these also consist of written algorithms for multiplication and division.	Pupils should only use formal written methods for calculations that cannot be efficiently calculated using mental strategies (with or without jottings).
Factorise	To identify factors of a given number. To express a number as factors.	I can factorise 12 by looking at its factor pairs. $1 \times 12 = 12$, $2 \times 6 = 12$, $3 \times 4 = 12$. So the factors of 12 are 1, 2, 3, 4, 6 and 12.
Long division	The formal written algorithm that can be used to divide by a number with two or more digits.	$ \begin{array}{r} 34 \\ 12 \overline{) 408} \\ \underline{36} \\ 48 \\ \underline{48} \\ 0 \end{array} $

Long multiplication	The formal written algorithm that can be used to multiply a number by a number with two or more digits.	$\begin{array}{r} 34 \\ \times 12 \\ \hline 68 \\ 340 \\ \hline 408 \end{array}$
Order of operations	The internationally agreed order to complete operations in a multi-step equation with multiple operations.	$(3 + 4) \times 2 = \square$ The order of operations dictates that the operation within the brackets is completed first.
Product	The result you get when you multiply two numbers.	24 is the product of 3 and 8.
Quotient	The result when the dividend is divided by the divisor.	$15 \div 3 = 5$ 5 is the quotient.
Remainder	The amount remaining after division when a whole number answer is needed.	21 divided by four is equal to five with a remainder of 1.
Short division	A formal written layout where the quotient is calculated showing only one written step.	$\begin{array}{r} 77 \\ 5 \overline{) 385} \end{array}$
Short multiplication	A formal written layout where the multiplier is usually 9 or less.	$\begin{array}{r} 782 \\ \times 9 \\ \hline 7038 \end{array}$

Strategies and representations:

Upper KS2 Key Representations

Find out more...

Watch the **Unit tutorial** before planning each unit and read the **Unit Narrative**.

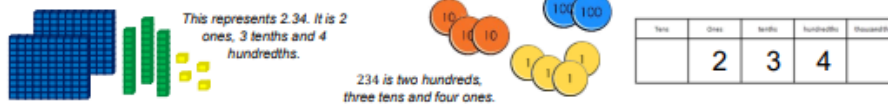
Read the **planning guides** for suggestions of representations.

Make use of **PD videos** on unit pages and Progression in Calculations page.



Representations of number

Pupils are familiar with a range of concrete and pictorial representations of number with and without a place value chart. These are used to represent a number or calculation and should not be used as a counting tool. Pupils have also experienced representing decimal numbers using manipulatives including repurposing Dienes equipment, understanding the base 10 relationship.



Number lines

Number lines can be used to represent and compare, demonstrating the continuous nature of the number system. When calculating, number lines may act as a jotting of the steps of a mental calculation and may begin 'empty' i.e. not have numbered divisions. They are also used as a representation for rounding.



Number fact knowledge

Pupils have an increasing range of number facts. Pupils should know all multiplication tables and related division facts.

Pupils make increasing use of number facts when considering larger integers.

I know 132 is a multiple of 4 because I can partition it into 120 and 12. These are both multiples of 4.

Equations

The phrase 'is equal to' is used consistently to refer to the = symbol. Equations should be presented with symbols and missing numbers in different positions:

$$38 = 25 + 13$$

$$\square = 37 + 44$$

$$12 \div \square = 4$$

Deriving facts

Using known number bonds pupils derive more complex facts including deriving decimal bonds and facts.

$$I \text{ know } 1 + 3 = 4 \text{ so } 0.1 + 0.3 = 0.4$$

$$I \text{ know } 13 + 12 = 25 \text{ so } 1300 + 1200 = 2500$$

Using strategies

Pupils are familiar with columnar addition and subtraction, short multiplication and short division written strategies and have developed conceptual understanding through concrete and pictorial representations. These strategies can be applied to larger integers and decimals. See PD videos for further exemplification.

Pupils should make use of a range of strategies, considering efficiency.

Which strategy is most efficient here?

Mental strategies

Pupils have experienced a range of mental strategies for all four operations, including:

Applying number bonds to 10 and 100 to calculate how many more/less to the next multiple of ten, extending to 100 and 1000, using the 'make 10' strategy.

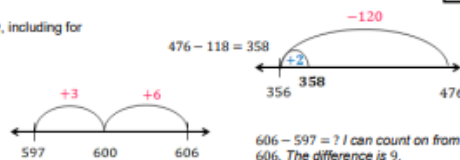
Identifying numbers close to a multiple of ten or 100 e.g. 28, 201 and using a round and adjust strategy, including for multiplication. 'If I know 20×4 is 80, then 19×4 is 76'.

Identifying near doubles for addition. 43 and 45 can be seen as 'double 43 plus two'.

Subtracting numbers close together in value, through counting on to find the difference.

Once secure, these can be applied to larger integers and decimal values.

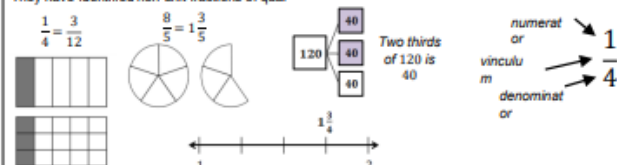
$336 + 127 = ?$ I can partition 27 into 123 and 4.
336 plus 4 is equal to 340. 340 plus 123 is equal to 463.



$606 - 597 = ?$ I can count on from 597 to 606. The difference is 9.

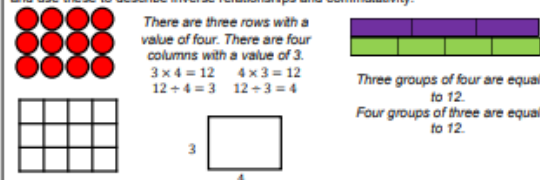
Representing fractions

Pupils will have represented unit, non-unit and improper fractions in a variety of ways including area, part of a set and on a number line. Through representations they understand equivalence. They have identified non-unit fractions of quantities:



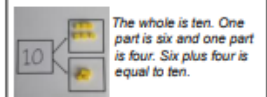
Representing multiplicative relationships

Pupils have used an increasing range of models to represent multiplicative relationships and use these to describe inverse relationships and commutativity.

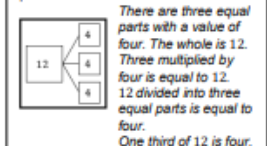


Part-whole language and representations

A part-whole model is used to represent the relationship between numbers in all four operations. The model is made of a whole and two or more parts.



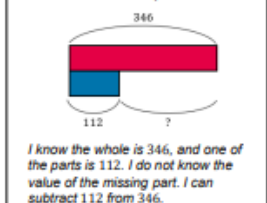
Using multiple equal parts represents multiplication, division and fractions of quantities.



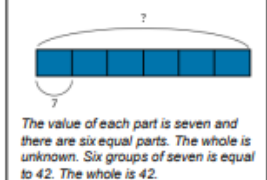
Close links are made between this and bar model representations.

Bar models

Pictorial bar models and concrete Cuisenaire as bar models are used to represent part-whole relationships and knowns and unknowns within problems in all four operations. See PD videos for further exemplification.



I know the whole is 346, and one of the parts is 112. I do not know the value of the missing part. I can subtract 112 from 346.



The value of each part is seven and there are six equal parts. The whole is unknown. Six groups of seven is equal to 42. The whole is 42.

Timetables

This term Year 6 are learning **primes**.

	Year 3	Year 4	Year 5	Year 6
Autumn 1	1 & 2	9	Mixed times and divide	Primes
Autumn 2	5 & 10	7		Square
Spring 1	3	(9) 12		Cubes
Spring 2	6	11		Mixed
Summer 1	4	Mixed		
Summer 2	8			