

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 lessons

Writing

Text Structure, Sentence, Useful Vocabulary, Word Classes, Punctuation

Story

Year 5

Text Structure	Sentence	Useful Vocabulary	Word Classes	Punctuation
Sequence of plot may be disrupted for effect, e.g. flashback. Opening and resolution shape the story. Structural features of narrative are included, e.g. repetition for effect. Paragraphs varied in length and structure. Pronouns used to hide the doer of the action, e.g. it crept into the woods.	Sentence length varied, e.g. short/long. Active and passive voice used deliberately to heighten engagement. e.g. the ring was removed from the drawer. Wide range of subordinate connectives, e.g. whilst, until, despite. Embedded subordinate clauses are used for economy or emphasis. Figurative language used to build description (sometimes clichéd), e.g. the crowd charged like bulls. Repetition is used for effect, e.g. the boys ran and ran until they could run no more.	Year 5 ambitious vocabulary used	<u>Noun</u> Locate and identify expanded noun phrases. <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> Know what an adverbial phrase is. Fronted adverbials. Comma after fronted adverbials. Adverbials of time, place and number.	Consolidate all previous learning. Brackets Dashes Colons Semi-colons

Text Structure	Sentence	Useful Vocabulary	Word Classes	Punctuation
Arguments are well constructed that answer the reader's questions.	Verb forms are controlled and precise, e.g. It will be a global crisis if people do not take a stand against...	It appears that...	<u>Noun</u> Expanded noun phrases to convey complicated information concisely.	Use a wide range of punctuation throughout the writing.
The writer understands the impact or the emotive language and thinks about the response.	Modifiers are used to intensify or qualify, e.g. insignificant amount, exceptionally.	There can be no doubt that...	<u>Verbs</u> Use modal verbs. Prefixes for verbs; dis, de, mis, over, ise, ify. Convert adjectives into verbs using suffixes; ate, ise, ify.	
Information is prioritised according to the writer's point of view.	Sentence length and type varied according to purpose.	It is critical...	<u>Adjectives</u> Choose appropriate adjectives.	
	Fronted adverbials used to clarify writer's position, e.g. As a consequence of your behaviour...	Fundamentally...	<u>Connectives/conjunctions</u> Use a wide range of connectives.	
	Complex noun phrases used to add detail, e.g. the phenomenal impact of using showers instead of baths...	How can anyone believe this to be true?...	<u>Tense</u> Change tense according to features of the genre.	
	Prepositional phrases used cleverly. e.g. In the event of a blackout...	Does anyone really believe that?...	<u>Adverbs</u> Link ideas across a text using cohesive devices, such as adverbials.	
		As everyone knows...		
		I cite, for example...		
		I would draw your attention to...		
		I would refer to...		
		On the basis of the evidence presented...		
		Phenomenal...		
		Unique...		
		Unmissable...		
		You will be...		
		Don't...		
		Take a moment to...		
		Isn't it time to...?		

Year 5 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	

Maths

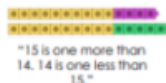
Unit journey



Place value: Overview



"One more than three is four"



"15 is one more than 14. 14 is one less than 15."

"Sixty two is greater than twenty six."

$$62 > 26$$



Concepts: Representing, Counting, Comparing, Problem solving and rounding

"Ten greater than 146 is 156. The tens digit increases by one which makes 5 tens." $146 < 156$

Year 2

- Read and write in numerals and words; recognise the place value of each digit: 0-100 (0-1000)
- Identify, represent and estimate numbers: 0-100 (progressing to 1000)
- Count in twos, threes, fives and tens; forward and backward: 0-100
- Compare and order number; use $<$, $>$ and $=$ signs: 0-100 (0-1000)
- Use place value and number facts to solve problems

Year 3

- Read and write in numerals and words; recognise the place value of each digit: 0-1000 (10,000)
- Identify, represent and estimate numbers using different representations: 0-1000 (progressing to 10,000)
- Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 (1000) more or less than a given number
- Compare and order numbers: 0-1000 (10,000)
- Round numbers to the nearest 10 and 100 (1000)
- Solve number problems and practical problems involving these ideas

3 125 496

"My number is less than your number because..."

Thousands	Hundreds	Tens	Ones
3	1	2	5



Year 6

- Read, write, order and compare numbers; recognise the place value of each digit: 0-10,000,000
- Use negative numbers in context, and calculate intervals across zero
- Round any whole number to a required degree of accuracy
- Solve number and practical problems that involve all of the above

Year 5

- Read, write, order and compare numbers; recognise the place value of each digit: 0-1,000,000 and beyond
- Read Roman numerals: 0-1,000
- Count forwards or backwards in steps of powers of 10: 0-1,000,000
- Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero (calculate intervals across zero)
- Round any number to the nearest 10, 100, 1,000, 10,000 and 100,000: 0-1,000,000
- Solve number problems and practical problems that involve all of the above

Year 4

- Recognise the place value of each digit: 0-10,000
- Identify, represent and estimate numbers using different representations: 0-10,000
- Read Roman numerals: 0-100
- Count in multiples of 6, 7, 9, 25 and 1000; find 1000 more or less than a given number
- Count backwards through zero: negative numbers
- Compare and order numbers: beyond 1000
- Round any number to the nearest 10, 100 or 1000
- Solve number and practical problems involving these ideas, with increasingly large positive numbers

Unit journey: Addition and subtraction

Key vocabulary:



Addition and Subtraction: Overview



First there were four passengers.
Then ___ joined the carriage.
Now there are ___ passengers.



Concepts: Number bonds, Understanding additive relationships, Calculation strategies, Solving problems

For further guidance see our [Progressions in Calculations](#)

"I will partition 36 into 30 and 6. I will partition 23 into 20 and 3. I will use my number bonds to help me."

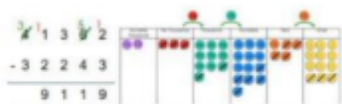


Year 2

- Recall and use number bonds within 20 fluently, and derive and use related facts up to 100
- Show that addition of 2 numbers can be done in any order (commutative) and subtraction of 1 number from another cannot
- Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems
- Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and 1s, a two-digit number and 10s, 2 two-digit numbers, adding 3 one-digit numbers
- Solve problems with addition and subtraction including numbers, quantities and measures

Year 3

- Estimate the answer to a calculation and use inverse operations to check answers
- Add and subtract mentally including adding 1s, 10s and 100s to a three-digit number
- Add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction
- Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction



Year 6

- Use their knowledge of the order of operations to carry out calculations involving the 4 operations
- Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy
- Perform mental calculations, including with mixed operations and large numbers
- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- Solve problems involving all four operations

Year 5

- Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
- Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
- Add and subtract numbers mentally with increasingly large numbers
- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why

Year 4

- Estimate and use inverse operations to check answers to a calculation
- Apply mental strategies including using known facts to numbers within 10000
- Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
- Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why

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.

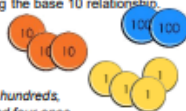


Representations of number

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.



This represents 2.34. It is 2 ones, 3 tenths and 4 hundredths.

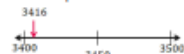


234 is two hundreds, three tens and four ones.

Tens	Ones	Tenths	Hundredths	Thousandths
2	3	4		

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.

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

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

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'.

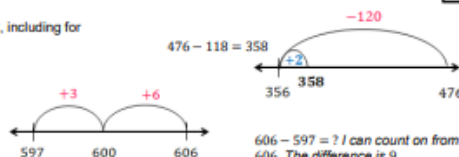
Identifying near doubles for addition. 43 and 45 can be seen as 'double 43 plus two'.

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.

$$336 + 127 = ? \text{ I can partition 27 into 123 and 4.}$$

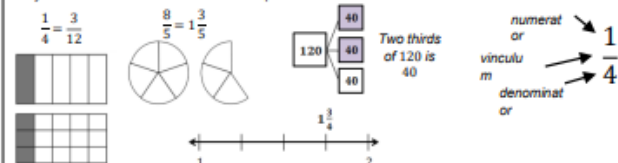
$$336 \text{ plus 4 is equal to } 340. 340 \text{ plus } 123 \text{ is equal to } 463.$$



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

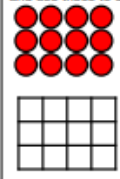
Representing fractions

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.



There are three rows with a value of four. There are four columns with a value of three.

$$3 \times 4 = 12 \quad 4 \times 3 = 12$$

$$12 \div 4 = 3 \quad 12 \div 3 = 4$$

Three groups of four are equal to 12.

Four groups of three are equal to 12.

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.



The whole is ten. One part is six and one part is four. Six plus four is equal to ten.

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

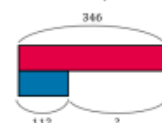


There are three equal parts with a value of four. The whole is 12. Three multiplied by four is equal to 12. 12 divided into three equal parts is equal to four. One third of 12 is four.

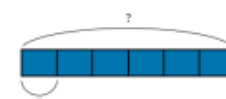
Close links are made between this and bar model representations.

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 5 are revising **mixed times tables** and using **division facts**.

	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			