

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 4

Text Structure	Sentence	Useful Vocabulary	Word Classes	Punctuation
Link between opening and resolution. Links between sentences help to navigate the reader from one idea to the next, e.g. contrasts in mood, angry mother, disheartened Jack. Paragraphs organised correctly to build up to key event. Repetition avoided through using different sentence structures and ellipsis.	Variation in sentence structures, e.g. while, although, until. Use embedded/relative clauses, e.g. Marcus, who grinned slyly at the teacher,... Include adverbs to show how often or add subtlety of meaning, e.g. exactly, suspiciously. Tense changes appropriate; verbs may refer to continuous action, e.g. will be thinking.	Year 4 ambitious vocabulary used Connectives: in addition, furthermore, consequently, in the end, much later on, moreover, in due course, eventually	<u>Noun</u> Nouns and pronouns used for clarity and cohesion. Noun phrases expanded by the addition of modifying adjectives, nouns and prepositional phrases. <u>Verbs</u> Standard English forms for verbs. <u>Adjectives</u> Choose appropriate adjectives. <u>Connectives/conjunctions</u> Use a wide range of connectives. <u>Tense</u> Correct use of past and present tense. <u>Adverbs</u> Know what an adverbial phrase is. Fronted adverbials. Comma after fronted adverbials.	Apostrophe to mark singular and plural possession. Commas after fronted adverbials. Use inverted commas and other punctuation to indicate direct speech.

Explanation

Year 4

Text Structure	Sentence	Useful Vocabulary	Word Class	Punctuation
Revisit the use of formal and technical vocabulary. Introductory paragraph outlines what is going to be explained. Links between sentences help to navigate the reader from one idea to the next. Paragraphs organised correctly into key ideas. Subheadings are used to organise information. E.g. sections of the river, body parts, layers of earth.	Variation in sentence structures, e.g. While the eggs hatch, female penguins ... Written in third person. Use embedded/relative clauses e.g. Dinosaurs, which are very strong, Include adverbs to show how often, e.g. daily, regularly, rarely. Sentences build from a general idea to more specific. Use technical vocabulary to show the writer's expertise.		<u>Noun</u> Nouns and pronouns used for clarity and cohesion. Noun phrases expanded by the addition of modifying adjectives, nouns and prepositional phrases. Consideration of nouns ending in '-tion'. <u>Verbs</u> Standard English forms for verbs. <u>Connectives/conjunctions</u> Use a wide range of connectives. <u>Tense</u> Correct and consistent use of past and present tense. <u>Adverbs</u> Use a range of fronted adverbial for both time and manner. Fronted adverbials are used correctly (comma after a fronted adverbial).	Apostrophe to mark singular and plural possession. Commas after fronted adverbials. Use inverted and other punctuation to indicate direct speech. 

Year 4 Autumn 1

Spelling list

Word list – years 3 and 4

accident(ally)	early	knowledge	purpose
actual(ly)	earth	learn	quarter
address	eight/eighth	length	question
answer	enough	library	recent
appear	exercise	material	regular
arrive	experience	medicine	reign
believe	experiment	mention	remember
bicycle	extreme	minute	sentence
breath	famous	natural	separate
breathe	favourite	naughty	special
build	February	notice	straight
busy/business	forward(s)	occasion(ally)	strange
calendar	fruit	often	strength
caught	grammar	opposite	suppose
centre	group	ordinary	surprise
century	guard	particular	therefore
certain	guide	peculiar	though/although
circle	heard	perhaps	thought
complete	heart	popular	through
consider	height	position	various
continue	history	possess(ion)	weight
decide	imagine	possible	woman/women
describe	increase	potatoes	
different	important	pressure	
difficult	interest	probably	
disappear	island	promise	

Maths

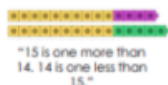
Unit journey: Place value



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 3 126 954

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

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
3	1	2	5	4	9



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



Addition and Subtraction: Overview



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



"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."



343	-	126	=	
3	4	3		
-	1	2	6	
2	2	7		

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

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

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

3	1	3	2
-	3	2	4
9	1	1	9



Thousands	Hundreds	Tens	Ones
6	2	5	6
+	2	9	3

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



Addition and subtraction vocabulary list

Year 4 - Addition and subtraction	Definition	Example
Difference	The numerical difference between two numbers or sets of objects. It is found by comparing the quantity of one set of objects with another.	The difference between ten and six is four.
Minus	A name for the symbol '-', which denotes the operation of subtraction.	Three minus one is equal to two.
Repeated addition	A structure of multiplication where equal parts are added to make a whole	I can show 4×5 as repeated addition: $4 + 4 + 4 + 4 + 4$.
Repeated subtraction	A structure of division, where equal parts are subtracted and the number of equal parts summed to calculate a quotient.	I can use repeated subtraction to calculate 20 divided by four: $20 - 4 - 4 - 4 - 4$
Integer	A whole number that can be positive or negative.	6 is an integer, 0.6 is not.

Strategies and representations:

Year 4 Key Representations

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:

$$38 = 25 + 13$$

$$\square = 37 + 44$$

$$12 - \square = 4$$

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 also make use of these when comparing numbers.

234 is two hundreds, three tens and four ones.

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 know number bonds to 100 and apply to other multiples of 10. Pupils are increasingly fluent in a range of number facts including partitioning in different ways to discuss number.

Deriving facts and inverse relationships

Pupils use known facts such as number bonds and understanding of place value and magnitude to derive further facts.

Multiplication and division by powers of 10

Pupils have experienced the concept of ten times greater and smaller through exchanging Dienes, linking this to the apparent move of digits in a place value chart.

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.

We know the whole is 312 and the value of one part is 190. We can use subtraction to find the missing part.

There are three parts. $90 + 158 + 72 = 312$

Using multiple equal parts represents multiplicative relationships.

There are three equal parts with a value of 40. The whole is 120. 40 multiplied by 3 is equal to 120. 120 divided into three equal parts is equal to 40.

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.

Representing fractions

A range of concrete and pictorial representations have been used for fractions including fractions of a whole, as part of a set of objects and as part of a quantity such as a length or volume. Pupils can apply these representations to comparing, finding simple equivalence and adding and subtracting with the same denominator, as well as fractions of sets or quantities.

One third is one of three equal parts.

One third of 36 is 12.

numerator: 1
vinculum: —
denominator: 3

$\frac{1}{3}$ is equivalent to $\frac{2}{6}$

Representing multiplicative relationships

Pupils have represented multiplicative relationships concretely and pictorially, primarily through arrays, Cuisenaire and bar models. A focus on equal parts, the number of equal parts and the value of each part supports understanding of commutativity and inverse relationships. The representations and language structures support written strategies.

There are four groups each with a value of 3. There are three groups each with a value of 4. I can see three, four times. I can see four, three times.

12 divided into groups of 4 gives three groups. 12 shared into four groups gives 3 in each group.

Bar models

Pictorial bar models and concrete Cuisenaire 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 4 are learning the 9 times table

	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			