

Additional information for Reading, Writing and Maths
Year 6 Summer 1

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

Letters

Year 6

Text Structure	Sentence	Useful Vocabulary	Word Classes	Punctuation
<p>Letter well constructed that answers the reader's questions.</p> <p>The writer understands the impact and thinks about the response.</p> <p>Information is prioritised according to importance and a frame of response set up for the reply.</p>	<p>Verb forms are controlled and precise, e.g. It would be helpful if you could let me know, as this will enable us to take further action.</p> <p>Modifiers are used to intensify or qualify, e.g. insignificant amount, exceptionally.</p> <p>Sentence length and type varied according to purpose. Fronted adverbials used to clarify writer's position, e.g. As a consequence of your actions...</p> <p>Complex noun phrases used to add detail, e.g. the dilapidated fencing around the enclosure was extremely dangerous.</p> <p>Prepositional phrases used cleverly. e.g. In the event of a fire...</p>	<p>Please do not hesitate to contact me...</p> <p>An early response would be greatly appreciated...</p> <p>Please accept my...</p> <p>I wish to express... The impact of...</p> <p>Despite continued efforts...</p> <p>Subsequently...</p>	<p><u>Noun</u> Expanded noun phrases to convey complicated information concisely.</p> <p><u>Verbs</u> Use modal verbs. Prefixes for verbs; dis, de, mis, over, ise, ify. Convert adjectives into verbs using suffixes; ate, ise, ify.</p> <p><u>Adjectives</u> Choose appropriate adjectives.</p> <p><u>Connectives/conjunctions</u> Use a wide range of connectives.</p> <p><u>Tense</u> Change tense according to features of the genre.</p> <p><u>Adverbs</u> Link ideas across a text using cohesive devices, such as adverbials.</p>	<p>Use a wide range of punctuation throughout the writing.</p>

Spelling list

Word list – years 5 and 6

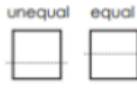
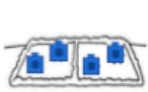
accommodate	embarrass	persuade
accompany	environment	physical
according	equip (-ped, -ment)	prejudice
achieve	especially	privilege
aggressive	exaggerate	profession
amateur	excellent	programme
ancient	existence	pronunciation
apparent	explanation	queue
appreciate	familiar	recognise
attached	foreign	recommend
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



Fractions: Overview



"There are two equal parts."



Numerator
___ equal parts are highlighted
Denominator
There are ___ equal parts altogether



"Two sixths is equal to one third"

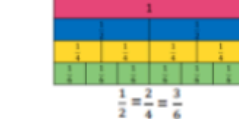
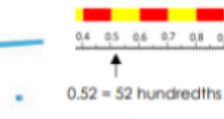
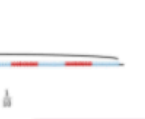
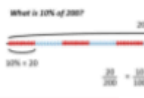
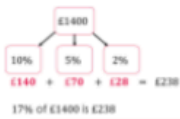
Concepts: Understanding fractions, Comparing fractions, Equivalences, Calculating with fractions



"Zero, one tenth, two tenths...."

Year 3

- Develop an understanding of tenths; count up and down in tenths
- Recognise, use as numbers, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators
- Compare and order unit fractions, and fractions with the same denominators
- Recognise and show, using diagrams, equivalent fractions with small denominators
- Add and subtract fractions with the same denominator within one whole
- Solve problems that involve all of the above



Year 6

- Use common factors to simplify fractions; use common multiples to express fractions in the same denomination
- Identify the value of each digit in numbers given to 3 decimal places
- Compare and order fractions, including fractions > 1
- Recall and use equivalences between simple fractions, decimals and percentages
- Add and subtract fractions with different denominators and mixed numbers
- Multiply simple pairs of proper fractions
- Divide proper fractions by whole numbers
- Associate a fraction with division and calculate decimal fraction equivalents for a simple fraction
- Multiply/divide numbers by powers of 10 giving answers up to 3 decimal places
- Multiply one-digit numbers with up to 2 decimal places by whole numbers
- Use written division methods in cases where the answer has up to 2 decimal places
- Solve problems which require answers to be rounded to

Year 5

- Recognise mixed numbers and improper fractions and convert from one form to the other
- Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
- Round decimals with 2 decimal places
- Read, write, order, compare and solve problems numbers with up to 3 decimal places
- Develop understanding of percentages (%) as a 'number of parts per 100'
- Compare and order fractions whose denominators are all multiples of the same number
- Read and write decimal numbers as fractions
- Identify, name and write equivalent fractions of a given fraction, including tenths and hundredths
- Add and subtract fractions with the same denominator, and denominators that are multiples of the same number
- Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
- Solve problems which require knowing percentage and decimal equivalents of common fractions

Year 4

- Round decimals with 1 decimal place to the nearest whole number
- Develop understanding of hundredths
- Compare numbers with the same number of decimal places up to 2 decimal places
- Recognise and show, using diagrams, families of common equivalent fractions
- Recognise and write decimal equivalents of any number of tenths or hundredths, $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$
- Solve problems involving increasingly harder fractions to calculate quantities
- Add and subtract fractions with the same denominator
- Divide a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths
- Solve simple measure and money problems involving fractions and decimals to 2 decimal places



Multiplication and Division: Overview



"What can you see, how do you see it?"



"I can see 2 equal groups of 3!"

"The array shows five equal parts. Each part has a value of two."



"The array shows two equal parts. Each part has a value of five."

10	3		
3	10	3	
30	9		

Concepts: Understanding multiplicative relationships, Multiplication and division facts, Calculation strategies, Solving problems

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

Year 2

- Show that multiplication of 2 numbers can be done in any order (commutative) and division of 1 number by another cannot
- Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward
- Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
- Calculate mathematical statements for multiplication and division and write them using the \times , \div and $=$ signs
- Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts

Year 3

- Count from 0 in multiples of 4, 8, 50 and 100
- Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
- Multiply and divide two-digit numbers by one-digit numbers, using mental and progressing to formal written methods
- Solve problems, including missing number problems, involving multiplication and division

$$\begin{array}{r} 81 \\ 8 \overline{) 654} \\ \underline{64} \\ 14 \\ \underline{12} \\ 20 \\ \underline{16} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

"I partition both factors. Next, we multiply the first factor by the ones. Then, we multiply the first factor by the tens. Finally, we both add the partial products."

	H	T	O
	4	2	
\times	1	2	5
	1	2	5
	8	4	0
	8	4	0

$$(42 \times 3)$$

$$(42 \times 20)$$

2	1	3	2
4	8	5	2
8	4	6	4

2	1	3	2
4	8	5	2
8	4	6	4

	2	1	3
\times	3		
	6	3	9

Year 6

- Identify common factors, common multiples and prime numbers
- Use their knowledge of the order of operations to carry out calculations involving the 4 operations
- Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
- Divide numbers up to 4 digits by a two-digit number using the formal written methods of short division or long division as appropriate, interpreting remainders according to the context
- Perform mental calculations, including with mixed operations and large numbers
- Solve problems involving four operations

Year 5

- Identify multiples and factors, including finding all factor pairs of a number, and common factors of 2 numbers
- Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers; establish whether a number up to 100 is prime and recall prime numbers up to 19
- Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)
- Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers
- Multiply and divide numbers mentally, drawing upon known facts
- Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context
- Multiply and divide whole numbers and decimals by 10, 100 and 1,000
- Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes
- Solve problems involving four operations and problems that involve scaling by simple fractions or involving simple rates

Year 4

- Count in multiples of 6, 7, 9, 25 and 1000
- Recall multiplication and division facts for multiplication tables up to 12×12
- Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers
- Recognise and use factor pairs and commutativity in mental calculations
- Multiply two-digit and three-digit numbers by a one-digit number using formal written layout
- Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems

Key vocabulary

Year 6	Definition	Example
Arc	A portion of the circumference of a circle	
Brackets	The symbols () used to separate parts of a multi-step calculation.	$(10 - 2) \times 3 = 21$
Centre	In a circle, the centre refers to one point that is equidistant to all points around the circumference of the circle.	To draw a circle, I place the point of my pair of compasses at the centre.
Circumference	The perimeter/boundary of a circle.	
Compasses	A tool for creating curved lines, arcs and circles.	I can use a pair of compasses to draw a circle with a radius of 4 cm.
Common fraction	A fraction written with a numerator and denominator separated by a vinculum.	One quarter can be written as a common fraction,
Degree of accuracy	A description of how accurately a value is communicated.	The degree of accuracy needed for the answer is one decimal place.
Diameter	A line from one point of the circumference of a circle to another on the opposite side, which must pass through the centre of the circle.	The circumference of a circle is the diameter multiplied by pi.
Equivalent expression	An expression, which can be algebraic, which is equal in value to another expression.	Find an equivalent expression to $17 + 10$. $18 + 9$ is an equivalent expression to $17 + 10$.
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.
Foot/feet	An imperial unit of measure	I am approximately five feet tall.

	of length.	
Formula	An algebraic expression of a rule.	The area of a rectangle can be found by multiplying the width and height. $a = w \times h$
Gallon	An imperial unit of measure of volume/capacity.	A gallon is approximately 4.5 litres
Imperial unit	A unit of measure once officially used in the UK but is now used less often, except in the context of length. Includes miles, pounds and pints.	Miles are an imperial unit to measure length.
Inch	An imperial unit of measure.	An inch is approximately 2.2 cm.
Intersect	The point at which two (or more) lines meet is where they intersect.	The x and y axes intersect at (0,0)

Metric unit	A standard unit of measure used in the UK and Europe. Includes centimetres, litres and kilograms.	Litres are a metric unit used to measure volume.
Mile	An imperial unit of measure of length.	Five miles is equivalent to eight kilometres.
Net	A group of 2-D shapes which, when folded and connected, forms a 3-D polyhedron.	The net of a cube is comprised of six connected squares.
Order of operations	The internationally agreed order to complete operations in a multi-step equation with multiple operations.	$(3 + 4) \times 2 = 14$ The order of operations dictates that the operation within the brackets is completed first.
Origin	The point at which axes in a coordinates grid cross; the point (0,0).	The origin is indicated by the blue dot.
Ounce	An imperial unit of measure of mass.	The newborn baby had a mass of 6 pounds and 3 ounces.

Timetables

This half term year 6 are revising all their times tables

	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			