

Year 1 - maths long term plan

Autumn

Place Value within 10 (4 weeks)	Addition and Subtraction within 10 (4 weeks)	Shape (2D) 1 week	Place Value within 20 (3 weeks)
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Spring

Addition and Subtraction within 20 (3 weeks)	Fractions (2 weeks)	Time (3 weeks)	Shape (3D) (1 week)	Place Value within 50 (3 weeks)
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Summer

Position and Direction (1.5 weeks)	Multiplication and Division (2.5 weeks)	Place Value within 100 (3 weeks)	Length and height (1 week)	Mass and volume (2 weeks)	Money (2 weeks)
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(4 weeks)

Prior knowledge: • Have a deep understanding of numbers to 10, including the composition of each number. • Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. • Count objects, actions and sounds. • Link the number symbol (numeral) with its cardinal number value. • Understand the 'one more than/one less than' relationship between consecutive numbers.	Vocabulary: Number count order compare forwards backwards numerals digit equal to more than less than (fewer)
Links to national curriculum: • Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. • Count, read and write numbers to 100 in numerals, and from 1 to 20 in words. • Count in multiples of twos, fives and tens • Given a number, identify one more and one less • Identify and represent numbers using objects and pictorial representations including the number line, and use the language of equal to, more than, less than (fewer), most, least	Assessment criteria (ready to progress): • Count within 100, forwards and backwards, starting with any number. • Reason about the location of numbers to 20 within the linear number system, including comparing using $<$ $>$ and $=$
Small steps: 1) Sort objects 2) Count objects 3) Count objects from a larger group 4) Represent objects 5) Recognise numbers as words 6) Count on from any number 7) 1 more	8) Count backwards within 10 9) 1 less 10) Compare groups by matching 11) Fewer, more, same 12) Less than, greater than, equal to 13) Compare numbers 14) Order objects and numbers 15) The number line

Year 1: addition and subtraction within 10

(4 weeks)

Prior knowledge:	Vocabulary:
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• Automatically recall number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts. • Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally. • Explore the composition of numbers to 10. • Automatically recall number bonds for numbers 0-5 and some to 10.	Add plus altogether total take away/minus number bonds part whole digit number problems
Links to national curriculum: • Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs • Represent and use number bonds and related subtraction facts within 20 • Add and subtract one-digit and two-digit numbers to 20, including zero • Solve one-step problems that involve addition and subtraction and missing number problems such as $7 = ? - 9$	Assessment criteria (ready to progress): • Develop fluency in addition and subtraction facts within 10. • Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers. • Read, write and interpret equations containing addition (), subtraction () and equals () symbols, and relate additive expressions and equations to real-life contexts.
Small steps: 1) Introduce parts and wholes 2) Part-whole model 3) Write number sentences 4) Fact families - addition facts 5) Number bonds within 10 6) Systematic number bonds within 10 7) Number bonds to 10 8) Addition - add together 9) Addition - add more 10) Addition problems 11) Find a part 12) Subtraction - find a part 13) Fact families - the eight facts 14) Subtraction - take away/cross out (how many left?) 15) Subtraction - take away (how many left?) 16) Subtraction on a number line 17) Add or subtract 1 or 2	

Year 1: Shape
(1 week 2-d, 1 week 3-d)

Prior knowledge: - Select, rotate and manipulate shapes to develop spatial reasoning skills. - Continue, copy and create repeating patterns - Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.	Vocabulary: 2d shapes rectangle square circle triangle 3d shapes cuboids cubes cone spheres curved straight flat group sort sides corners pyramids
Links to national curriculum: - Recognise and name common 2-d and 3-d shapes, including: 2-d shapes [for example, rectangles (including squares), circles and triangles] 3-d shapes [for example, cuboids (including cubes), pyramids and spheres].	Assessment criteria (ready to progress): - Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another. - Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations.
Small steps (2-d shapes) - Recognise and name 2-d shapes - Sort 2-d shapes - Patterns with 2-d shapes	Small steps (3-d shapes) - Recognise and name 3-d shapes - Sort 3-d shapes - Patterns with 3-d shapes

Year 1: place value within 20 (3 weeks)	
Prior knowledge:	Vocabulary:

• Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. • Count objects, actions and sounds. • Link the number symbol (numeral) with its cardinal number value. • Count beyond ten. • Compare numbers. • Understand the 'one more than/one less than' relationship between consecutive numbers. • Year 1: place value within 10.	Number count order compare forwards backwards numerals digit equal to more than less than (fewer) ones tens place value
Links to national curriculum: • Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. • Count, read and write numbers to 100 in numerals, and from 1 to 20 in words. • Count in multiples of twos, fives and tens • Given a number, identify one more and one less • Identify and represent numbers using objects and pictorial representations including the number line, and use the language of equal to, more than, less than (fewer), most, least	Assessment criteria (ready to progress): • Count within 100, forwards and backwards, starting with any number. • Reason about the location of numbers to 20 within the linear number system, including comparing using < > and =
Small steps: 1) Count within 20 2) Understand 10 3) Understand 11, 12 and 13 4) Understand 14, 15 and 16 5) Understand 17, 18 and 19 6) Understand 20 7) Numbers 10-20 8) 1 more and 1 less 9) The number line to 20 10) Use a number line to 20 11) Compare numbers to 20 12) Order numbers to 20	

Year 1: addition and subtraction within 20 (3 weeks)	
Prior knowledge:	Vocabulary:

• Automatically recall number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts. • Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally. • Explore the composition of numbers to 10. • Automatically recall number bonds for numbers 0-5 and some to 10. • Year 1: addition and subtraction within 20	Add plus altogether total take away/minus number bonds part whole digit number problems
Links to national curriculum: • Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs • Represent and use number bonds and related subtraction facts within 20 • Add and subtract one-digit and two-digit numbers to 20, including zero • Solve one-step problems that involve addition and subtraction and missing number problems such as $7 = ? - 9$	Assessment criteria (ready to progress): • Read, write and interpret equations containing addition (+), subtraction (-) and equals (=) symbols, and relate additive expressions and equations to real-life contexts.
Small steps: 1) Add by counting on within 20 2) Add ones using number bonds 3) Find and make number bonds to 20 4) Doubles 5) Near doubles 6) Subtract ones using number bonds 7) Subtraction - counting back 8) Subtraction - finding the difference 9) Related facts 10) Missing number problems	

Year 1: Fractions (2 weeks)	
Prior knowledge: • Automatically recall some number bonds to 10, including double facts.	Vocabulary: Whole half quarter equal parts

• Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. • Explore and represent patterns within numbers up to 10, including double facts and how quantities can be distributed equally.	
Links to national curriculum: • Recognise, find and name a half as one of two equal parts of an object, shape or quantity • Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity	Assessment criteria (School set): • Recognise a half and a quarter.
Small steps: 1) Recognise a half of an object or a shape 2) Find a half of an object or a shape 3) Recognise a half of a quantity 4) Find a half of a quantity 5) Recognise a quarter of an object or a shape 6) Find a quarter of an object or a shape 7) Recognise a quarter of a quantity 8) Find a quarter of a quantity	

Year 1: Time (3 weeks)	
Prior knowledge: • Begin to describe a sequence of events, real or fictional, using words such as 'first,' 'then...'	Vocabulary: Time day hour minutes quicker slower earlier later before after next first today yesterday tomorrow morning afternoon evening o'clock half past
Links to national curriculum:	Assessment criteria (school set):

• Compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later] • Measure and begin to record time (hours, minutes, seconds) • Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] • Recognise and use language relating to dates, including days of the week, weeks, months and years • Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.	• Read time - o'clock and half past
Small steps: 1) Before and after 2) Earlier and later 3) Quicker and slower 4) Today, yesterday, tomorrow 5) Morning, afternoon, evening 6) Chronological order 7) Days of the week 8) Months of the year 9) Hours, minutes and seconds 10) Tell the time to the hour 11) Tell the time to the half hour	

Year 1: place value within 50 (3 weeks)	
Prior knowledge: • Verbally count beyond 20, recognising the pattern of the counting system. • Count objects, actions and sounds. • Link the number symbol (numeral) with its cardinal number value. • Count beyond ten. • Compare numbers.	Vocabulary: Number count order compare forwards backwards numerals digit equal to more than less than (fewer) ones tens place value

• Understand the 'one more than/one less than' relationship between consecutive numbers. • Year 1: place value within 10 and 20	
Links to national curriculum: • Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. • Count, read and write numbers to 100 in numerals, and from 1 to 20 in words. • Count in multiples of twos, fives and tens • Given a number, identify one more and one less • Identify and represent numbers using objects and pictorial representations including the number line, and use the language of equal to, more than, less than (fewer), most, least	Assessment criteria (ready to progress): • Count within 100, forwards and backwards, starting with any number.
Small steps: 1) Count from 20 to 30 2) Count from 30 to 40 3) Count from 40 to 50 4) Count from 20 to 50 5) 20, 30, 40 and 50 6) Count by making groups of tens 7) Groups of tens and ones 8) Partition into tens and ones 9) The number line to 50 10) 1 more, 1 less 11) Compare numbers to 50 12) Order numbers to 50	

Year 1: position and direction (1 week)	
Prior knowledge: • Select, rotate and manipulate shapes to develop spatial reasoning skills. • Continue, copy and create repeating patterns	Vocabulary: Front behind left right above below whole turn quarter turn half turn three-quarter turn
Links to national curriculum: • Describe position, direction and movement, including whole, half, quarter and three-quarter turns	Assessment criteria (school set): • Describe position - front, behind, left, right
Small steps:	

- 1) Describe turns
- 2) Describe position - left and right
- 3) Describe position - forwards and backwards
- 4) Describe position - above and below

Year 1: multiplication and division
(2 weeks)

Prior knowledge:

- Automatically recall some number bonds to 10, including double facts.
- Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

Vocabulary:

Double half twice as many equal unequal group odd even multiplication division arrays row column count in... lots of groups of.. Times multiple repeated addition divide multiplication tables commutative

Links to national curriculum:

- Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.

Assessment criteria (ready to progress):

- Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers.

Small steps:

- 1) Count in 2s (standard)
- 2) Count in 2s through odd numbers
- 3) Count in 10s
- 4) Count in 5s
- 5) Recognise equal groups
- 6) Add equal groups
- 7) Make arrays
- 8) Make doubles
- 9) Make equal groups - grouping

Year 1: place value within 100
(3 weeks)

Prior knowledge:

- Verbally count beyond 20, recognising the pattern of the counting system.
- Count objects, actions and sounds.
- Link the number symbol (numeral) with its cardinal number value.
- Compare numbers.
- Understand the 'one more than/one less than' relationship between consecutive numbers.
- Year 1: place value within 10, 20 and 50

Vocabulary:

Number count order compare forwards backwards numerals digit equal to more than less than (fewer) ones tens place value

Links to national curriculum:

- Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.

Assessment criteria (ready to progress):

- Count within 100, forwards and backwards, starting with any number.

- Count, read and write numbers to 100 in numerals, and from 1 to 20 in words. - Count in multiples of twos, fives and tens - Given a number, identify one more and one less - Identify and represent numbers using objects and pictorial representations including the number line, and use the language of equal to, more than, less than (fewer), most, least	
Small steps: - Count from 50 to 60 - Count from 60 to 70 - Count from 70 to 80 - Count from 80 to 90 - Count from 90 to 100 - Count from 50 to 100 - Tens to 100 - Count by making groups of tens - Groups of tens and ones - Partition into tens and ones - The number line to 100 1 more, 1 less - Compare numbers with the same number of tens - Compare any two numbers	
Year 1: length and height (1 week)	
Prior knowledge: Compare length, weight and capacity.	Vocabulary: Height long short measure wider narrow compare longer shorter length height centimetre cm
Links to national curriculum: - Compare, describe and solve practical problems for lengths and heights [for example, long/short, longer/shorter, tall/short] - Measure and begin to record lengths and heights	Assessment criteria (school set): Measure in cm
Small steps: - Compare lengths and heights - Measure length using objects - Measure length in centimetres	

Year 1: mass and volume
(2 weeks)

Prior knowledge:

- compare length, weight and capacity.

Vocabulary:

Weight capacity heavy/light heavier than lighter than full/empty more than less than half/half full mass volume holds scales container

Links to national curriculum:

- compare, describe and solve practical problems for:
 - o Mass/weight [for example, heavy/light, heavier than, lighter than]
 - o Capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]
- Measure and begin to record the following:
 - o Mass/weight
 - o Capacity and volume

Assessment criteria (school set):

- Measure mass using balance scales.
- Measure capacity using vessels.

Small steps:

- 1) Heavier and lighter
- 2) Measure mass
- 3) Compare mass

- 4) Full and empty
- 5) Compare volume
- 6) Measure capacity
- 7) Compare capacity

Year 1: money (2 weeks)	
Prior knowledge:	Vocabulary:
• Experience of play money - role play.	Money coins notes pounds
Links to national curriculum:	Assessment criteria (school set):
• recognise and know the value of different denominations of coins and notes	• Recognise coins.
Small steps:	
1) Unitising 2) Recognise coins (1p 2p) 3) Recognise coins (5p 10p 20p 50p) 4) Recognise coins (£1 £2) 5) Recognise notes 6) Count in coins (1p, 2p, 5p, 10p)	

