



	Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number- place value	Numbers to 10	<p>Numbers follow a sequence. Each number is one more than the previous number. The last number reached when counting tells you how many there are in total.</p>	<p>The last number counted of a group is the total.                      One object can be represented by another.                      Zero comes before one.                      Zero comes before one.                      One more is the number after.                      One less is the number before.                      Equal means the same in amount, size or number. More than means greater in amount or size. Less than means smaller in amount or size. Most means the biggest number or amount of something. Least means the smallest number or amount of something.                      The less than sign (&lt;) shows that the value to the left of it is lower than the value to the right of it. The greater than sign (&gt;) shows that the value to the left of it is higher than the value to the right of it.                      Know that, when comparing numbers, they should compare the highest place value column first (tens), then move onto the ones if the tens are equal.                      Ordinal numbers give the position on a list 1st, 2nd, 3rd and so on.</p>					
	Numbers to 20	<p>Numbers to 10 can be made in different ways, but the total is the same each time.                      Numbers to 10 can be made in different ways but the total is the same each time.                      There are different ways of separating numbers into two groups but the total is still the same.</p>	<p>10 and 20 have just 10s and no ones. 11 to 19 have one 10 and some ones.                      One more is one more one, not one more 10.                      The less than sign (&lt;) shows that the value to the left of it is lower than the value to the right of it. The greater than sign (&gt;) shows that the value to the left of it is higher than the value to the right of it.</p>	<p>10 and 20 have just 10s and no ones. 11 to 19 have one 10 and some ones.</p>				



	Aspect	Reception	Year 1	Year 2
Number- place value	Numbers beyond 20 - Reception and KS1	<p>Numbers have an order and a pattern that they follow.</p> <p>However a group of objects is displayed, the total is still the same.</p> <p>The same as means that both quantities match.</p> <p>More than is a bigger amount. Less than is a smaller amount.</p>	<p>Know that one 10 is equal to 10 ones.</p> <p>Equal means the same in amount, size or number. More than means greater in amount or size. Less than means smaller in amount or size.</p> <p>Most means the biggest number or amount of something. Least means the smallest number or amount of something.</p> <p>The less than sign (&lt;) shows that the value to the left of it is lower than the value to the right of it. The greater than sign (&gt;) shows that the value to the left of it is higher than the value to the right of it.</p> <p>Know that, when comparing numbers, they should compare the highest place value column first (10s), then move onto the ones if the tens are equal.</p> <p>When comparing three or more numbers, inequality symbols, such as &lt; and &gt;, should not be used.</p>	<p>Know that one 10 is equal to 10 ones.</p> <p>Place value refers to the amount a digit is worth due to its position in a number. For example, the digit 2 in 25 is worth 20 (two tens).</p> <p>The less than sign (&lt;) shows that the value to the left of it is lower than the value to the right of it. The greater than sign (&gt;) shows that the value to the left of it is higher than the value to the right of it.</p>



	Aspect	Year 3	Year 4	Year 5	Year 6
<p>Number- place value</p>	<p>Numbers beyond 20 - KS2</p>	<p>10 10s make 100 and 100 ones make 100.</p> <p>Three digit numbers are made up of 10s, hundreds and ones.</p> <p>Ascending is increasing in size. Descending is decreasing in size.</p>	<p>Three digit numbers are made up of 10s, hundreds and ones.</p> <p>Rounding to the nearest 10 is adjusting the digits in a number, either up or down, to the nearest 10. For two or more digit numbers, if the number to the right of the place value number that you are rounding is equal to or greater than five, round up. If the number to the right of the place value number that you are rounding is less than five, round down. This means, when rounding to the nearest 10, look at the ones digit.</p> <p>Rounding to the nearest hundred is adjusting the digits in a number either up or down to the nearest hundred. For two or more digit numbers, if the number to the right of the place value number that you are rounding is equal to or greater than five, round up. If the number to the right of the place value number that you are rounding is less than five, round down. This means, when rounding to the nearest 100, look at the tens digit.</p> <p>1000 is made up of 10 hundreds.</p> <p>1000 is made up of 10 hundreds.</p> <p>Rounding to the nearest thousand is adjusting the digits in a number either up or down to the nearest thousand. For two or more digit numbers, if the number to the right of the place value number that you are rounding is equal to or greater than five, round up. If the number to the right of the place value number that you are rounding is less than five, round down. This means, when rounding to the nearest thousand, look at the hundreds digit.</p> <p>There are two 25s in 50 and four 25s in 100.</p>	<p>Rounding to the nearest 10 is adjusting the digits in a number either up or down to the nearest 10. For two or more digit numbers, if the number to the right of the place value number that you are rounding is equal to or greater than five, round up. If the number to the right of the place value number that you are rounding is less than five, round down. This means, when rounding to the nearest 10, look at the ones digit.</p> <p>Rounding to the nearest 100 is adjusting the digits in a number either up or down to the nearest hundred. For two or more digit numbers, if the number to the right of the place value number that you are rounding is equal to or greater than five, round up. If the number to the right of the place value number that you are rounding is less than five, round down. This means, when rounding to the nearest 100, look at the 10s digit.</p> <p>The term to term rule allows you to find the next number in a sequence if you know the previous term or terms.</p> <p>Focus on the highest place value when comparing numbers.</p>	



	Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number- place value	Negative Numbers					The numbers below zero, negative numbers, have a '-' sign in front of them.		
	Roman Numerals					In Roman numerals, I=1, V=5, X=10, L=50 and C=100. All numbers between one and 100 can be written using a combination of these numerals. If a lower value numeral is placed after a higher value numeral, it indicates that they should be added together. For example, VI=6 (5+1). If a lower value is placed before a higher value numeral, it should be subtracted from the higher value. For example, IX=9 (10-1).	In Roman numerals, I=1, V=5, X=10, L=50, C=100, D=500 and M=1000. All numbers can be written using a combination of these. Years are sometimes written in Roman numerals. For example, 2020 is MMXX.	
Number- Algebra	Algebra							Know simple algebraic conventions, such as $x \times 4$ as $4x$ . The same expression can have different values depending on what has been substituted. Expressions like $x + 5$ , can take different values depending on the value of $x$ , but an equation like $x + 5 = 11.2$ is a specific unknown value.
Number- Ratio	Ratio							Ratio shows the relationship between two values and can describe how one is related to another. The term 'scale factor' relates to enlarging shapes to make them two, three or more times bigger. 'Similar' shape in mathematics means that one shape is an exact enlargement of the other, not just that they have some common properties.



	Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number – Decimals and Percentages	Fractions, Decimals and Percentages				<p>A tenth is one divided by 10 (<math>\frac{1}{10}</math>). A tenth is one of 10 equal parts of an object, shape or quantity, and is written as <math>\frac{1}{10}</math>. Tenths are calculated by dividing an object into ten equal parts or dividing a quantity by 10. For example, one tenth of 50 is <math>50 \div 10 = 5</math>. The number system extends to the right of the decimal point, into the tenths column.</p>	<p>A tenth is one divided by 10 (<math>\frac{1}{10}</math>). A tenth is one of 10 equal parts of an object, shape or quantity, and is written as <math>\frac{1}{10}</math>. Tenths are calculated by dividing an object into ten equal parts or dividing a quantity by 10. For example, one tenth of 50 is <math>50 \div 10 = 5</math>. The number system extends to the right of the decimal point into the tenths column.</p> <p>Ten hundredths are equivalent to one tenth.</p> <p>A tenth is a part of a whole split into 10 equal parts.</p> <p>A hundredth is one divided by 100 (<math>\frac{1}{100}</math>). A hundredth is one of 100 equal parts of an object, shape or quantity, and is written as <math>\frac{1}{100}</math>. Hundredths are calculated by dividing an object into 100 equal parts or by dividing a quantity by 100.</p>	<p>% is the symbol for percent, which is the number of parts per hundred.</p>	<p>Know common fractions, such as thirds, quarters, fifths and eighths, as decimals.</p> <p>% is the symbol for percent, which is the number of parts per hundred.</p> <p>Percent' means 'out of 100'.</p> <p>0.1 is 10%, 0.01 is 1%.</p> <p><math>50\% = \frac{1}{2}</math>, <math>25\% = \frac{1}{4}</math>, <math>10\% = \frac{1}{10}</math> and <math>1\% = \frac{1}{100}</math></p>



	Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number – Decimals and Percentages	Recognise, order and compare decimals					<p>The tenths column is to the right of the decimal</p> <p>When dividing by 10, the number is being split into 10 equal parts and is 10 times smaller. Moving digits is an effective way of dividing by 10.</p> <p>Moving digits is an effective way of dividing by 10.</p> <p>The hundredths column is to the right of the decimal point and the tenths column.</p> <p>Moving digits is an effective way of dividing by 100.</p> <p>Look at the digit in the tenths column to understand whether to round a number up or not. If a number is exactly halfway, then by convention, we round up to the next integer.</p>	<p>The thousandths column is to the right of the decimal point, the tenths and the hundredths columns.</p> <p>The word term is used to describe an unknown number in a sequence.</p> <p>All digits move to the left when multiplying by 10, 100 and 1000.</p> <p>All digits move to the right when dividing by 10, 100 and 1000.</p>	<p>Digits move to the left when they are multiplying, and zero is used as a place holder. The decimal point does not move.</p> <p>Know that, for example, 2.4 and 2.40 are the same. Similarly, 12 and 12.0 are equivalent.</p>
	Addition with decimals						<p>A complement is something that you add to make a defined whole.</p>	

	Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Statistics	Construct, read and interpret	Data can be recorded in tables and pictograms.		<p>Information, also known as data, can be recorded in tally charts. These charts make information easier for others to read and understand. A tally chart is a method of collecting information quickly and uses lines, called tally marks, to represent information. Tally marks are written in groups of five.</p> <p>Information, also known as data, can be recorded in pictograms. These charts make information easier for others to read and understand. A pictogram uses pictures or symbols to show information.</p>	Information, also known as data, can be recorded in tally charts. These charts make information easier for others to read and understand. A tally chart is a method of collecting information quickly and uses lines, called tally marks, to represent information. Tally marks are written in groups of five.	Discrete data can only be shown in integers, such as the number of children in a class. Discrete data can be counted and cannot be shown in decimals.	<p>Discrete data can only be shown in integers, for example, the number of children in a class. Discrete data can be counted and cannot be shown in decimals.</p> <p>Two-way tables show two different sets of data which are displayed horizontally and vertically.</p>	Line graphs represent continuous data not discrete data.



	Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Statistics	Problems (Statistics)			The words most, least, fewer, altogether and total can be used in questions about data. Most means the group with the biggest number or amount. Least means the group with the smallest number or amount. Altogether, or the total, is the whole of something.			A line graph is used to display information that is connected in some way, such as change over time.	The mean is a type of average. It is the total of the numbers divided by how many numbers there are. Mean = total ÷ number of items.
	Pie Charts							<p>A circle is a 2-D shape. A circle's perimeter (the total distance around the edge of a shape) is called the circumference. The diameter of a circle is the straight line that passes through the centre. The radius is a straight line from the centre to the circumference of a circle and is half of the diameter.</p> <p>The whole of a pie chart totals 100%.</p> <p>Angles around a point total 360 degrees. This represents 100% of the data within a pie chart.</p> <p>.</p>



	Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Geometry - Shape, Position and Direction	Shape	<p>3-D shapes are solid shapes. They have a different number of faces and edges. The faces are made up of different 2-D shapes. 2-D shapes are flat. They have a different number of sides and angles. 2-D shapes can be folded and cut into different 2-D shapes. They can also be put together to make other 2-D shapes.</p>	<p>Common 3-D shapes are: cuboids, cubes, cylinders, pyramids, cones and spheres. Common 2-D shapes are: squares, rectangles, circles, triangles, pentagons, hexagons and octagons.</p>	<p>Know that 2-D shapes are actually flat.                      Know that a vertex is where two lines meet at a point and that more than one vertex are called vertices. The word vertex should be used in place of the word corner.                      A shape has symmetry in a vertical line if a line can be drawn down the middle of it and the left side is a mirror image of the right.                      A three-dimensional (3-D) shape has three measurements and can be held. These are common 3-D shapes: cuboids, cubes, spheres, cones, cylinders, pyramids, triangular-based pyramid, square-based pyramid and triangular prism.                      The flat surface of a 3-D shape is called a face. The faces of a cuboid can be rectangles and squares. The faces on a cube are squares. Two of the faces on a cylinder are circles. One of the faces on a pyramid may be a circle, square or rectangle.                      An edge is where two faces meet or where a face and a curved surface meet.                      A vertex is where two or more edges meet.                      3-D shapes can be sorted in different ways e.g. faces, shapes of faces, edges, vertices, if they roll, if they stack...</p>	<p>A curved surface is not a face. A cylinder has 2 circular faces and a curved surface.</p>	<p>A polygon is any 2-D shape with straight sides. 'Tri' is derived from Latin and Greek, meaning three. An equilateral triangle has three equal sides and angles and three lines of symmetry. An isosceles triangle has two equal sides and angles. A scalene triangle has no equal sides and no equal angles. A right-angled triangle has a 90° angle. The angles in any triangle add up to 180°.                      A quadrilateral is a four-sided shape. 'Quad' is derived from the Latin word for four, and lateral is related to sides. A square has four equal sides, four right angles (90°) and four lines of symmetry. A rectangle or oblong has two sets of two equal sides, four right angles (90°) and two lines of symmetry. A parallelogram has two sets of two equal sides, two sets of two equal angles and usually no lines of symmetry. A rhombus has four equal sides, two sets of two equal angles and two lines of symmetry. A trapezium has two parallel sides and can have pairs of equal angles and a line of symmetry.</p>	<p>A polygon is any 2-D shape with straight sides. 'Tri' is derived from Latin and Greek, meaning three. An equilateral triangle has three equal sides and angles and three lines of symmetry. An isosceles triangle has two equal sides and angles. A scalene triangle has no equal sides and no equal angles. A right-angled triangle has a 90° angle. The angles in any triangle add up to 180°.                      A quadrilateral is a four-sided shape. 'Quad' is derived from the Latin word for four, and lateral is related to sides. A square has four equal sides, four right angles (90°) and four lines of symmetry. A rectangle or oblong has two sets of two equal sides, four right angles (90°) and two lines of symmetry. A parallelogram has two sets of two equal sides, two sets of two equal angles and usually no lines of symmetry. A rhombus has four equal sides, two sets of two equal angles and two lines of symmetry. A trapezium has two parallel sides and can have pairs of equal angles and a line of symmetry.                      Regular means that all of the sides and angles in a shape are equal. An equilateral triangle and a square are regular, but a rectangle with unequal sides and an isosceles triangle are irregular polygons.</p>	



		Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Geometry - Shape, Position and Direction	Position, Direction and Co-ordinates		Positional language includes under, over, next to, behind, in front, above and through.	Position and movement can be described using these words: top, middle, bottom, on top of, in front of, above, between, around, near, close, far, up, down and turn  Direction can be described using these words: forwards, backwards, left and right.  Position can be described using these words: top, in between, bottom, above and below.	Direction can be described using these words: forwards, backwards, left and right.  Position can be described using these words: top, in between, bottom, above and below.  Direction can be described using these words: forwards, backwards, up, down, left and right.		Read the $x$ -axis first, then the $y$ -axis.  In shape translation, when vertex A on the object translates to vertex A on the image, these are corresponding vertices.	Read the $x$ -axis first then the $y$ -axis.  The origin on a coordinates grid is (0,0). The first number represents the $x$ -coordinate and the second number represents the $y$ -coordinate. Coordinates are fixed whereas, a point can be plotted as different coordinates.  Shapes do not change size nor orientation when translated.	Both the $x$ and $y$ coordinates are positive in the first quadrant.  A full coordinate grid has four quadrants (first, second, third and fourth). The first quadrant is the top right, the second is the top left, the third is the bottom left and the fourth is the bottom right.
	Pattern and Symmetry					Horizontal lines go across. Vertical lines go up and down.	Horizontal lines go across. Vertical lines go up and down.  A shape may be symmetrical, but if the pattern on the shape isn't symmetrical then the diagram isn't symmetrical.  A shape may be symmetrical, but if the pattern on the shape isn't symmetrical then the diagram isn't symmetrical.	A shape may be symmetrical, but if the pattern on the shape isn't symmetrical then the diagram isn't symmetrical.  A shape may be symmetrical, but if the pattern on the shape isn't symmetrical then the diagram isn't symmetrical.	



	Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Geometry - Shape, Position and Direction	Angles				<p>An angle is created when two straight lines meet at a point.</p> <p>A right angle is a quarter turn, two right angles make a half turn, three right angles make three quarters of a turn and four right angles make a complete turn.</p> <p>An acute angle is less than a right angle and an obtuse angle is greater than a right angle.</p> <p>Perpendicular lines are lines that form a right angle where they meet. Parallel lines never meet or cross, they are always the same distance apart.</p>	<p>An angle is created when two straight lines meet at a point.</p> <p>A right angle is a quarter turn. Two right angles make a half turn, three right angles make three quarters of a turn and four right angles make a complete turn.</p> <p>An acute angle is less than a right angle and an obtuse angle is greater than a right angle.</p> <p>An acute angle is more than 0 degrees and less than 90 degrees, a right angle is exactly 90 degrees and an obtuse angle is more than 90 degrees but less than 180 degrees.</p>	<p>An acute angle is more than zero degrees and less than 90 degrees, a right angle is exactly 90 degrees and an obtuse angle is more than 90 degrees but less than 180 degrees.</p> <p>A full turn is 360 degrees, a half turn is 180 degrees and a quarter turn (or right angle) is 90 degrees. A reflex angle is greater than 180 degrees.</p> <p>A straight line is a half of a turn. Two right angles, 180 degrees, are equivalent to a straight line. The angles on a straight line add up to 180 degrees.</p> <p>A full turn is equivalent to 360 degrees.</p>	<p>There are two right angles on a straight line and four right angles around a point.</p> <p>A straight line is a half of a turn. Two right angles, 180 degrees, are equivalent to a straight line. The angles on a straight line add up to 180 degrees.</p> <p>A full turn is equivalent to 360 degrees.</p> <p>Vertically opposite angles, angles opposite each other when two lines cross, share a vertex and are always equal.</p> <p>The interior angles of a triangle will add up to 180 degrees.</p> <p>Hatch marks are used to notate equal lengths.</p> <p>The interior angles of any quadrilaterals will add up to 360 degrees.</p>



	Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measuring- Measuring and Calculating	Length and Height	<p>Items can be measured to show how long, tall or heavy they are.</p> <p>Items can be measured using non standard units to show how long or tall they are.</p>	<p>Length is a measure of how long something is from end to end. Height is a measure of how high something is from head to foot or top to base.</p> <p>Length is a measure of how long something is from end to end. Height is a measure of how high something is from head to foot or top to base.</p>	<p>Length is a measure of how long something is from end to end. Height is a measure of how high something is from head to foot or top to base.</p> <p>Length is a measure of how long something is from end to end. Height is a measure of how high something is from head to foot or top to base. Non-standard units used must be of equal length.</p> <p>Measure from zero, rather than the end of the ruler or tape measure.</p>				
	Problems (Measurement)	<p>Items can be measured to show how long, tall or heavy they are. Capacity shows how much a container holds.</p>						



	Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measuring- Measuring and Calculating	Volume and Capacity	<p>The capacity of an object is how much it can hold.</p>	<p>Capacity is how much a container can hold. Volume is the space that water takes up in a container.</p>	<p>Capacity is how much a container can hold. Volume is the space that water takes up in a container.</p> <p>Capacity is how much a container can hold. Volume is the space that water takes up in a container.</p> <p>Capacity and volume can be measured in litres (l) or millilitres (ml). There are 1000 ml in 1 l.</p>	<p>Capacity and volume can be measured in litres (l) or millilitres (ml). There are 1000 ml in 1 l.</p> <p>Capacity is how much a container can hold. Volume is the space that water takes up in a container.</p> <p>The capacity is the amount of liquid a container can hold and the volume is how much liquid is in the container.</p>		<p>Volume is the amount of solid space that something takes up, while capacity is the amount that a container can hold.</p> <p>Containers can be different shapes but still hold the same capacity. The word capacity, rather than volume, is often used when referring to liquid</p>	<p>Volume is the amount of solid space that something takes up, while capacity is the amount that a container can hold.</p> <p>The volume of cubes and cuboids can be calculated by multiplying the length, width and height. This is the same as calculating the are of the base and multiplying it by the height. Standard units of volume are cubic centimetres or centimetres cubed (cm<sup>3</sup>) and cubic metres or metres cubed (m<sup>3</sup>).</p>



Measuring- Measuring and Calculating

Time

Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	<p>Events can be sequenced using everyday words, such as first, then, next, morning and afternoon.</p> <p>There are seven days in the week. School days are Monday to Friday. Saturday and Sunday are the weekend.</p>	<p>Events can be sequenced using these words: before, after, now, next, first, morning, afternoon and evening.</p> <p>There are seven days in a week: Monday, Tuesday, Wednesday, Thursday, Friday, Saturday and Sunday.</p> <p>There are twelve months in a year: January, February, March, April, May, June, July, August, September, October, November and December. The past refers to events that have already happened, the present refers to events that are happening now and the future refers to events that haven't happened yet.</p> <p>The hour hand is the shorter hand on a clock, and the minute hand is the longer hand. On an analogue clock, the minute hand points to 12 when it is an o'clock time.</p> <p>At half past the hour, the minute hand has travelled half way around the clock and is pointing at the six, while the hour hand is half way between the hours.</p> <p>Time can be measured using hours, minutes and seconds.</p> <p>When someone wins a race, the length of time will be shorter. If someone takes longer, the length of time will be larger.</p>	<p>The hour hand is the shorter hand on a clock and the minute hand is the longer hand. On an analogue clock, the minute hand points to 12 when it is an o'clock time.</p> <p>At half past the hour, the minute hand has travelled half way around the clock and is pointing at the six, while the hour hand is half way between the hours.</p> <p>The hour hand moves along with the minute hand. Therefore, when the time is quarter past the hour, the hour hand will be just past the hour and when the time is quarter to, the hour hand will be just before the hour.</p> <p>An analogue clock face can be divided into 60 minutes, using the numbers from one to 12 on the face. Once the minute hand gets past six, the time is described as 'to' the next hour, rather than 'past' the hour. A clock face often shows five minute intervals as well.</p> <p>There are 24 hours in a day and 60 minutes in an hour.</p> <p>Duration is how long something lasts.</p>	<p>The hour hand moves along with the minute hand. Therefore, when the time is quarter past the hour, the hour hand will be just past the hour, and when the time is quarter to, the hour hand will be just before the hour.</p> <p>There are 365 days in a year and 366 in a leap year, which occurs every fourth year. The twelve months of the year are January (31 days), February (28 or 29 days), March (31 days), April (30 days), May (31 days), June (30 days), July (31 days), August (31 days), September (30 days), October (31 days), November (30 days) and December (31 days).</p> <p>There are 24 hours in a day.</p> <p>In Roman numerals, I=1, II=2, III=3, IV=4, V=5, VI=6, VII=7, VIII=8 IX=9, X=10, XI=11 and XII=12.</p> <p>There are 60 seconds in a minute.</p>	<p>In Roman numerals, I=1, II=2, III=3, IV=4, V=5, VI=6, VII=7, VIII=8 IX=9, X=10, XI=11 and XII=12.</p>		



## Measuring- Measuring and Calculating

	Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Weight and Mass	<p>Items can be measured to show how long, tall or heavy they are.</p> <p>Items can be measured using non standard units to show how long or tall they are.</p>	<p>Mass or weight is the measure of the amount of something and how heavy it is.</p> <p>Mass or weight is the measure of the amount of something and how heavy it is.</p> <p>When using non-standard units of measure the units must stay the same.</p>	<p>Mass, or weight, is the measure of the amount of something and how heavy it is.</p> <p>Mass or weight is the measure of the amount of something and how heavy it is.</p> <p>Mass can be measured in kilograms (kg) or grams (g). There are 1000g in 1kg.</p>				
	Temperature			<p>The temperature is higher when it is warmer. A thermometer measures temperature and temperature is measured in degrees Celsius or Centigrade (<math>^{\circ}\text{C}</math>). <math>0^{\circ}\text{C}</math> is the freezing point of water and <math>100^{\circ}\text{C}</math> is the boiling point of water.</p>	<p>The temperature is higher when it is warmer. A thermometer measures temperature and temperature is measured in degrees Celsius or Centigrade (<math>^{\circ}\text{C}</math>). <math>0^{\circ}\text{C}</math> is the freezing point of water and <math>100^{\circ}\text{C}</math> is the boiling point of water.</p>			
	Money	<p>There are different types of coins. Each coin is worth a different amount.</p>		<p>Change is the money returned to someone when they have paid for an item with an amount that is greater than the price. <math>100\text{p}=\text{£}1</math></p>	<p>Money can be recorded using mixed units (<math>\text{£}</math> and p). Pounds and pence are recorded with a decimal point between them. When an amount of money is recorded in this way, the pence sign (p) is usually omitted. For example <math>\text{£}5.00</math>, <math>\text{£}7.25</math> or <math>\text{£}10.01</math></p>			



	Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measuring- Measuring and Calculating	Converting Units				<p>£1 is 100p.</p> <p>100cm is equivalent to 1m.</p> <p>10mm is equivalent to 1cm.</p>	<p>100cm is equivalent to 1m.</p> <p>10mm is equivalent to 1cm.</p> <p>1000m is equal to 1km.</p> <p>£1 is 100p.</p> <p>60 minutes in an hour and 60 seconds in a minute.</p> <p>365 days in a year and 364 in a leap year, which occurs every fourth year. Twelve months in a year. Approximately 52 weeks in a year and 4 weeks in a month. 7 days in a week.</p> <p>Digital time is written in 4-digit format e.g. 09:30 am not 9:30.</p>	<p>The prefix kilo means 1000.</p> <p>The prefix kilo means 1000.</p> <p>The prefix milli means <math>\frac{1}{1000}</math></p> <p>Divide by different multiples of 10 to convert between the different measurements.</p> <p>Imperial units of measurement were used in Britain from the 1820s to the 1960s, when the metric system, using multiples of 10, was adopted. * 1 inch=2.5cm * 1 foot=12 inches=30cm (approximately) * 1 yard=3 feet=91.4cm (approximately 1m) * 1 mile=1.6km * 1 ounce=28g * 1 pound=16 ounces=454g (approximately 1/2kg. 1 kg is sometimes seen as approximating to 2.2 lbs) * 1 stone=14 pounds=6.4kg * 1 pint=568ml (approximately 1/2L) * 1 gallon=8 pints=4.5L</p> <p>Time is not decimal, so some methods may not be effective for conversions.</p>	<p>Capacity is the amount an object can contain. Volume is the amount actually in an object.</p> <p>Know that 5 miles is approximately equal to 8 km.</p> <p>Imperial measure * 1 foot is equal to 12 inches * 1 pound is equal to 16 ounces * 1 stone is equal to 14 pounds * 1 gallon is equal to 8 pints * 1 inch is approximately 2.5 cm</p>



	Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measuring- Measuring and Calculating	Perimeter				<p>The perimeter is the total distance around the edge of a shape. The perimeter can be found by counting squares or measuring with a ruler.</p>	<p>The perimeter is the total distance around the edge of a shape. The perimeter can be found by counting squares or measuring with a ruler.</p> <p>A rectilinear shape is a 2-D shape whose sides all meet at right angles.</p> <p>A rectilinear shape is a 2-D shape whose sides all meet at right angles.</p>	<p>A rectilinear shape is a 2-D shape whose sides all meet at right angles.</p>	
	Area					<p>Area is the amount of space taken up by a 2D shape or surface.</p> <p>A rectilinear shape is a 2-D shape whose sides all meet at right angles.</p> <p>A rectilinear shape is a 2-D shape whose sides all meet at right angles.</p>	<p>A rectilinear shape is a 2-D shape whose sides all meet at right angles.</p> <p>A compound or composite shape is made of two or more rectilinear shapes.</p>	<p>A right-angled triangle with the same length and perpendicular height as a rectangle will have an area half the size.</p>



## Number- Fractions

## Recognising, finding and making fractions

A half is one of two equal parts of a whole object or shape.

A half is one of two equal parts of a quantity.

A quarter is one of four equal parts of a whole object or shape.

A quarter is one of four equal parts of a quantity.

A whole is one object or one quantity. A fraction is part of an object, shape or quantity that has been split into equal parts or groups.

Halving is splitting a whole into two equal parts. The numerator of a fraction is the top number and shows how many parts of a whole there are. The denominator of a fraction is the bottom number and shows into how many equal parts the item or number is divided.

Halving is the same as dividing by two.

One quarter is equal to one part out of four equal parts.

One third is equal to one part out of three equal parts.

The numerator of a fraction is the top number and shows how many parts of a whole there are. Unit fractions have a numerator of 1. The denominator of a fraction is the bottom number and shows into how many equal parts the item or number is divided.

A whole is one object or one quantity. A fraction is part of an object, shape or quantity that has been split into equal parts or groups.

Halving is splitting a whole into two equal parts. The numerator of a fraction is the top number, and shows how many parts of a whole there are. The denominator of a fraction is the bottom number, and shows into how many equal parts the item or number is divided.

Halving is the same as dividing by 2. One quarter is equal to one part out of four equal parts.

One third is equal to one part out of three equal parts.

The numerator of a fraction is the top number, and shows how many parts of a whole there are. Unit fractions have a numerator of one. The denominator of a fraction is the bottom number, and shows into how many equal parts the item or number is divided.

The numerator of a fraction is the top number, and shows how many parts of a whole there are. Unit fractions have a numerator of one. Non-unit fractions have a numerator greater than one. The denominator of a fraction is the bottom number, and shows into how many equal parts the item or number is divided.

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	Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number- Fractions	Recognising, finding and making fractions			<p>The numerator and the denominator are the same when the fraction is equivalent to one whole. Non-unit fractions have a numerator greater than 1.</p> <p>A fraction is part of an object, shape or quantity that has been split into equal parts or groups. The top number of a fraction shows the number of parts we are dealing with and the bottom number shows the number of equal parts into which something has been split. A quarter (<math>\frac{1}{4}</math>) is one of four equal parts of a whole object, shape or quantity. A half (<math>\frac{1}{2}</math>) is one of two equal parts. Two-quarters (<math>\frac{2}{4}</math>) is two of four equal parts. A third (<math>\frac{1}{3}</math>) is one of three equal parts.</p>	<p>The numerator and the denominator are the same when the fraction is equivalent to one whole. Non-unit fractions have a numerator greater than one.</p> <p>A fraction is part of an object, shape or quantity that has been split into equal parts or groups. The top number of a fraction shows the number of parts that we are dealing with, and the bottom number shows the number of equal parts into which something has been split. A quarter (<math>\frac{1}{4}</math>) is one of four equal parts of a whole object, shape or quantity. A half (<math>\frac{1}{2}</math>) is one of two equal parts. Two quarters (<math>\frac{2}{4}</math>) is two of four equal parts. A third (<math>\frac{1}{3}</math>) is one of three equal parts.</p> <p>The numerator of a fraction is the top number, and shows how many parts of a whole there are. Unit fractions have a numerator of one. Non-unit fractions have a numerator greater than one. The denominator of a fraction is the bottom number, and shows into how many equal parts the item or number is divided.</p>	<p>A tenth is one divided by 10 (<math>\frac{1}{10}</math>). A tenth is one of 10 equal parts of an object, shape or quantity and is written as <math>\frac{1}{10}</math>.</p> <p>Tenths are calculated by dividing an object into ten equal parts or dividing a quantity by 10. For example, one tenth of 50 is <math>50 \div 10 = 5</math>. The number system extends to the right of the decimal point into the tenths column.</p>		



## Number- Fractions

Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Equivalence				<p>Equivalence means of equal (the same) value. Equivalent fractions are fractions that have the same value. For example, <math>\frac{1}{2}</math> and <math>\frac{2}{4}</math>, <math>\frac{1}{3}</math> and <math>\frac{2}{6}</math> or <math>\frac{3}{4}</math> and <math>\frac{9}{12}</math>. The numerator of a fraction is the top number, and shows how many parts of the whole there are. The denominator of a fraction is the bottom number, and shows into how many equal parts the item or number is divided.</p> <p>Dividing something into more equal parts makes each part smaller.</p>	<p>Equivalence means of equal (the same) value. Equivalent fractions are fractions that have the same value. For example, <math>\frac{1}{2}</math> and <math>\frac{2}{4}</math>, <math>\frac{1}{3}</math> and <math>\frac{2}{6}</math> or <math>\frac{3}{4}</math> and <math>\frac{9}{12}</math>. The numerator of a fraction is the top number, and shows how many parts of the whole there are. The denominator of a fraction is the bottom number, and shows into how many equal parts the item or number is divided.</p> <p>A family of equivalent fractions is a group of fractions that all have the same value but are written differently. For example, <math>\frac{1}{2}</math>, <math>\frac{2}{4}</math>, <math>\frac{4}{8}</math> and <math>\frac{3}{6}</math> are a family, and <math>\frac{3}{4}</math>, <math>\frac{6}{8}</math> and <math>\frac{9}{12}</math> are a family.</p> <p>The numerator of a fraction is the top number, and shows how many parts of a whole there are. The denominator of a fraction is the bottom number, and shows into how many equal parts the item or number is divided. Unit fractions have a numerator of one. Non-unit fractions have a numerator greater than one.</p>	<p>A family of equivalent fractions is a group of fractions that all have the same value but are written differently. For example, <math>\frac{1}{2}</math>, <math>\frac{2}{4}</math>, <math>\frac{4}{8}</math> and <math>\frac{3}{6}</math> are a family, and <math>\frac{3}{4}</math>, <math>\frac{6}{8}</math> and <math>\frac{9}{12}</math> are a family.</p> <p>A proper fraction has a numerator less than the denominator. An improper fraction has a numerator equal to or greater than the denominator. A mixed number is the combination a whole number (integer) and a proper fraction.</p> <p>A proper fraction has a numerator less than the denominator. An improper fraction has a numerator equal to or greater than the denominator. A mixed number is the combination a whole number (integer) and a proper fraction.</p> <p>When the denominator or numerator of two or more fractions is the same, it is called a common denominator or common numerator.</p>	<p>If the denominators are the same, the larger the numerator, the larger the fraction.</p> <p>If the numerators are the same, the larger the denominator, the smaller the fraction.</p>



Number- Fractions

Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Counting and Calculating with Fractions					A proper fraction has a numerator less than the denominator. An improper fraction has a numerator equal to or greater than the denominator. A mixed number is the combination a whole number (integer) and a proper fraction.		The denominator is the number of parts that the amount is being divided into, and the numerator is the amount of those parts that we need to know about.
The four operations with fractions						<p>When multiplying fractions the denominator remains the same, whilst the numerator is multiplied by the integer.</p> <p>The order of a multiplication can change when using integers or fractions without changing the product.</p>	
Addition with Fractions				When adding fractions with the same denominator, only the numerator is added. The denominators stay the same.	<p>When adding fractions, only the numerators are added. The denominators stay the same.</p> <p>When adding fractions, only the numerators are added. The denominators stay the same.</p>		
Subtraction with Fractions				When subtracting fractions with the same denominator, only the numerators are subtracted.	<p>When subtracting fractions, only the numerators are subtracted. The denominators stay the same.</p> <p>When subtracting fractions, only the numerators are subtracted. The denominators stay the same.</p>		



	Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number- Multiplication and Division	Multiplication	<p>Doubling is adding the same number to itself.</p> <p>Sharing something evenly means that each group has the same amount.</p> <p>Only even numbers can be shared equally between two sets.</p>	<p>In an array, a row is across and a column is down.</p> <p>Double is two groups of a number or amount.</p> <p>Doubling is adding the same number to itself.</p>	<p>In an array, a row is across and a column is down.</p> <p>Know and recognise the multiplication symbol and that multiplication is repeated addition.</p> <p>An array is an arrangement of objects, numbers or pictures in columns and rows.</p> <p>Double is two groups of a number or amount.</p> <p>Doubling is adding the same number to itself.</p>		<p>The 'Associative Law' is that, in addition and multiplication, it does not matter how the numbers are grouped.</p> <p>A factor is a whole number that multiplies by another number to make a product, such as <math>3 \times 5 = 15</math>, factor <math>\times</math> factor = product. Factor pairs are two numbers that multiply together to make a particular number. For example, <math>2 \times 4 = 8</math>, so two and four are a factor pair of eight.</p>	<p>Factors are the whole numbers that you multiply together to get another whole number (factor <math>\times</math> factor = product).</p> <p>Factors come in pairs.</p> <p>Numbers have the same factors these are called common factors.</p> <p>Prime numbers have exactly two factors, one and itself. One is not a prime number because it does not have exactly two factors (it only has one factor).</p> <p>Square numbers have an odd number of factors and are the result of multiplying a whole number by itself. The notation for squared is <math>^2</math>.</p> <p>A cube number is the result of multiplying a whole number by itself three times. The notation for squared is <math>^3</math>.</p>	<p>Numbers that are not prime numbers are called composite numbers.</p>
	Problems (Multiplication and Division)				<p>Multiplication is the opposite of division.</p> <p>Grouping and counting in 10s is more efficient than sharing into 10 equal groups.</p> <p>One number in the calculation, 10 times bigger, will result in the answer being 10 times bigger.</p>	<p>Multiplication and division are inverse operations.</p> <p>A remainder is the whole number left over after a division calculation when one number does not divide exactly into another.</p> <p>Scaling involves multiplying or dividing measures or integers to increase or decrease a measurement or quantity.</p>	<p>In mixed operation calculations, calculations are not carried out from left to right. No operation sign means multiply.</p> <p><math>4(2+1)</math> means <math>4 \times (2+1)</math>.</p>	



Number- Multiplication and Division

Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Times Tables				<p>Doubling and doubling again is the same as multiplying by four.</p> <p>Halving and halving again is the same as dividing by four.</p> <p>Each multiple of eight is double its equivalent multiple of four.</p>	<p>'Ten times bigger' is the same as 'multiply by 10'.</p> <p>Each multiple of six is double its equivalent multiple of three.</p> <p>Each multiple of nine is one less than the equivalent multiple of 10.</p>		
Division	<p>Sharing something evenly means that each group has the same amount. Only even numbers can be shared equally between two sets.</p>		<p>Know and recognise the division symbol.</p> <p>Know and recognise the division symbol.</p> <p>Division is the opposite of multiplication.</p> <p>Grouping and counting in 10s is more efficient than sharing into 10 equal groups.</p>	<p>Know and recognise the division symbol.</p> <p>A remainder is the whole number left over after a division calculation when one number does not divide exactly into another.</p>			<p>The dividend is the number being divided. The divisor is the number that the dividend is being divided by.</p>
Multiplication Methods							
Division Methods				<p>A remainder is the whole number left over after a division calculation when one number does not divide exactly into another.</p>	<p>A remainder is the whole number left over after a division calculation when one number does not divide exactly into another.</p>		



	Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number- Addition and Subtraction	Addition		<p>Whole is all of something. Parts or groups are amounts which, when added together, makes up the whole of something.</p> <p>Altogether is when everything, every item in a part or group, is added together.</p> <p>A number can be partitioned into two or more parts.</p> <p>'+' represents add or plus and '=' represents is equal to (equals).</p> <p>Adding two numbers in a different order gives the same answer.</p> <p>Adding parts together gives a total.</p> <p>Know that they are adding to what they already have and should not include their start number when counting on.</p> <p>Know that they are adding to what they already have and should not include their start number when counting on.</p>					
	Subtraction		<p>When nothing is taken away, the whole remains the same.</p> <p>The '-' symbol represents taking away. When nothing is taken away, the whole remains the same.</p> <p>Know that when nothing is taken away, the start number remains the same, or when the whole group is taken away, there will be nothing left.</p> <p>0, 1, 2, 3, 4, 5, 6, 7, 8 and 9 are one digit numbers. One digit numbers are made up of one digit or number. Two digit numbers are made up of two digits, such as 12 or 20.</p>					



	Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number- Addition and Subtraction	Addition and Subtraction	<p>Adding means making a group larger and can be represented by the + symbol. Subtraction means making a group smaller and can be represented by the – symbol.</p>	<p>Addition (+) is putting two or more numbers or objects together to give a larger number (the total). Subtraction (–) is removing or taking away numbers or objects. What is left is the difference between the two numbers. The equals sign (=) shows that things on both sides of it have the same value.</p> <p>Addition and subtraction are inverse operations. Addition is commutative but subtraction is not.</p> <p>The less than sign (&lt;) shows that the value to the left of it is lower than the value to the right of it. The greater than sign (&gt;) shows that the value to the left of it is higher than the value to the right of it.</p>	<p>Addition is the opposite of subtraction.</p>				



Number- Addition and Subtraction

Aspect	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Addition Methods			<p>10 ones is the same as one 10.</p> <p>Add the ones first when using the column method.</p>	<p>Adding a 10 can change the 10s and hundreds columns.</p>			
Subtraction Methods			<p>10 ones is the same as one 10.</p>				
Problems- Addition and Subtraction							
Estimating and checking				<p>Estimate means to quickly find, with some thought of the calculation, an approximate value close to the right answer.</p> <p>Inverse operations are opposites that reverse the effect of the other operation. Addition and subtraction are inverse operations.</p>		<p>Adding two numbers in a different order gives the same answer - commutative. Addition is commutative, subtraction is not.</p>	<p>Adding two numbers in a different order gives the same answer - commutative. Addition is commutative, subtraction is not.</p>