

# The Sultan's School Mathematics Year 2 Medium-Term Plans

Unit 9		
<i>Number -</i>		<i>Geometry -</i>
Number & place value	Addition & subtraction	Position & direction

Unit 10		
<i>Number -</i>		<i>Measurement</i> (including Temperature)
Multiplication & division including Number & place value	Multiplication & division including Number & place value	

Unit 11		
<i>Number -</i>		<i>Statistics</i>
Addition & subtraction	Addition & subtraction	

Unit 12		
<i>Number -</i>		<i>Measurement</i> (time)
Multiplication & division including Number & place value	Fractions	

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Unit 1		
<i>Number -</i>		<i>Geometry -</i>
Number & place value	Addition & subtraction	Properties of shapes

Unit 5		
<i>Number -</i>		<i>Geometry -</i>
Number & place value	Addition & subtraction including <i>Measurement</i> (money)	Properties of shapes

Unit 2		
<i>Number -</i>		<i>Measurement</i> (length & height)
Addition & subtraction	Addition & subtraction	

Unit 6		
<i>Number -</i>		<i>Measurement</i> (mass)
Multiplication & division including Number & place value	Multiplication & division	

Unit 3		
<i>Number -</i>		<i>Geometry -</i>
Multiplication & division including Number & place value	Multiplication & division including Number & place value	Position & direction

Unit 7		
<i>Number -</i>		<i>Statistics</i>
Addition & subtraction	Addition & subtraction including <i>Measurement</i> (money)	

Unit 4		
<i>Number -</i>		<i>Measurement</i> (time)
Multiplication & division including Number & place value	Fractions	

Unit 8		
<i>Number -</i>		<i>Measurement</i> (volume & capacity)
Multiplication & division including Number & place value	Fractions	

# The Sultan's School Mathematics Year 2 Medium-Term Plans

Unit 1 Number – Number and place value Number – Addition and subtraction Geometry – Properties of shapes		
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
<b>Number – Number and place value</b>	<b>Week 1</b>	
<ul style="list-style-type: none"> <li>recognise the place value of each digit in a two-digit number (tens, ones)</li> <li>identify, represent and estimate numbers using different representations, including the number line</li> <li>compare and order numbers from 0 up to 100; use <math>&lt;</math>, <math>&gt;</math> and <math>=</math> signs</li> <li>read and write numbers to at least 100 in numerals and in words</li> <li>use place value and number facts to solve problems</li> </ul>	<ul style="list-style-type: none"> <li>Read and write numbers to 50 in numerals</li> <li>Recognise the place value of each digit in a two-digit number up to 50 (tens, ones)</li> </ul>	1
	<ul style="list-style-type: none"> <li>Compare and order numbers from 0 up to 50; use <math>&lt;</math> and <math>&gt;</math> signs</li> </ul>	2
	<ul style="list-style-type: none"> <li>Read and write numbers to 50 in words</li> </ul>	3
	<ul style="list-style-type: none"> <li>Use place value and number facts to solve problems</li> </ul>	4
<b>Number – Addition and subtraction</b>	<b>Week 2</b>	
<ul style="list-style-type: none"> <li>recall and use addition and subtraction facts to 20 fluently</li> <li>show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot</li> <li>recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems</li> </ul>	<ul style="list-style-type: none"> <li>Understand that addition of two numbers can be done in any order (commutative rule) but subtraction cannot</li> </ul>	1
	<ul style="list-style-type: none"> <li>Recall and use addition and subtraction facts to 20</li> </ul>	2
	<ul style="list-style-type: none"> <li>Recognise and use the inverse relationship between addition and subtraction, and use this to check calculations</li> </ul>	3
	<ul style="list-style-type: none"> <li>Recall and use addition and subtraction facts to 20, using number lines, and understand the term 'difference'</li> </ul>	4
<b>Geometry – Properties of shapes</b>	<b>Week 3</b>	
<ul style="list-style-type: none"> <li>identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line</li> <li>compare and sort common 2-D shapes</li> <li>draw lines and shapes using a straight edge *</li> </ul>	<ul style="list-style-type: none"> <li>Identify and describe the properties of 2-D shapes</li> </ul>	1
	<ul style="list-style-type: none"> <li>Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line</li> </ul>	2
	<ul style="list-style-type: none"> <li>Draw straight lines and 2D shapes using a straight edge</li> </ul>	3
	<ul style="list-style-type: none"> <li>Compare and sort common 2D shapes using appropriate mathematical vocabulary (including quadrilateral)</li> </ul>	4

Unit 2 Number – Addition and subtraction Measurement (length & height)			
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson	
<b>Number – Multiplication and division</b>	<b>Week 1</b>		
<ul style="list-style-type: none"> <li>solve problems with addition and subtraction:                             <ul style="list-style-type: none"> <li>using concrete objects and pictorial representations, including those involving numbers, quantities and measures</li> <li>applying their increasing knowledge of mental methods</li> </ul> </li> <li>recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</li> <li>recognise and use the inverse relationship between addition and subtraction and use this to solve missing number problems</li> </ul>	<ul style="list-style-type: none"> <li>Recall and use addition and subtraction facts to 20, and derive and use related facts</li> <li>Apply increasing knowledge of mental methods</li> </ul>	1	
	<ul style="list-style-type: none"> <li>Recall and use addition facts to 20 fluently, and derive and use related facts up to 100</li> <li>Apply increasing knowledge of mental methods</li> </ul>	2	
	<ul style="list-style-type: none"> <li>Recall and use subtraction facts to 20, and derive and use related facts up to 100</li> <li>Apply increasing knowledge of mental methods</li> </ul>	3	
	<ul style="list-style-type: none"> <li>Use patterns of similar calculations</li> <li>Apply increasing knowledge of mental methods</li> </ul>	4	
	<b>Week 2</b>		
	<ul style="list-style-type: none"> <li>Add a one-digit number to a multiple of 10</li> </ul>	1	
	<ul style="list-style-type: none"> <li>Subtract a one-digit number from a multiple of 10</li> </ul>	2	
	<ul style="list-style-type: none"> <li>Solve missing number problems involving addition</li> <li>Recognise and use the inverse relationship between addition and subtraction to solve missing number problems</li> </ul>	3	
<ul style="list-style-type: none"> <li>Solve missing number problems involving subtraction</li> <li>Recognise and use the inverse relationship between addition and subtraction to solve missing number problems</li> </ul>	4		
<b>Measurement (length &amp; height)</b>	<b>Week 3</b>		
<ul style="list-style-type: none"> <li>choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) to the nearest appropriate unit, using rulers</li> <li>compare and order lengths and record the results using <math>&gt;</math>, <math>&lt;</math> and <math>=</math></li> </ul>	<ul style="list-style-type: none"> <li>Estimate, measure and record lengths in centimetres</li> </ul>	1	
	<ul style="list-style-type: none"> <li>Estimate, measure and record heights in centimetres and metres</li> <li>Convert metres to centimetres and vice versa</li> </ul>	2	
	<ul style="list-style-type: none"> <li>Measure, compare and order different lengths</li> <li>Record using <math>&gt;</math>, <math>&lt;</math> and <math>=</math></li> </ul>	3	
	<ul style="list-style-type: none"> <li>Compare lengths using simple multiples</li> </ul>	4	

\* Notes and guidance (non-statutory)

Unit 3 Number – Multiplication and division, including Number and place value
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# The Sultan's School Mathematics Year 2 Medium-Term Plans

Geometry – Position and direction		
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
<b>Number – Multiplication and division</b>	<b>Week 1</b>	
<ul style="list-style-type: none"> <li>calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (<math>=</math>) signs</li> <li>show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot</li> <li>solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts</li> </ul>	<ul style="list-style-type: none"> <li>Count in steps of 2</li> </ul>	1
	<ul style="list-style-type: none"> <li>Calculate mathematical statements for multiplication within the 2 times table and write them using the multiplication (<math>\times</math>) and equals (<math>=</math>) signs</li> <li>Show that multiplication of two numbers can be done in any order (commutative)</li> </ul>	2
	<ul style="list-style-type: none"> <li>Calculate mathematical statements for division within the 2 times table and write them using the division (<math>\div</math>) and equals (<math>=</math>) signs</li> <li>Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot</li> </ul>	3
	<ul style="list-style-type: none"> <li>Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts</li> </ul>	4
<b>Number – Number and place value</b>	<b>Week 2</b>	
<ul style="list-style-type: none"> <li>count in steps of 2 and 5 from 0, forward and backward</li> </ul>	<ul style="list-style-type: none"> <li>Count in steps of 5</li> </ul>	1
	<ul style="list-style-type: none"> <li>Calculate mathematical statements for multiplication within the 5 times table and write them using the multiplication (<math>\times</math>) and equals (<math>=</math>) signs</li> <li>Show that multiplication of two numbers can be done in any order (commutative)</li> </ul>	2
	<ul style="list-style-type: none"> <li>Calculate mathematical statements for division within the 5 times table and write them using the division (<math>\div</math>) and equals (<math>=</math>) signs</li> <li>Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot</li> </ul>	3
	<ul style="list-style-type: none"> <li>Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts</li> </ul>	4
<b>Geometry – Position and direction</b>	<b>Week 3</b>	
<ul style="list-style-type: none"> <li>order and arrange combinations of mathematical objects in patterns and sequences</li> <li>use mathematical vocabulary to describe position, direction and movement, including movement in a straight line</li> </ul>	<ul style="list-style-type: none"> <li>Identify patterns and sequences involving 2-D shapes to make predictions about what comes next</li> </ul>	1
	<ul style="list-style-type: none"> <li>Order and arrange mathematical shapes to create patterns and sequences</li> </ul>	2
	<ul style="list-style-type: none"> <li>Describe and find the position of a square on a grid of squares with the rows and columns labelled</li> </ul>	3
	<ul style="list-style-type: none"> <li>Describe direction using mathematical language (North, South, East, West)</li> </ul>	4

## The Sultan's School Mathematics Year 2 Medium-Term Plans

Unit 4 <b>Number – Multiplication and division, including Number and place value</b> <b>Number – Fractions</b> <b>Measurement (time)</b>		
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
<b>Number – Multiplication and division</b>	<b>Week 1</b>	
<ul style="list-style-type: none"> <li>calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (=) signs</li> <li>show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot</li> <li>solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts</li> </ul>	<ul style="list-style-type: none"> <li>Count in steps of 10</li> </ul>	1
	<ul style="list-style-type: none"> <li>Calculate mathematical statements for multiplication within the 10 times table and write them using the multiplication (<math>\times</math>) and equals (=) signs</li> <li>Show that multiplication of two numbers can be done in any order (commutative)</li> </ul>	2
	<ul style="list-style-type: none"> <li>Calculate mathematical statements for division within the 10 times table and write them using the division (<math>\div</math>) and equals (=) signs</li> <li>Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot</li> </ul>	3
<b>Number – Number and place value</b>		
<ul style="list-style-type: none"> <li>count in steps of 2 and 5 from 0, and in tens from any number, forward and backward</li> </ul>	<ul style="list-style-type: none"> <li>Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts</li> </ul>	4
<b>Number – Fractions</b>	<b>Week 2</b>	
<ul style="list-style-type: none"> <li>recognise, find, name and write fractions <math>\frac{1}{3}</math>, <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math> and <math>\frac{3}{4}</math> of a length, shape, set of objects or quantity</li> <li>write simple fractions for example, <math>\frac{1}{2}</math> of 6 = 3 and recognise the equivalence of <math>\frac{2}{4}</math> and <math>\frac{1}{2}</math></li> </ul>	<ul style="list-style-type: none"> <li>Recognise, find, name and write fractions <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math> and <math>\frac{3}{4}</math> of a shape</li> </ul>	1
	<ul style="list-style-type: none"> <li>Recognise, find, name and write fractions <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math> and <math>\frac{3}{4}</math> of a shape</li> <li>Recognise that two quarters are the same as one half</li> </ul>	2
	<ul style="list-style-type: none"> <li>Find half of a set of objects</li> <li>Identify the total number of objects when half is known</li> </ul>	3
	<ul style="list-style-type: none"> <li>Find a quarter and three-quarters of a set of objects</li> <li>Identify the total number of objects when a quarter of three-quarters is known</li> </ul>	4
<b>Measurement (time)</b>	<b>Week 3</b>	
<ul style="list-style-type: none"> <li>tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times</li> <li>know the number of minutes in an hour</li> </ul>	<ul style="list-style-type: none"> <li>Tell and write the time to quarter past the hour</li> <li>Draw the hands on a clock face to show these times</li> </ul>	1
	<ul style="list-style-type: none"> <li>Tell and write the time to quarter to the hour</li> <li>Draw the hands on a clock face to show these times</li> </ul>	2
	<ul style="list-style-type: none"> <li>Tell and write the time to quarter past and quarter to the hour</li> <li>Draw the hands on a clock face to show these times</li> </ul>	3
	<ul style="list-style-type: none"> <li>Tell and write the time to 5 minutes, focusing on 5 to 30 minutes past</li> <li>Draw the hands on a clock face to show these times</li> </ul>	4

\* Notes and guidance (non-statutory)

# The Sultan's School Mathematics Year 2 Medium-Term Plans

<b>Number – Number and place value</b> <b>Unit 5 Number – Addition and subtraction, including Measurement (money)</b> <b>Geometry – Properties of shapes</b>		
<b>National Curriculum attainment targets</b> Pupils should be taught to:	<b>Lesson objectives</b> Pupils will be taught to:	<b>Lesson</b>
<b>Number – Number and place value</b>	<b>Week 1</b>	
<ul style="list-style-type: none"> <li>count in steps of 3 from 0, forward and backward</li> <li>identify, represent and estimate numbers using different representations, including the number line</li> <li>compare and order numbers from 0 up to 100; use &lt;, &gt; and = signs</li> <li>read and write numbers to at least 100 in numerals and in words</li> </ul>	• Count in steps of 3	1
	• Read and write numbers to 100 in numerals and in words	2
	• Compare and order numbers from 0 up to 100; use <, > and = signs	3
	• Estimate numbers using a number line	4
<b>Number – Addition and subtraction</b>	<b>Week 2</b>	
<ul style="list-style-type: none"> <li>solve problems with addition and subtraction:               <ul style="list-style-type: none"> <li>using concrete objects and pictorial representations, including those involving numbers, quantities and measures</li> <li>applying their increasing knowledge of mental methods</li> </ul> </li> <li>add and subtract numbers using concrete objects, pictorial representations, and mentally, including:               <ul style="list-style-type: none"> <li>a two-digit number and ones</li> </ul> </li> </ul>	• Add two-digit numbers and ones	1
	• Subtract two-digit numbers and ones	2
	• Double numbers to 20	3
<b>Measurement (money)</b>		
<ul style="list-style-type: none"> <li>recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value</li> </ul>	<ul style="list-style-type: none"> <li>Recognise and use symbols for pounds (£) and pence (p)</li> <li>Combine amounts to make a particular value</li> </ul>	4
<b>Statistics</b>	<b>Week 3</b>	
<ul style="list-style-type: none"> <li>identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces</li> <li>identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]</li> <li>compare and sort common 2-D and 3-D shapes and everyday objects</li> </ul>	• Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces	1
	• Identify 2-D shapes on the surface of 3-D shapes	2
	• Compare and sort common 2-D and 3-D shapes	3
	• Compare and sort common 2-D and 3-D shapes and everyday objects	4
<b>Unit 6 Number – Multiplication and division, including Number and place value</b> <b>Measurement (mass)</b>		
<b>National Curriculum attainment targets</b> Pupils should be taught to:	<b>Lesson objectives</b> Pupils will be taught to:	<b>Lesson</b>
<b>Number – Multiplication and division</b>	<b>Week 1</b>	
<ul style="list-style-type: none"> <li>recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</li> <li>calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs</li> <li>solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts</li> </ul>	• Count in steps of 2 and 5 from 0, forward and backward	1
	• Count in tens from any number, forward and backward	
	• Recall and use multiplication facts for the 2 multiplication table	2
	• Recall and use multiplication and division facts for the 2 multiplication table	3
	• Recall and use multiplication facts for the 5 multiplication table	4
	<b>Week 2</b>	
	• Recall and use multiplication and division facts for the 5 multiplication table	1
	• Recall and use multiplication facts for the 10 multiplication table	2
	• Recall and use multiplication and division facts for the 10 multiplication table	3
<b>Number – Number and place value</b>	• Solve problems involving multiplication and division, using arrays	4
<b>Measurement (mass)</b>	<b>Week 3</b>	
<ul style="list-style-type: none"> <li>choose and use appropriate standard units to estimate and measure mass (kg/g) to the nearest appropriate unit, using scales</li> <li>compare and order mass and record the results using &gt;, &lt; and =</li> </ul>	• Estimate, measure and record mass in kilograms	1
	• Estimate, measure and record masses in grams and kilograms	2
	• Convert kilograms to grams and vice versa	
	• Measure, compare and order different masses	3
	• Record using >, < and =	
	• Compare mass using simple multiples	4

\* Notes and guidance (non-statutory)

# The Sultan's School Mathematics Year 2 Medium-Term Plans

Unit 7    Number – Addition and subtraction Number – Addition and subtraction, including Measurement (money) Statistics		
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
<b>Number – Addition and subtraction</b>	<b>Week 1</b>	
<ul style="list-style-type: none"> <li>• add and subtract numbers using concrete objects, pictorial representations, and mentally, including:               <ul style="list-style-type: none"> <li>- a two-digit number and tens</li> <li>- adding three one-digit numbers</li> </ul> </li> <li>• show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot</li> <li>• recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems</li> </ul>	• Add two-digit numbers and tens	1
	• Subtract two-digit numbers and tens	2
	• Find missing numbers when multiples of 10 are added to or subtracted from two-digit numbers	3
	• Add three one-digit numbers • Show that addition can be done in any order	4
<b>Number – Addition and subtraction</b>	<b>Week 2</b>	
<ul style="list-style-type: none"> <li>• solve problems with addition and subtraction:               <ul style="list-style-type: none"> <li>- using concrete objects and pictorial representations, including those involving numbers</li> <li>- applying their increasing knowledge of mental methods</li> </ul> </li> <li>• add and subtract numbers using concrete objects, pictorial representations, and mentally</li> </ul>	• Add a 'near multiple of 10' to a two-digit number	1
	• Subtract a 'near multiple of 10' from a two-digit number	2
	• Find different combinations of coins that equal the same amounts of money	3
<b>Measurement (money)</b>		
<ul style="list-style-type: none"> <li>• find different combinations of coins that equal the same amounts of money</li> <li>• solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</li> </ul>	• Solve practical money problems, including giving change	4
<b>Statistics</b>	<b>Week 3</b>	
<ul style="list-style-type: none"> <li>• interpret and construct tally charts and simple tables</li> <li>• ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity</li> <li>• ask and answer questions about totalling and comparing categorical data</li> </ul>	• Sort objects into groups, counting the number of objects in each category and comparing totals	1
	• Construct a tally chart from a Carroll Diagram and vice versa	2
	• Interpret and construct a simple frequency table	3
	• Sort information using a Venn Diagram	4

# The Sultan's School Mathematics Year 2 Medium-Term Plans

Unit 8 Number – Multiplication and division, including Number and place value Number – Fractions Measurement (volume and capacity)		
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
<b>Number – Multiplication and division</b>	<b>Week 1</b>	
<ul style="list-style-type: none"> <li>recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</li> <li>calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (=) signs</li> <li>show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot</li> </ul>	<ul style="list-style-type: none"> <li>Count in steps of 2, 5 and 10</li> <li>Recognise odd and even numbers</li> </ul>	1
	<ul style="list-style-type: none"> <li>Recall and use multiplication and division facts for the 2 multiplication tables</li> <li>Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (=) signs</li> </ul>	2
	<ul style="list-style-type: none"> <li>Recall and use multiplication and division facts for the 5 multiplication tables</li> <li>Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (=) signs</li> <li>show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot</li> </ul>	3
<b>Number – Number and place value</b>		
<ul style="list-style-type: none"> <li>count in steps of 2 and 5 from 0, and in tens from any number, forward and backward</li> </ul>	<ul style="list-style-type: none"> <li>Recall and use multiplication and division facts for the 10 multiplication tables</li> <li>Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (=) signs</li> </ul>	4
<b>Number – Fractions</b>	<b>Week 2</b>	
<ul style="list-style-type: none"> <li>recognise, find, name and write fractions <math>\frac{1}{3}</math>, <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math> and <math>\frac{3}{4}</math> of a length, shape, set of objects or quantity</li> <li>write simple fractions for example, <math>\frac{1}{2}</math> of 6 = 3 and recognise the equivalence of <math>\frac{2}{4}</math> and <math>\frac{1}{2}</math></li> </ul>	<ul style="list-style-type: none"> <li>Find <math>\frac{1}{4}</math>, <math>\frac{1}{2}</math> and <math>\frac{3}{4}</math> of a length</li> </ul>	1
	<ul style="list-style-type: none"> <li>Recognise <math>\frac{1}{3}</math>, <math>\frac{2}{3}</math> and <math>\frac{3}{3}</math> of a shape</li> <li>Find <math>\frac{1}{3}</math> and <math>\frac{2}{3}</math> of a length, set of objects or quantity</li> </ul>	2
	<ul style="list-style-type: none"> <li>Recognise <math>\frac{1}{3}</math>, <math>\frac{2}{3}</math> and <math>\frac{3}{3}</math> of a shape</li> <li>Find <math>\frac{1}{3}</math> and <math>\frac{2}{3}</math> of a length, set of objects or quantity</li> </ul>	3
	<ul style="list-style-type: none"> <li>Link fractions to division and multiplication</li> </ul>	4
<b>Measurement (volume and capacity)</b>	<b>Week 3</b>	
<ul style="list-style-type: none"> <li>choose and use appropriate standard units to estimate and measure capacity (litres/ml) to the nearest appropriate unit, using measuring vessels</li> <li>compare and order volume/capacity and record the results using <math>&gt;</math>, <math>&lt;</math> and <math>=</math></li> </ul>	<ul style="list-style-type: none"> <li>Estimate, measure and record capacity in litres and millilitres</li> </ul>	1
	<ul style="list-style-type: none"> <li>Measure, compare and order different capacities</li> <li>Convert from litres to millilitres and vice versa</li> </ul>	2
	<ul style="list-style-type: none"> <li>Measure, compare and order different liquid volumes in litres and millilitres</li> <li>Record using <math>&gt;</math>, <math>&lt;</math> and <math>=</math></li> </ul>	3
	<ul style="list-style-type: none"> <li>Compare capacity and volume using simple multiples</li> </ul>	4

\* Notes and guidance (non-statutory)



# The Sultan's School Mathematics Year 2 Medium-Term Plans

Unit 9 Number – Number and place value Number – Addition and subtraction Geometry – Position and direction		
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
<b>Number – Number and place value</b>	<b>Week 1</b>	
<ul style="list-style-type: none"> <li>count in steps of 3 from 0, forward and backward</li> <li>recognise the place value of each digit in a two-digit number (tens, ones)</li> <li>compare and order numbers from 0 up to 100; use <math>&lt;</math>, <math>&gt;</math> and <math>=</math> signs</li> <li>use place value and number facts to solve problems</li> </ul>	<ul style="list-style-type: none"> <li>Count in steps of 3</li> </ul>	1
	<ul style="list-style-type: none"> <li>Recognise the place value of each digit in a two-digit number up to 100</li> </ul>	2
	<ul style="list-style-type: none"> <li>Compare and order numbers from 0 up to 100; use <math>&lt;</math>, <math>&gt;</math> and <math>=</math> signs</li> </ul>	3
	<ul style="list-style-type: none"> <li>Use place value and number facts to solve problems</li> </ul>	4
<b>Number – Addition and subtraction</b>	<b>Week 2</b>	
<ul style="list-style-type: none"> <li>add and subtract numbers using concrete objects, pictorial representations, and mentally, including:               <ul style="list-style-type: none"> <li>two two-digit numbers</li> </ul> </li> <li>show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot</li> <li>recognise and use the inverse relationship between addition and subtraction and use this to check calculations</li> </ul>	<ul style="list-style-type: none"> <li>Add two two-digit numbers using the 1-100 number square</li> </ul>	1
	<ul style="list-style-type: none"> <li>Add two two-digit numbers using the empty number line</li> </ul>	2
	<ul style="list-style-type: none"> <li>Subtract two two-digit numbers using the 1-100 number square</li> </ul>	3
	<ul style="list-style-type: none"> <li>Subtract two two-digit numbers using the empty number line</li> </ul>	4
<b>Geometry – Position and direction</b>	<b>Week 3</b>	
<ul style="list-style-type: none"> <li>use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)</li> </ul>	<ul style="list-style-type: none"> <li>Use mathematical vocabulary to describe rotation as a turn for quarter, half and three-quarter turns (clockwise and anti-clockwise)</li> </ul>	1
	<ul style="list-style-type: none"> <li>Use mathematical vocabulary to describe movement and distinguish between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)</li> </ul>	2
	<ul style="list-style-type: none"> <li>Use mathematical vocabulary to describe position, direction and movement</li> </ul>	3
	<ul style="list-style-type: none"> <li>Use mathematical vocabulary to give directions to navigate a course</li> </ul>	4

\* Notes and guidance (non-statutory)

Unit 10 Number – Multiplication and division, including Number and place value Measurement, including Temperature		
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
<b>Number – Multiplication and division</b>	<b>Week 1</b>	
<ul style="list-style-type: none"> <li>recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</li> <li>calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (<math>=</math>) signs</li> <li>solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts</li> </ul>	<ul style="list-style-type: none"> <li>Count in steps of 2 from 0</li> </ul>	1
	<ul style="list-style-type: none"> <li>Recall and use multiplication and division facts for the 2 multiplication table</li> </ul>	2
	<ul style="list-style-type: none"> <li>Count in steps of 5 from 0</li> </ul>	3
	<ul style="list-style-type: none"> <li>Recall and use multiplication and division facts for the 5 multiplication table</li> </ul>	4
	<b>Week 2</b>	
	<ul style="list-style-type: none"> <li>Count in steps of 10 from 0</li> </ul>	1
	<ul style="list-style-type: none"> <li>Recall and use multiplication and division facts for the 10 multiplication table</li> </ul>	2
	<ul style="list-style-type: none"> <li>Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables</li> <li>Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (<math>=</math>) signs</li> </ul>	3
<b>Number – Number and place value</b>		
<ul style="list-style-type: none"> <li>count in steps of 2 and 5 from 0, and in tens from any number, forward and backward</li> </ul>	<ul style="list-style-type: none"> <li>Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts</li> </ul>	4
<b>Measurement, including Temperature</b>	<b>Week 3</b>	
<ul style="list-style-type: none"> <li>choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (<math>^{\circ}</math>C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels</li> <li>compare and order lengths, mass, volume/capacity and record the results using <math>&gt;</math>, <math>&lt;</math> and <math>=</math></li> </ul>	<ul style="list-style-type: none"> <li>Solve problems involving temperature</li> </ul>	1
	<ul style="list-style-type: none"> <li>Solve problems which involve comparing, measuring and ordering length, height and width</li> <li>Convert from centimetre to metres and vice versa</li> </ul>	2
	<ul style="list-style-type: none"> <li>Solve problems which involve comparing, measuring and ordering mass</li> <li>Convert from grams to kilograms and vice versa</li> </ul>	3
	<ul style="list-style-type: none"> <li>Solve problems which involve comparing, measuring and ordering capacity and volume</li> <li>Convert from millilitres to litres and vice versa</li> </ul>	4

# The Sultan's School Mathematics Year 2 Medium-Term Plans

\* Notes and guidance (non-statutory)

Unit 11 Number – Addition and subtraction Number – Addition and subtraction Statistics			
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson	
Number – Addition and subtraction	<b>Week 1</b>		
<ul style="list-style-type: none"> <li>solve problems with addition and subtraction:               <ul style="list-style-type: none"> <li>using concrete objects and pictorial representations including those involving numbers, quantities and measures</li> <li>applying their increasing knowledge of mental and written methods</li> </ul> </li> <li>add and subtract numbers using concrete objects, pictorial representations, and mentally, including:               <ul style="list-style-type: none"> <li>two two-digit numbers</li> </ul> </li> <li>show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot</li> <li>recognise and use the inverse relationship between addition and subtraction and use this to check calculations</li> <li>record addition and subtraction in columns to support place value and prepare for formal written methods with larger numbers *</li> </ul>	<ul style="list-style-type: none"> <li>Add two two-digit numbers using partitioning</li> </ul>	1	
	<ul style="list-style-type: none"> <li>Solve problems with addition, applying an increasing knowledge of mental and written methods - partitioning</li> </ul>	2	
	<ul style="list-style-type: none"> <li>Subtract two two-digit numbers using partitioning</li> </ul>	3	
	<ul style="list-style-type: none"> <li>Solve problems with subtraction, applying an increasing knowledge of mental and written methods - partitioning</li> </ul>	4	
	<b>Week 2</b>		
	<ul style="list-style-type: none"> <li>Add two two-digit numbers using the expanded written method</li> </ul>	1	
	<ul style="list-style-type: none"> <li>Subtract two two-digit numbers using the written method</li> </ul>	2	
	<ul style="list-style-type: none"> <li>Solve addition and subtraction problems using written methods</li> </ul>	3	
<ul style="list-style-type: none"> <li>Solve addition and subtraction problems using mental and written methods</li> </ul>	4		
Statistics	<b>Week 3</b>		
<ul style="list-style-type: none"> <li>interpret and construct simple pictograms block diagrams and simple tables</li> <li>use many-to-one correspondence in pictograms with simple ratios of 2 *</li> <li>ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity</li> <li>ask and answer questions about totalling and comparing categorical data</li> </ul>	<ul style="list-style-type: none"> <li>Make and use a block diagram to ask and answer questions about information gathered</li> <li>Compare pictograms and block diagrams</li> </ul>	1	
	<ul style="list-style-type: none"> <li>Make and use a block diagram to ask and answer questions about information gathered</li> </ul>	2	
	<ul style="list-style-type: none"> <li>Construct a simple pictogram and ask and answer questions from the information collected</li> </ul>	3	
	<ul style="list-style-type: none"> <li>Begin to compare different presentations of the same information</li> </ul>	4	

\* Notes and guidance (non-statutory)

# The Sultan's School Mathematics Year 2 Medium-Term Plans

Unit 12 <b>Number – Multiplication and division, including Number and place value</b> <b>Number – Fractions</b> <b>Measurement (time)</b>		
<b>National Curriculum attainment targets</b> Pupils should be taught to:	<b>Lesson objectives</b> Pupils will be taught to:	<b>Lesson</b>
<b>Number – Multiplication and division</b>	<b>Week 1</b>	
<ul style="list-style-type: none"> <li>calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (=) signs</li> <li>solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts</li> </ul>	<ul style="list-style-type: none"> <li>Count in steps of 2 and 5 from 0, and in tens from any number, forward and backward</li> </ul>	1
	<ul style="list-style-type: none"> <li>Calculate mathematical statements for multiplication and division within the 2, 5 and 10 multiplication tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (=) signs</li> <li>Solve problems involving multiplication and division, using arrays</li> </ul>	2
	<ul style="list-style-type: none"> <li>Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts</li> </ul>	3
	<ul style="list-style-type: none"> <li>Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts</li> </ul>	4
<b>Number – Number and place value</b>		
<ul style="list-style-type: none"> <li>count in steps of 2 and 5 from 0, and in tens from any number, forward and backward</li> </ul>		
<b>Number – Fractions</b>	<b>Week 2</b>	
<ul style="list-style-type: none"> <li>recognise, find, name and write fractions <math>\frac{1}{3}</math>, <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math> and <math>\frac{3}{4}</math> of a length, shape, set of objects or quantity</li> <li>write simple fractions for example, <math>\frac{1}{2}</math> of 6 = 3 and recognise the equivalence of <math>\frac{2}{4}</math> and <math>\frac{1}{2}</math></li> </ul>	<ul style="list-style-type: none"> <li>Compare the relative sizes of fractions</li> <li>Mark fractions on a number line</li> </ul>	1
	<ul style="list-style-type: none"> <li>Mark fractions on a number line</li> </ul>	2
	<ul style="list-style-type: none"> <li>Recognise and find fractions of a set of objects</li> </ul>	3
	<ul style="list-style-type: none"> <li>Solve problems involving fractions</li> </ul>	4
<b>Measurement (time)</b>	<b>Week 3</b>	
<ul style="list-style-type: none"> <li>compare and sequence intervals of time</li> <li>tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times</li> <li>know the number of minutes in an hour and the number of hours in a day</li> </ul>	<ul style="list-style-type: none"> <li>Tell and write the time to five minutes and draw the hands on a clock face to show these times</li> </ul>	1
	<ul style="list-style-type: none"> <li>Tell and write the time to five minutes and draw the hands on a clock face to show these times</li> </ul>	2
	<ul style="list-style-type: none"> <li>Know the number of minutes in an hour and the number of hours in a day</li> <li>Compare and sequence intervals of time</li> </ul>	3
	<ul style="list-style-type: none"> <li>Know the number of minutes in an hour</li> <li>Compare and sequence intervals of time</li> </ul>	4

\* Notes and guidance (non-statutory)