

Math Medium Term Plan – Year 2



Southridge First
School

Year 2 Math Medium Term Planning Autumn 1

Date	Week	Topic	Math Objectives
		Number and place Value	<p>Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward.</p> <ul style="list-style-type: none"> ➤ Count in 10s from any number – forward to 100 ➤ Count in 2s from any number – forward to 50 ➤ Count in 2s from any number – forward to 100 ➤ Count in 5s from any number – forward to 50 ➤ Count in 5s from any number – forward to 100 ➤ Count in 10s from any number – backward to 0 ➤ Count in 2s from any number – backward to 0 ➤ Count in 5s from any number – backward to 0 ➤ Count in 3s to 30 ➤ Count in 3s to 60 ➤ Count in 3s to 90
		Number and place Value	<p>Read and write numbers to at least 100 in numerals and in words.</p> <ul style="list-style-type: none"> ➤ Read all numbers to 50 in words ➤ Write all numbers to 50 in words ➤ Read all numbers to 100 in words ➤ Write all numbers to 100 in words
		Measures Length & Weight	<p>Compare & order lengths, mass, & record the results using >, < and =.</p> <ul style="list-style-type: none"> ➤ Order different lengths using cm and m ➤ Order different weights using g and kg ➤ Use the symbol < > = to compare two amounts of length and weight ➤ Record information using < > =
		Addition & Subtraction	<p>Recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100.</p> <ul style="list-style-type: none"> ➤ Recall addition bonds to 20 based on instant recall. ➤ Recall subtraction facts to 20 based on instant recall. ➤ Know addition facts (multiples of 10) up to 100, e.g. $60+20=80$ ➤ Know subtraction facts (multiples of 10) up to 100, e.g. $90-70=20$ ➤ Explain how to use bonds to ten to derive other number facts. <p>To add using concrete objects, pictorial representations</p>
		Addition & Subtraction	<p>Add and subtract numbers mentally, including:</p> <ul style="list-style-type: none"> - 2-digit numbers & ones - 2-digit numbers & tens - two 2-digit numbers - adding three 1-digit numbers <p>Mentally:</p> <ul style="list-style-type: none"> ➤ Add any three 1-digit numbers ➤ Subtract any 1-digit number from a greater 1-digit number. ➤ Add a 2-digit number to 1-digit number ➤ Subtract a 1-digit number from a 2-digit number ➤ Add 10 to any 2-digit number ➤ Add any 10s number to a 2-digit number (up to 100) ➤ Subtract 10 from any 2-digit number ➤ Subtract any 10s number from a 2-digit number

		Geometry 2D & 3D Shape	<p>Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line.</p> <p>Identify and describe the properties of 3D shapes, including the number of edges, vertices & faces.</p> <ul style="list-style-type: none">➤ Identify 2D shapes by recognising number of edges and vertices (corners) they have➤ Describe the properties of 2D shapes by describing number of edges and vertices (corners) they have➤ Identify line of symmetry in simple shapes➤ Make symmetrical patterns and shapes➤ Identify 3D shapes by recognising number of edges, vertices & faces they have➤ Describe 3D shapes by describing the number of edges, vertices & faces they have➤ Use the terms edge, vertex/vertices and face accurately
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Year 2 Math Medium Term Planning Autumn 2

Date	Week	Topic	Math Objectives
		Multiplication and Division	<p>Recall and use multiplication and division facts for the 2, 5 and 10 tables, including recognising odd and even numbers</p> <ul style="list-style-type: none"> ➤ Count in 2s; forward and backward. ➤ Recite the x2 table up to x12, without error. ➤ Answer any calculation involving x2, out of order. ➤ Know that 2x4 is the same as 4x2 etc. ➤ Answer any calculation involving $\div 2$, out of order. ➤ Count in 5s; forward and backward. ➤ Recite the x5 table up to x12, without error. ➤ Answer any calculation involving x5, out of order. ➤ Know that x4 is the same as 4x5 etc. ➤ Answer any calculation involving $\div 5$, out of order. ➤ Count in 10s; forward and backward. ➤ Recite the x10 table up to x12, without error. ➤ Answer any calculation involving x10, out of order. ➤ Know that 4x10 is the same as 10x4 etc. ➤ Answer any calculation involving $\div 10$, out of order.
		Fractions	<p>Recognise, find, name and write fractions 1/3, 1/4, 2/4, 1/2, 3/4 of a length, shape, set of objects, or quantity.</p> <ul style="list-style-type: none"> ➤ Know what $\frac{1}{2}$ means and use and write the term 'half' and $\frac{1}{2}$ interchangeably. ➤ Know what $\frac{1}{4}$ means and use and write the term 'quarter' and $\frac{1}{4}$ interchangeably. ➤ Know what $\frac{3}{4}$ means and use and write the term 'three-quarters' and $\frac{3}{4}$ interchangeably. ➤ Know what $\frac{1}{3}$ means and use and write the term 'third' and '$\frac{1}{3}$' interchangeably. ➤ Find $\frac{1}{4}$ of a shape or length. ➤ Find $\frac{1}{3}$ of a shape or length. ➤ Find $\frac{2}{4}$ or $\frac{1}{2}$ of a shape or length. ➤ Find $\frac{3}{4}$ of a shape or length. ➤ Calculate $\frac{1}{3}$ of a number that is divisible by 3. ➤ Calculate $\frac{1}{4}$ of a number that is divisible by 4. ➤ Calculate $\frac{1}{2}$ of a given number that is divisible by 2. ➤ Calculate $\frac{3}{4}$ of a number that is divisible by 4.
		Statistics	<p>Interpret and construct: pictograms, tally charts, block diagrams, simple tables</p> <ul style="list-style-type: none"> ➤ Read information contained within a simple pictogram. ➤ Read information contained within a simple tally chart. ➤ Read information contained within a block diagram. ➤ Read information contained within a simple table. ➤ Construct a simple table to show information collected (total less than 20). ➤ Construct a pictogram to show information collected (total less than 20). ➤ Construct a tally chart to show information collected (total less than 20). ➤ Construct a block diagram to show information collected (total less than 20).
		Measures Money	<p>Recognise & use symbols for pounds (£) and pence (p); combine amounts to make a particular value.</p> <ul style="list-style-type: none"> ➤ Use the symbols £ and p to represent amounts of money. ➤ Make given amounts up to £5 using coin combinations. ➤ Find different ways of making the same amount.

		Measures Time	Tell & write the time to quarter past/to the hour & draw the hands on a clock face to show these times. <ul style="list-style-type: none">➤ Tell quarter past times.➤ Tell quarter to times.➤ Draw hands on clock to show quarter past times.➤ Draw hands on clock to show quarter to times.
		Consolidate and Assess	Start this week by revising the learning covered in the Autumn term so as to ensure pupils are fluent and secure with their basic skills. Refocus mental starters as needed.

Year 2 Math Medium Term Planning Spring 1

Date	Week	Topic	Math Objectives
		Number and place Value	<p>Compare and order numbers from 0 up to 100; use < > and = signs.</p> <ul style="list-style-type: none"> ➤ Order numbers 0 – 20 from smallest to largest ➤ Order numbers 0 – 20 from largest to smallest ➤ Order numbers 0 – 50 from smallest to largest ➤ Order numbers 0 – 50 from largest to smallest ➤ Order numbers 0 – 100 from smallest to largest ➤ Order numbers 0 – 100 from largest to smallest ➤ Know what = sign stands for and demonstrate correct use ➤ Know what < signs stands for and demonstrate correct use ➤ Know what > signs stands for and demonstrate correct use ➤ Use the = sign in simple calculations, e.g. $15+5=20$ ➤ Use the = sign to demonstrate equal value, e.g. $15+5 = 2+18$ ➤ Use the < sign between two numbers accurately ➤ Use the > sign between two numbers accurately
		Measures Capacity and volume	<p>Compare & order volume/capacity & record the results using >, < and =.</p> <ul style="list-style-type: none"> ➤ Record information using < > = ➤ Record amounts of liquid using ml and l ➤ Use the symbol < > = to compare amounts of liquid
		Geometry 2D and 3D shapes	<p>Identify 2D shapes on the surface of 3D shapes.</p> <ul style="list-style-type: none"> ➤ Describe 3D shapes according to their 2D make up ➤ Begin to explore the nets of 3D shapes according to 2D shapes contained within them
		Measures Money	<p>Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.</p> <ul style="list-style-type: none"> ➤ Calculate change from £1 ➤ Add and subtract monetary values and find change from £1 or £2
		Multiplication and Division	<p>Calculate the mathematical statements for multiplication and division within the multiplication tables and write them using the $\times \div =$ signs.</p> <ul style="list-style-type: none"> ➤ Understand the function of the \times sign. ➤ Understand the function of the \div sign. ➤ Understand the function of the = sign. ➤ Use the $\times \div =$ signs to write calculations using known table facts.
		Multiplication and Division	<p>Show that multiplication of two numbers can be one in any order (commutative) and division of one number by another cannot.</p> <ul style="list-style-type: none"> ➤ Recognise commutativity in multiplication, e.g. $8 \times 2 = 2 \times 8$. ➤ Recognise that commutativity cannot be applied to division.

Year 2 Math Medium Term Planning Spring 2

Date	Week	Topic	Math Objectives
		Fractions	<p>Write simple fractions and recognise the equivalence</p> <ul style="list-style-type: none"> ➤ Write simple fractions, e.g. $\frac{1}{2}$ of $6 = 3$ ➤ Recognise and demonstrate the equivalence of $\frac{1}{2}$ and $\frac{2}{4}$
		Addition and subtraction	<p>Show that addition of any two numbers can be done in any order (commutative) and subtraction of one number from another cannot.</p> <ul style="list-style-type: none"> ➤ Swap numbers in addition calculations and explain they total the same answer. ➤ Understand that the numbers in a subtraction calculation cannot be reversed and explain why. <p>-To add using concrete objects, pictorial representations, and mentally including: a two digit number and ones; a two digit number and tens; two two-digit numbers; and adding three one-digit numbers.</p>
		Measures: Length, weight, mass	<p>Choose and use appropriate standard units to estimate and measure:</p> <ul style="list-style-type: none"> - length/height in any direction (m/cm) - mass (kg/g) to the nearest appropriate unit, using rulers & scales, <ul style="list-style-type: none"> ➤ Measure accurately in cm ➤ Measure accurately in m ➤ Know 1m and make reasonable estimates of length/height up to 10m. ➤ Know 1cm and make reasonable estimates of length/height up to 100cm. ➤ Measure accurately in g/kg ➤ Know kg and make reasonable estimates of weight up to 5kg. ➤ Name objects that weigh more/less than 1kg, 5kg etc. ➤ Know their own approx. weight in kg ➤ Read ruler scales to the nearest cm ➤ Read weighing scales to the nearest g
		Geometry Position and Direction	<p>Order and arrange combinations of mathematical objects in patterns and sequences</p> <ul style="list-style-type: none"> ➤ Place objects in a repeating pattern ➤ Place objects in an order which forms a sequence
		Measures Time	<p>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.</p> <ul style="list-style-type: none"> ➤ Read the clock in 5 min intervals past the hour ➤ Read the clock in 5 min intervals to the hour. ➤ Draw hands on the clock showing 5 min internals ➤ Know that 15 minutes past is the same as quarter past. ➤ Know that 15 minutes to, is the same as quarter to.
		Consolidate and Assess	<p>Start this week by revising the learning covered in the Autumn and Spring terms so as to ensure pupils are fluent and secure with their basic skills.</p>

Year 2 Math Medium Term Planning Summer 1

Date	Week	Topic	Math Objectives
		Number and place Value	<p>Recognise the place value of each digit in a 2 digit number</p> <ul style="list-style-type: none"> ➤ Identify the tens and ones in any 2 digit number ➤ Partition a 2 digit number identifying the value of each digit
		Addition and Subtraction	<p>Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.</p> <ul style="list-style-type: none"> ➤ Recognise the inverse relationship between addition and subtraction, e.g. $5+7$; $12-5$; $12-7$ etc. ➤ Infer the related calculation from a given, e.g. If $6+8=14$ what is $14-8$? ➤ Complete missing number calculations.
		Measures Capacity and Volume	<p>Choose and use appropriate standard units to estimate and measure:</p> <ul style="list-style-type: none"> - Temperature (°C), capacity (l/ml) to the nearest appropriate unit, using, thermometers & measuring vessels. ➤ Know how much one litre is in ml ➤ Know that many liquids are sold in litres ➤ Know amounts that are more, less than a litre ➤ Measure liquid accurately to the nearest litre and 50 ml ➤ Know that 0°C is freezing point of water ➤ Know that 100°C is boiling point of water ➤ Use a thermometer to accurately measure temperature ➤ Read liquid amount to the nearest 10ml
		Fractions	<p>Revisit and revise previous Year 2 objectives with regard to fractions, i.e. Know $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{4}$ of numbers and work out equivalence of fractions</p> <ul style="list-style-type: none"> ➤ Know what $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{4}$ and $\frac{1}{3}$ means ➤ Find $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{4}$ and $\frac{1}{3}$ of a shape or length ➤ Find $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{4}$ and $\frac{1}{3}$ of a given number ➤ Write simple fractions, e.g. $\frac{1}{2}$ of $6 = 3$ ➤ Recognise and demonstrate the equivalence of $\frac{1}{2}$ and $\frac{2}{4}$
		Geometry Position and Direction	<p>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) Explore links with ICT - OZOBOTS</p> <ul style="list-style-type: none"> ➤ Know what a right angle is ➤ Describe quarter, half and three-quarter turns in relation to right angles ➤ Use the terms clockwise, anti-clockwise to describe movement
		Geometry 2D and 3D Shape	<p>Compare and sort common 2D and 3D shapes and everyday objects.</p> <ul style="list-style-type: none"> ➤ Compare and sort a set of triangles and pyramids recognising their similarities and differences ➤ Gather a set of rectangles and cuboids, recognising their similarities and differences ➤ Gather a set of circles and spheres, recognising their similarities and differences

Year 2 Math Medium Term Planning Summer 2

Date	Week	Topic	Math Objectives
		Measures Time	<p>Compare and sequence intervals of time</p> <ul style="list-style-type: none"> ➤ Sequence events in a given day using appropriate time language, i.e. morning, afternoon, evening, night, earlier and later ➤ Order a given number of time events to the given hour or half an hour ➤ Work out longest and shortest interval of times to the given hour ➤ Revise telling the time to 5 minute intervals
		Multiplication and Division	<p>Recognise that division is the inverse of multiplication and use to check calculations.</p> <ul style="list-style-type: none"> ➤ Know that examples such as 8×2 correspond to $16 \div 2$. ➤ Know that examples such as $20 \div 5 = 4$ correspond to 5×4.
		Statistics	<p>Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity</p> <ul style="list-style-type: none"> ➤ Count objects to answer questions ➤ Pose questions about given information for others to answer ➤ Compare data and answer questions ➤ Sort information and present it pictorially
		Measures Money	<p>Find different combinations of coins that equal the same amounts of money.</p> <ul style="list-style-type: none"> ➤ Find all different ways of making 10p ➤ Find all different ways of making 20p ➤ Find ways of making given amount with least number of coins ➤ Calculate change from £1 ➤ Add monetary values and find change from £1
		Revise: All aspects of Number	<p>Consolidate: All learning involving place value; addition and subtraction and fractions</p> <ul style="list-style-type: none"> ➤ Revise all aspects of learning associated with number in Year 2
		Consolidate and Assess	<p>Start this week by revising the learning covered in the Autumn and Spring terms so as to ensure pupils are fluent and secure with their basic skills and ready to begin Year 3. Consolidate any learning from summer term. Refocus mental starters as needed.</p>