

Moorgate Primary Academy

Year 2 Maths Long Term Overview



Year 2 – Autumn				
Properties of Shape -Recognise 2D and 3D shapes and make links between them. -Identify common features of different types of 2D and 3D shapes. -Accurately draw 2D shapes -Count the sides on 2D shapes and use this knowledge to categorise different shapes -Classify shapes by the number of vertices -Find lines of symmetry in 2D shapes -Sort 2D shapes focusing on number of sides, vertices and lines of symmetry. -Make patterns with 2D shapes -Count and describe faces of a 3D shape - Identify edges on a 3D shape -Identify vertices on a 3D shape -Sort 3D shapes according to their properties -Make patterns using 3D shapes -	Numbers to 100 - Partition 2 digits numbers into 10s and 1s - Use a number line to compare numbers as greater or less than. - Count in multiples of 10 up to 100. - Know how many 10s are in a multiple of 10 eg $70 = 7$ tens. - Count in 10s, then count in 1s in order to count a certain number of objects or items. - Use a place value grid to show the value of digits within a 1 or 2 digit number. - Partition 2 digit numbers flexibly. - Write a 2-digit number as an addition of 10s and 1s eg $43 = 40 + 3$ - Use number lines that start at a multiple of 10 - Compare pairs of 2 digit numbers	Addition and Subtraction (1) - Use part-whole models to represent numbers to 20. Say the + and – facts related to the model. - Recall number bonds to 10 - Use known facts with 1s to determine other facts with corresponding multiples of 10 eg $4 + 3 = 7$; $40 + 30 = 70$ - TO – O without exchanging - Bridge over ten - Add three numbers. - Add from a 2-digit number to the next multiple of 10. - Add a 2 digit and 1 digit number, crossing the tens barrier. - Subtract by crossing 10, within 20 - Subtract from 2-digit numbers more flexibly, by subtracting from a given multiple of 10 - Subtract across a multiple of 10	Addition and subtraction (2) -Find 10 more and 10 less than a number -Add two 2-digit numbers that include an exchange -Subtract two numbers that include an exchange. -Add 3 numbers -Represent word problems using bar models. Use the words ‘part’ and ‘whole’ to help them identify whether the calculation is addition or subtraction.	Money -Learn the value of a range of coins and notes -Count different amounts of money and record in pounds and pence eg. £3 and 21 pence -Make the same amounts of money using different combinations of coins and notes -Compare amounts of money using the correct vocabulary (more than, less than, greater than) and the correct signs. (<, > and =) -Find the cost of items within 100p -Work out how much change should be received after paying for something -Solve 2-step money word problems

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	<ul style="list-style-type: none"> - Order three or more 1 and 2 digit numbers. - Count forwards and backwards in 2s, 5s and 10s. - Count forwards and backwards in 3s 			
Year 2 - SPRING				
<u>Multiplication and division (1)</u> -Group objects into equal groups. -Write repeated addition number sentences and multiplication sentences to match a picture -Use a number line alongside repeated addition and multiplication sentences to work out a total. -Identify the repeated addition sentence and the multiplication sentence than an array represents. -Know their 2x table up to 12 x 2 -Know their 5 x table up to 12 x 5 Know their 10x table up to 12 x 10 -Answer scaling questions which involve the 2, 5 and 10x table.	<u>Multiplication and Division (2)</u> -Use repeated subtraction to model division calculations -Share a number into equal groups -Relate 2x table to dividing by 2. -Know their odd and even numbers. They will know a number is odd or even according to whether it can be grouped equally. -Divide by 5 by grouping or repeated subtraction -Divide by 10 by linking to 10 x table and using repeated subtraction -Represent division calculations using a bar model, using grouping and sharing. -Come up with their own division problems	<u>Statistics</u> -Read and construct a tally chart -Read and construct pictograms. Link to tally charts. Use symbols which represent more than 1 - Find and compare totals using a pictogram -Read, construct and interpret block diagrams -Solve worded problems using tally charts and pictograms.	<u>Length and height</u> -Use rulers to measure simple objects to the nearest centimetre -Estimate and measure objects using metres as a unit of measure -Order sets of lengths measured in centimetres or metres -Solve word problems involving length and height	<u>Fractions</u> -Match parts to the correct whole and fill in sentence scaffolds to match parts and wholes -Identify equal parts of a whole in different contexts, including shape, quantity, volume and money. -Identify equal objects which have been split into two equal parts. Know that 'half' is represented as $\frac{1}{2}$ -Find one half of objects, shapes and numbers -Recognise shapes that have been split into four equal parts and see $\frac{1}{4}$ shown as part of a distance around a whole tract. -Draw what a whole looks like from $\frac{1}{4}$ -Know what is meant by 'unit fractions' and recognise $\frac{1}{2}$ $\frac{1}{4}$

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				<p>1/3 of different shapes and amounts.</p> <ul style="list-style-type: none"> -Know what is meant by a 'non-unit fraction' -Know that $\frac{1}{2}$ and $\frac{2}{4}$ are equivalent -Work out unit and non-unit fractions of numbers up to 20. Eg $\frac{3}{4}$ of 20 -Learn about non-unit fractions becoming one whole -Write numbers that are made of whole and parts -Count forward and backwards in halves with the aid of a number line -Count in quarters. Work out how many quarters are needed to make a whole.
Year 2 - Summer				
<p>Position and direction</p> <ul style="list-style-type: none"> -Describe movement and follow instructions using the words left, right, forward and backwards -Describe quarter, half and three-quarter turns around a point using the terms clockwise and anti-clockwise. -Combine rotation and linear movement in order to follow or describe a designated path -Complete and describe patterns using prior knowledge 	<p>Problem solving and efficient methods</p> <ul style="list-style-type: none"> -Solve money problems using a variety of addition and subtraction strategies. - Make links between calculations to calculate unknown quantities, based on similarities and differences between the parts and wholes -Use known number facts to determine whether a calculation is feasible. -Use a 100 square to count forwards and backwards in 1s and 10s. Use it to help solve + and – problems. 	<p>Time</p> <ul style="list-style-type: none"> -Tell the time to the nearest 5 minutes -Know there are 60 minutes in an hour -Find the duration between two points of time in minutes -Find and compare two or more durations of time. - Find an end time when given a start time and duration -Find a start time and when given an end time and duration -Know there are 24 hours in a day - 	<p>Weight volume and temperature</p> <ul style="list-style-type: none"> -Use balance scales to compare the mass of 2 or more objects -Measure mass in grams using weighing scales -Measure and compare the mass of objects that are over 100g using scales -Measure mass in KG -Use ml to measure capacity and volume -Use scales that are marked in increments of 100 to link ml and l -Measure capacity and volume in litres 	

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	<ul style="list-style-type: none"> -Find multiple answers to the same questions. Use trial and error and begin to work systematically. -Solve missing number problems -Learn how to add or subtract from a multiple of 10 or from a number and then adjust to reflect the amount that should have been subtracted. EG $10 - 7 = 9 - 6$ -Choose the most efficient subtraction strategy -Solve multiplication and division problems using a bar model where appropriate -Solve problems with multiple steps using +, -, x and ÷ - 		<ul style="list-style-type: none"> -Read the temperature on a thermometer. Children to use their knowledge of 2s, 5s and 10s to read different scales -
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