

Autumn Term		
Weeks 1-3	Weeks 4-8	Weeks 9-12
Number: Place Value	Number: Addition and Subtraction	Number: Multiplication and Division
<p>recognise the place value of each digit in a 3-digit number (100s, 10s, 1s)</p> <p>read and write numbers up to 1,000 in numerals and in words</p> <p>identify, represent and estimate numbers using different representations</p> <p>compare and order numbers up to 1,000</p> <p>count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number</p> <p>solve number problems and practical problems involving these ideas.</p>	<p>add and subtract numbers mentally, including:</p> <ol style="list-style-type: none"> i. a three-digit number and 1s ii. a three-digit number and 10s iii. a three-digit number and 100s <p>add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction</p> <p>estimate the answer to a calculation and use inverse operations to check answers</p> <p>solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</p>	<p>recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables</p> <p>write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods</p> <p>solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.</p>
Steps for Learning		
<p>Step 1 Represent numbers to 100</p> <p>Step 2 Partition numbers to 100</p> <p>Step 3 Number line to 100</p> <p>Step 4 Hundreds</p> <p>Step 5 Represent numbers to 1,000</p> <p>Step 6 Partition numbers to 1,000</p> <p>Step 7 Flexible partitioning of numbers to 1,000</p> <p>Step 8 Hundreds, tens and ones</p> <p>Step 9 Find 1, 10 or 100 more or less</p> <p>Step 10 Number line to 1,000</p> <p>Step 11 Estimate on a number line to 1,000</p> <p>Step 12 Compare numbers to 1,000</p> <p>Step 13 Order numbers to 1,000</p> <p>Step 14 Count in 50s</p>	<p>Step 1 Apply number bonds within 10</p> <p>Step 2 Add and subtract 1s</p> <p>Step 3 Add and subtract 10s</p> <p>Step 4 Add and subtract 100s</p> <p>Step 5 Spot the pattern</p> <p>Step 6 Add 1s across a 10</p> <p>Step 7 Add 10s across a 100</p> <p>Step 8 Subtract 1s across a 10</p> <p>Step 9 Subtract 10s across a 100</p> <p>Step 10 Make connections</p> <p>Step 11 Add two numbers (no exchange)</p> <p>Step 12 Subtract two numbers (no exchange)</p> <p>Step 13 Add two numbers (across a 10)</p> <p>Step 14 Add two numbers (across a 100)</p> <p>Step 15 Subtract two numbers (across a 10)</p> <p>Step 16 Subtract two numbers (across a 100)</p> <p>Step 17 Add 2-digit and 3-digit numbers</p> <p>Step 18 Subtract a 2-digit number from a 3-digit number</p> <p>Step 19 Complements to 100</p> <p>Step 20 Estimate answers</p> <p>Step 21 Inverse operations</p> <p>Step 22 Make decisions</p>	<p>Step 1 Multiplication - equal groups</p> <p>Step 2 Use arrays</p> <p>Step 3 Multiples of 2</p> <p>Step 4 Multiples of 5 and 10</p> <p>Step 5 Sharing and grouping</p> <p>Step 6 Multiply by 3</p> <p>Step 7 Divide by 3</p> <p>Step 8 The 3 times-table</p> <p>Step 9 Multiply by 4</p> <p>Step 10 Divide by 4</p> <p>Step 11 The 4 times-table</p> <p>Step 12 Multiply by 8</p> <p>Step 13 Divide by 8</p> <p>Step 14 The 8 times-table</p> <p>Step 15 The 2, 4 and 8 times-tables</p>
Times table Rock Stars		
Recall and use multiplication and division facts for the 5, 10 and 2 times tables		Recall and use multiplication and division facts for the 3 and 4 times tables



Spring Term			
Weeks 1-3	Weeks 4-6	Weeks 7-9	Weeks 10-12
Number: Multiplication and Division	Measurement: Length and Perimeter	Number: Fractions	Measurement: Mass and Capacity
<p>recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables</p> <p>write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods</p> <p>solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.</p>	<p>measure, compare, add and subtract: lengths (m/cm/mm)</p> <p>measure the perimeter of simple 2-D shapes</p>	<p>recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators</p> <p>count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10</p> <p>compare and order unit fractions, and fractions with the same denominators</p> <p>recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators</p> <p>solve problems that involve all of the above.</p>	<p>measure, compare, add and subtract: mass (kg/g);</p> <p>measure, compare, add and subtract: volume/capacity (l/ml)</p>
Steps for learning			
<p>Step 1 Multiples of 10</p> <p>Step 2 Related calculations</p> <p>Step 3 Reasoning about multiplication</p> <p>Step 4 Multiply a 2-digit number by a 1-digit number - no exchange</p> <p>Step 5 Multiply a 2-digit number by a 1-digit number - with exchange</p> <p>Step 6 Link multiplication and division</p> <p>Step 7 Divide a 2-digit number by a 1-digit number - no exchange</p> <p>Step 8 Divide a 2-digit number by a 1-digit number - flexible partitioning</p> <p>Step 9 Divide a 2-digit number by a 1-digit number - with remainders</p> <p>Step 10 Scaling</p> <p>Step 11 How many ways?</p>	<p>Step 1 Measure in metres and centimetres</p> <p>Step 2 Measure in millimetres</p> <p>Step 3 Measure in centimetres and millimetres</p> <p>Step 4 Metres, centimetres and millimetres</p> <p>Step 5 Equivalent lengths (metres and centimetres)</p> <p>Step 6 Equivalent lengths (centimetres and millimetres)</p> <p>Step 7 Compare lengths</p> <p>Step 8 Add lengths</p> <p>Step 9 Subtract lengths</p> <p>Step 10 What is perimeter?</p> <p>Step 11 Measure perimeter</p> <p>Step 12 Calculate perimeter</p>	<p>Step 1 Understand the denominators of unit fractions</p> <p>Step 2 Compare and order unit fractions</p> <p>Step 3 Understand the numerators of non-unit fractions</p> <p>Step 4 Understand the whole</p> <p>Step 5 Compare and order non-unit fractions</p> <p>Step 6 Fractions and scales</p> <p>Step 7 Fractions on a number line</p> <p>Step 8 Count in fractions on a number line</p> <p>Step 9 Equivalent fractions on a number line</p> <p>Step 10 Equivalent fractions as bar models</p>	<p>Step 1 Use scales</p> <p>Step 2 Measure mass in grams</p> <p>Step 3 Measure mass in kilograms and grams</p> <p>Step 4 Equivalent masses (kilograms and grams)</p> <p>Step 5 Compare mass</p> <p>Step 6 Add and subtract mass</p> <p>Step 7 Measure capacity and volume in millilitres</p> <p>Step 8 Measure capacity and volume in litres and millilitres</p> <p>Step 9 Equivalent capacities and volumes (litres and millilitres)</p> <p>Step 10 Compare capacity and volume</p> <p>Step 11 Add and subtract capacity and volume</p>
Times table Rock Stars			
Recall and use multiplication and division facts for the 3 and 4 times tables		Recall and use multiplication and division facts for the 3, 4 and 8 times tables	



Summer Term					
Weeks 1-2	Weeks 3-4	Weeks 5-7	Weeks 8-9	Weeks 10-11	Week 12
Number: Fractions	Measurement: Money	Measurement: Time	Geometry: Properties of Shape	Statistics	Consolidation
<p>recognise and show, using diagrams, equivalent fractions with small denominators</p> <p>add and subtract fractions with the same denominator within one whole</p>	<p>add and subtract amounts of money to give change, using both £ and p in practical contexts</p>	<p>tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks</p> <p>estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight</p> <p>know the number of seconds in a minute and the number of days in each month, year and leap year</p> <p>compare durations of events</p>	<p>draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them</p> <p>recognise angles as a property of shape or a description of a turn</p> <p>identify right angles, recognise that 2 right angles make a half-turn, 3 make three quarters of a turn and 4 a complete turn; identify whether angles are greater than or less than a right angle</p> <p>identify horizontal and vertical lines and pairs of perpendicular and parallel lines.</p>	<p>interpret and present data using bar charts, pictograms and tables</p> <p>solve one-step and two-step questions using information presented in scaled bar charts and pictograms and tables.</p>	
Steps for learning					
<p>Step 1 Add fractions</p> <p>Step 2 Subtract fractions</p> <p>Step 3 Partition the whole</p> <p>Step 4 Unit fractions of a set of objects</p> <p>Step 5 Non-unit fractions of a set of objects</p> <p>Step 6 Reasoning with fractions of an amount</p>	<p>Step 1 Pounds and pence</p> <p>Step 2 Convert pounds and pence</p> <p>Step 3 Add money</p> <p>Step 4 Subtract money</p> <p>Step 5 Find change</p>	<p>Step 1 Roman numerals to 12</p> <p>Step 2 Tell the time to 5 minutes</p> <p>Step 3 Tell the time to the minute</p> <p>Step 4 Read time on a digital clock</p> <p>Step 5 Use a.m. and p.m.</p> <p>Step 6 Years, months and days</p> <p>Step 7 Days and hours</p> <p>Step 8 Hours and minutes - use start and end times</p> <p>Step 9 Hours and minutes - use durations</p> <p>Step 10 Minutes and seconds</p>	<p>Step 1 Turns and angles</p> <p>Step 2 Right angles</p> <p>Step 3 Compare angles</p> <p>Step 4 Measure and draw accurately</p> <p>Step 5 Horizontal and vertical</p> <p>Step 6 Parallel and perpendicular</p> <p>Step 7 Recognise and describe 2-D shapes</p> <p>Step 8 Draw polygons</p> <p>Step 9 Recognise and describe 3-D shapes</p> <p>Step 10 Make 3-D shapes</p>	<p>Step 1 Interpret pictograms</p> <p>Step 2 Draw pictograms</p> <p>Step 3 Interpret bar charts</p> <p>Step 4 Draw bar charts</p> <p>Step 5 Collect and represent data</p> <p>Step 6 Two-way tables</p>	
Times table Rock Stars					
Recall and use multiplication and division facts for the 3, 4 and 8 times tables			Recall and use multiplication and division facts for the 3, 4 and 8 times tables		

