



*Aston Tower Community
Primary School*

**Maths
Medium Term
Planning:
Year 6**

Year 6: Autumn 1

Week	Retrieval	Main Maths Objectives
	<ul style="list-style-type: none"> Times tables up 12 x 12 	<ul style="list-style-type: none"> Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. Solve problems involving addition, subtraction, multiplication and division. Round any number to a required degree of accuracy in problems.
1	Determine the value of each digit in numbers up to 10 000 000 Read, write, order and compare numbers up to 10 000 000	Determine the value of each digit in numbers up to 10 000 000 Read, write, order and compare numbers up to 10 000 000 Use negative numbers in context, and calculate intervals across zero.
2	Identify common factors, multiples and prime numbers. Use negative numbers in context, and calculate intervals across zero.	Formal addition using the column method. Formal subtraction using the column method. Solve addition/subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
3	Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to two decimal places.	Multiply multi-digit numbers up to 4 digits by a two-digit number using the formal method of long multiplication. Multiply one-digit numbers with up to two decimal places by whole numbers.
4	Round any number to a required degree of accuracy. Use negative numbers in context, and calculate intervals across zero.	Divide numbers up to 4 digits by a one-digit whole number using the formal written method of short division, and interpret remainders according to context. Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context. Use written division methods in cases where the answer has up to two-decimal places.
5	Identify common factors, multiples and prime numbers.	Use common factors to simplify fractions; use common multiples to express fractions in the same denominator. Compare and order fractions, including >1 Associate a fraction with division to calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction.
6	Recall and use the equivalences between simple fractions, decimals and percentages, including in different contexts.(also in word problems)	Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. Multiply simple pairs of proper fractions, writing the answer in its simplest form. Divide fractions by whole numbers.
7	Assess and review	

Year 6: Autumn 2

Week	Retrieval	Main Maths Objectives
	<ul style="list-style-type: none"> • Times tables up 12 x 12 	<ul style="list-style-type: none"> • Solve problems involving calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.
1	Solve simple ratio problems.	<p>Solve problems involving the relative sizes of two quantities, where missing values can be found by using integer multiplication and division facts.</p> <p>Solve problems involving the calculation of percentages and the use of percentages for comparison.</p> <p>Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.</p> <p>Calculate and interpret the mean as an average.</p>
2	Convert between seconds, minutes, hours, days, weeks, months and years.	<p>Use, read, write and convert between standard units, length, mass and time, using decimal notation up to 3 decimal places.</p> <p>Convert between miles and kilometres.</p>
3	Compare and classify geometric shapes based on their properties and sizes. Describe 3-D shapes.	<p>Draw 2-D shapes using given dimensions and angles.</p> <p>Recognise and build 3-D shapes, including making nets.</p> <p>Calculate the area of compound shapes, parallelograms and triangles.</p> <p>Recognise the use of formulae for area.</p>
4	Solve simple angle problems. Find unknown angles in any triangles, quadrilaterals and regular polygons.	<p>Recognise that shapes with the same area can have different perimeters and vice versa.</p> <p>Calculate, estimate and compare volume. Recognise the use of formulae for volume.</p> <p>Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find the missing angles.</p>
5	Name and plot points on a co-ordinates grid. Name 2D shapes based on their properties.	<p>Illustrate and name parts of the circle, including radius, diameter and circumference and know that the diameter is twice the radius.</p> <p>Describe positions on the full coordinate grid (all four quadrants).</p> <p>Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.</p>
6	Use their knowledge of the order of operations to carry out calculations involving the four operations.	Interpret and construct tables, bar graphs, pie charts and line graphs and use these to solve problems.
7	Assess and review	

Year 6: Spring 1

Week	Retrieval	Main Maths Objectives
	<ul style="list-style-type: none"> Times tables up 12 x 12 	<ul style="list-style-type: none"> Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. Solve problems involving addition, subtraction, multiplication and division. Round any number to a required degree of accuracy in problems.
1	Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to two decimal places.	Addition and subtraction.
2	Identify common factors, multiples and prime numbers. Use negative numbers in context, and calculate intervals across zero.	Multiplication and division.
3	Round any number to a required degree of accuracy. Use negative numbers in context, and calculate intervals across zero.	BODMAS – Use knowledge of the order of operations to carry out calculations involving the four operations.
4	Identify common factors, multiples and prime numbers.	Use common factors to simplify fractions; use common multiples to express fractions in the same denominator. Compare and order fractions, including >1 Associate a fraction with division to calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction.
5	Recall and use the equivalences between simple fractions, decimals and percentages, including in different contexts.(also in word problems)	Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. Multiply simple pairs of proper fractions, writing the answer in its simplest form Divide fractions by a whole number.
6	Generate and describe number sequences.	Express missing number problems algebraically. Use simple formulae. Find pairs of numbers that satisfy an equation with two unknowns. Enumerate possibilities of combination of two variables.
7	Assess and review	Solve problems involving similar shapes where the scale factor is known or can be found.

Year 6: Spring 2

Week	Retrieval <ul style="list-style-type: none">• Times tables up 12 x 12	Main Maths Objectives
1	Consolidation	Solve problems involving similar shapes where the scale factor is known or can be found.
2	Consolidation	Consolidation
3	Consolidation	Consolidation
4	Consolidation	Consolidation
5	Consolidation	Consolidation
6	Consolidation	Consolidation
7	Assess and review	

Year 6: Summer 1/2

Week	Retrieval <ul style="list-style-type: none">• Times tables up 12 x 12	Main Maths Objectives <ul style="list-style-type: none">•
1	Consolidation	Consolidation
2	Consolidation	Consolidation
3	SATS	
4 onwards	POST SATs activities based on gaps/areas of weakness	POST SATs activities based on gaps/areas of weakness White Rose Activities