

# Aston Tower Community Primary School

# Maths Medium Term Planning: Year 4

## Year 4: Autumn 1

Week	Retrieval	<ul> <li>Main Maths Objectives</li> <li>Recall multiplication and division facts for multiplication tables up to 12 × 12</li> <li>Identify, represent and estimate numbers using different representations.</li> <li>Solve number and practical problems.</li> <li>Estimate and use inverse operations to check answers to a calculation.</li> <li>Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.</li> </ul>
1	Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones).	Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.  Add numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.
	Order and compare numbers beyond 1000.	Solve addition two-step problems in contexts, deciding which operations and methods to use and why.
2	Count in multiples of 6, 7, 9, 25 and 1000 Find 1000 more or less than a given number.	Subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.  Solve subtraction two-step problems in contexts, deciding which operations and methods to use and why.
3	Recognise and use factor pairs and commutativity in mental calculations. Round any number to the nearest 10, 100 or 1000.	Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.  Divide 2 digit and 3 digit numbers by a 1 digit number
4	Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers.	Recognise and show, using diagrams, families of equivalent fractions.  Recognise and write decimal equivalents to $\frac{1}{4}$ , $\frac{1}{2}$ and $\frac{3}{4}$ Add and subtract fractions with the same denominator.
5	Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.	Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths.  Recognise and write decimal equivalents of any number of tenths or hundredths.  Round decimals with one decimal place to the nearest whole number.  Compare numbers with the same number of decimal places up to two decimal places.
6	Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.  Count backwards through zero to include negative numbers.	Solve problems involving increasingly harder to calculate quantities and fractions to divide quantities, including non-unit fractions where the answer is a whole number.  Solve simple measure and money problems involving fractions and decimals to two decimal places.
7	Assess and review	

#### Year 4: Autumn 2

Week	Retrieval	Main Maths Objectives  • Recall multiplication and division facts for multiplication tables up to 12 × 12
1	Convert between different units of measurement, e.g. kilometre to metre  Divide a 1-digit or 2-digit number by 10 or 100.	Convert between different units of measurement, e.g. kilometre to metre Compare, estimate and calculate with different measures including money.
2	Convert from hours to minutes; minutes to seconds; years to months; weeks to days.  Convert between pounds and pence.	Read, write and convert time between analogue and digital 12-hour clocks.  Read, write and convert time between analogue and digital 24-hour clocks.  Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
3	Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.  Write decimal equivalents of 1/10s and	Find the area of rectilinear shapes by counting squares.  Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
4	1/100s.  Identify acute and obtuse angles and compare and order angles up to two right angles by size.  Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.	Identify acute and obtuse angles and compare and order angles up to two right angles by size.  Compare and classify geometric shapes, including quadrilaterals and triangles based on their properties and sizes.  Identify lines of symmetry in 2-D shapes presented in different orientations.  Complete a simple symmetric figure with respect to a specific line of symmetry.
5	Describe positions on a 2-D grid as coordinates in the first quadrant.  Identify acute and obtuse angles and compare and order angles up to two right angles by size.	Describe positions on a 2-D grid as coordinates in the first quadrant.  Plot specified points and draw sides to complete a given polygon.  Describe movements between positions as translations of a given unit to the left/right and up/down.
6	Round any number to the nearest 10, 100 or 1000.  Divide a 1-digit or 2-digit number by 10 or 100.	Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.  Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
7	Assess and review	

# Year 4: Spring 1

Week	Retrieval	<ul> <li>Main Maths Objectives</li> <li>Recall multiplication and division facts for multiplication tables up to 12 × 12</li> <li>Identify, represent and estimate numbers using different representations.</li> <li>Solve number and practical problems.</li> <li>Estimate and use inverse operations to check answers to a calculation.</li> <li>Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.</li> </ul>
1	Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones).	Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.  Add numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.  Solve addition two-step problems in contexts, deciding which operations
	Order and compare numbers beyond 1000.	and methods to use and why.
2	Count in multiples of 6, 7, 9, 25 and 1000 Find 1000 more or less than a given number.	Subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.  Solve subtraction two-step problems in contexts, deciding which operations and methods to use and why.
3	Recognise and use factor pairs and commutativity in mental calculations. Round any number to the nearest 10, 100 or 1000.	Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.  Divide 2 digit and 3 digit numbers by a 1 digit number
4	Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers.	Recognise and show, using diagrams, families of equivalent fractions. Recognise and write decimal equivalents to $\frac{1}{4}$ , $\frac{1}{2}$ and $\frac{3}{4}$ Add and subtract fractions with the same denominator.
5	Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.	Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths.  Recognise and write decimal equivalents of any number of tenths or hundredths.  Round decimals with one decimal place to the nearest whole number.  Compare numbers with the same number of decimal places up to two decimal places.
6	Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.  Count backwards through zero to include negative numbers.	Solve problems involving increasingly harder to calculate quantities and fractions to divide quantities, including non-unit fractions where the answer is a whole number.  Solve simple measure and money problems involving fractions and decimals to two decimal places.
7	Assess and review	

# Year 4: Spring 2

Week	Retrieval	Main Maths Objectives  ■ Recall multiplication and division facts for multiplication tables up to 12 × 12
1	Convert between different units of measurement, e.g. kilometre to metre  Divide a 1-digit or 2-digit number by 10 or 100.	Convert between different units of measurement, e.g. kilometre to metre Compare, estimate and calculate with different measures including money.
2	Convert from hours to minutes; minutes to seconds; years to months; weeks to days.  Convert between pounds and pence.	Read, write and convert time between analogue and digital 12-hour clocks.  Read, write and convert time between analogue and digital 24-hour clocks.  Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
3	Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.  Write decimal equivalents of 1/10s and	Find the area of rectilinear shapes by counting squares.  Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
4	1/100s.  Identify acute and obtuse angles and compare and order angles up to two right angles by size.  Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.	Identify acute and obtuse angles and compare and order angles up to two right angles by size.  Compare and classify geometric shapes, including quadrilaterals and triangles based on their properties and sizes.  Identify lines of symmetry in 2-D shapes presented in different orientations.  Complete a simple symmetric figure with respect to a specific line of symmetry.
5	Describe positions on a 2-D grid as coordinates in the first quadrant.  Identify acute and obtuse angles and compare and order angles up to two right angles by size.	Describe positions on a 2-D grid as coordinates in the first quadrant.  Plot specified points and draw sides to complete a given polygon.  Describe movements between positions as translations of a given unit to the left/right and up/down.
6	Round any number to the nearest 10, 100 or 1000.  Divide a 1-digit or 2-digit number by 10 or 100.	Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.  Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
7	Assess and review	

## Year 4: Summer 1

Week	Retrieval	<ul> <li>Main Maths Objectives</li> <li>Recall multiplication and division facts for multiplication tables up to 12 × 12</li> <li>Identify, represent and estimate numbers using different representations.</li> <li>Solve number and practical problems.</li> <li>Estimate and use inverse operations to check answers to a calculation.</li> <li>Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.</li> </ul>
1	Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones).  Order and compare numbers beyond	Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.  Add numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.  Solve addition two-step problems in contexts, deciding which operations
	1000.	and methods to use and why.
2	Count in multiples of 6, 7, 9, 25 and 1000 Find 1000 more or less than a given number.	Subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.  Solve subtraction two-step problems in contexts, deciding which operations and methods to use and why.
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5	Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.	Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths.  Recognise and write decimal equivalents of any number of tenths or hundredths.  Round decimals with one decimal place to the nearest whole number.  Compare numbers with the same number of decimal places up to two decimal places.
6	Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.  Count backwards through zero to include negative numbers.	Solve problems involving increasingly harder to calculate quantities and fractions to divide quantities, including non-unit fractions where the answer is a whole number.  Solve simple measure and money problems involving fractions and decimals to two decimal places.
7	Assess and review	

#### Year 4: Summer 2

Week	Retrieval	Main Maths Objectives  ■ Recall multiplication and division facts for multiplication tables up to 12 × 12
1	Convert between different units of measurement, e.g. kilometre to metre  Divide a 1-digit or 2-digit number by 10 or 100.	Convert between different units of measurement, e.g. kilometre to metre Compare, estimate and calculate with different measures including money.
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