

Mathematics Key Assessment Objectives Year Six

Trinity Primary





Key Assessment Objectives Year Six

Year 6 Number				
	6.1	6.2	6.3	6.4 + application
Counting	I can count backwards through zero to include negative numbers in 1s, 2s and 10s down to -100 mentally	I can count backwards through zero to include negative numbers in 1s, 2s, 5s and 10s down to -100 mentally	I can find the difference between negative and positive integers e.g. What is the difference between -50 and 15	I can find the difference between negative and positive integers and calculate sums which go through 0 e.g. $25 - 32 = -7$ and $-7 + 25 = 18$
Place Value	I can round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000 I can round decimals with two decimal places to the nearest whole number	I can round decimals with two decimal places to one decimal place	I can round any whole number to a required degree of accuracy I can round decimals with three decimal places to one or two decimal places	I can round decimals to any number of decimal places
Problems +/-	I can solve multi-step problems in contexts, deciding which operations and methods to use			
Mental (x/÷)	I am scoring 30+ Platinum level times tables	I am scoring 40+ Platinum level times tables	I am scoring 50+ Platinum level times tables	I am completing Countdown Maths with increasing speed and accuracy
Written (x/÷)	I can use formal written multiplication for TU x TU and HTU x U I can use bus shelter division for THTU ÷ U with remainders	I can use formal written multiplication for HTU x TU I can use long division for HTU ÷ TU without remainders	I can use formal written multiplication for HTU x HTU I can use long division for HTU ÷ TU with remainders	I can use formal written multiplication for THTU x THTU I can use bus shelter and long division for division representing remainders as decimals or fractions
Problems (x/÷)	I can solve problems involving knowledge of factors and multiples i.e. Which numbers are factors of both 12 and 9?/Which numbers are multiples of both 25 and 2? I can solve multi-step problems involving all operations (x÷+-)	I can solve problems involving knowledge of square and cube numbers i.e. What is the largest square/cube number no bigger than fifty?	I can use BIDMAS when solving calculations involving the four operations	I can use BIDMAS when solving calculations including indices e.g. $3 + (4^2 \div 4)$



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Comparing Fractions	<p>I can compare and order fractions whose denominators are all multiples of the same number between 1 and 6 times tables (1/3, 6/9)</p> <p>I can recognise and show families of all equivalent fractions by multiplying denominators and numerators by the same number</p>	<p>I can compare and order fractions whose denominators are all multiples of the same number for all times tables (3/7, 6/21)</p>	<p>I can compare and order fractions using common multiples e.g. 2/5 and 4/6</p> <p>I can use common factors to simplify fractions e.g. $20/60 = 2/6 = 1/3$</p>	<p>I can use common factors (including 7s, 8s and 9s) to simplify fractions</p>
Fraction Calculations	<p>I can add and subtract fractions whose denominators are multiples of the same number e.g. $2/3 + 4/9 = 6/9 + 4/9 = 10/9$</p> <p>I can multiply proper fractions by whole numbers e.g. $2/3 \times 3 = 2/3 \times 3/1 = 6/3$</p>	<p>I can add and subtract fractions whose denominators are multiples of the same number and simplify answers e.g. $2/3 + 4/9 = 6/9 + 4/9 = 10/9 = 1 \frac{1}{9}$</p> <p>I can multiply proper and improper fractions by whole numbers e.g. $4/3 \times 3 = 4/3 \times 3/1 = 12/3$</p>	<p>I can add and subtract mixed numbers where the denominators are the same e.g. $1 \frac{3}{5} + 2/5$</p> <p>I can multiply simple pairs of proper fractions, writing the answer in its simplest form</p>	<p>I can add and subtract mixed numbers where one denominator is a multiple of the other e.g. $1 \frac{3}{5} + 6/10$</p>
Decimals as Fractions	<p>I can convert between unit fractions and decimals e.g. 1/4s, 1/2s, 1/3s 1/5s, 1/20s and 1/25s</p>	<p>I can convert between fractions and decimals whose denominators are factors of 100 e.g. $12/25 = 48/100 = 0.48$</p>	<p>I can convert between fractions and decimals where simplifying is required first e.g. $12/16 = 3/4 = 0.75$</p>	<p>I can use a calculator to convert between any fractions and decimals</p>
Percentages	<p>I can recognise the per cent symbol (%) and know that it can be written as a fraction of 100 e.g. $22\% = 22/100$</p> <p>I can convert between fractions, decimals and percentages equivalent to $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$, $\frac{1}{3}$, $\frac{2}{3}$</p>	<p>I can convert between fractions, decimals and percentages whose denominators are factors of 100 e.g. $4/25 = 16/100 = 16\% = 0.16$</p>	<p>I can find 25%, 50%, 75% and multiples of 10% of quantities</p> <p>I can convert between fractions, decimals and percentages whose denominators are factors of 100 with increasing speed e.g. $4/25 = 16/100 = 16\% = 0.16$</p>	<p>I can find any percent of a quantity by dividing by 100 first</p> <p>I can convert between fractions, decimals and percentages using a calculator</p>
Algebra			<p>I can describe linear number sequences involving all operations</p> <p>I can extend a number sequence when given the rule</p>	<p>I can write an expression to describe the nth term of an arithmetic sequence</p> <p>I can substitute into simple formulae to generate a number sequence</p>



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Year 6 Geometry, Measuring and Statistics				
	6.1	6.2	6.3	6.4 + application
Measures	I can convert between different units of metric measure	I can solve problems which involve simple conversion e.g. Ralph has eaten 128g of sweets, Darren has eaten 1.2kg of sweets. Who has eaten the most?	I can solve problems which involve conversions up to two decimal places	I can solve problems which involve conversions up to three decimal places
Perimeter & Area	I can find the perimeter and area of composite rectilinear shapes (cm/m/cm ² /m ²) when the length of all sides are given	I can find the perimeter and area of composite rectilinear shapes with missing sides	I can calculate the area of parallelograms and triangles	
Angles	I know angles on a straight line add up to 180°	I can find missing angles on a straight line	<p>I can find missing angles when two or more angles are missing e.g. triangle on a straight line</p> <p>I know angles in quadrilateral add up to 360°</p> <p>I can find missing angles in a quadrilaterals</p>	<p>I use angle rules to find missing angles in different shapes and composite shapes</p> <p>I can find missing angles in a regular polygon</p>
Interpreting Data			<p>I can interpret pie charts when the fraction or percentage of a slice is given e.g. the pie chart represents 240 people, the red section is 1/5, how many people does this represent?</p> <p>I can find the mean of a set of data</p>	<p>I can interpret pie charts when the fraction or percentage of a slice is not given e.g. the pie chart represents 240 people, look at the red section, estimate the fraction, how many people does this represent?</p> <p>I can create my own pie chart from a set of data</p> <p>I can find the mean of a set of data when presented in a line graph</p>