

Number

Measurement

Geometry

Statistics

Algebra

(Year 6 onwards)

Ratio and Proportion

(Year 6 onwards)

Probability

(Year 7 onwards)

[KEY SKILLS IN MATHS]

Colour coded key performance indicators identifying mathematical strands – All statement banks adapted from NAHT key performance indicators, Rising Stars and Kangaroo Maths

Year 5 Key Skills in Mathematics

Key objective	Developing	Secure	Mastery	My teacher agrees: (Signed)
To read, write, order and compare numbers to at least 1 000 000 and find the value of each digit.	I can read and write numbers to 1,000,000 that are multiples of 100. I can choose the larger number out of two multiples of 100. Eg 30,000 and 300,000.	I can form a number with up to six digit cards and write it in words. I can place the correct sign (=, < and >) in statements, for example between 343,434 and 344,344.	I can write the number of megabytes on a memory stick in words and numerals. I can solve problems involving timelines. I can compare huge values such as the distance between planets.	
To count forwards and backwards with positive and negative whole numbers, including through zero.	I can continue the sequence –1, 0, 1 ...	I can continue the sequence –3, –2, –1 ... in both directions. I can continue the sequence 1,5,9,13,....	I can solve problems such as 'Does the sequence –11, –6, –1 ... pass through 91?' I can find missing numbers in sequences	
To read and write decimals as fractions.	I can change a decimal into a fraction, for example 0.6 is the same as 6/10.	I can change two digit decimals into fractions, for example 0.51 is 51/100.	I can change three digit decimals into fractions, for example 0.126 is 126/1000. I can change any decimal value into a mixed number.	
To round decimals with two decimal places to the nearest whole and to one decimal place.	I can round numbers like 3.14 to the nearest whole number (3) and to one decimal place with the support of a number line.	I can round numbers such as 4.76 to the nearest whole number (5) and to one decimal place (4.8).	I can identify a number that rounds to, for example, 6.6 to one decimal place. I can identify a range of numbers that would round to a given value.	
To read, write, order and compare numbers with up to three decimal places.	I can choose the larger out of 8.6 and 8.68 and write down a number between them with the support of a number line.	I can choose the larger out of 2.608 and 2.86 and write down a number between them.	I can choose the larger out of 2.608 and 2.86 and write down the number that is halfway between them.	
To convert between adjacent metric units of measure for length, capacity and mass. Eg. cm to M, g to Kg	I can apply my knowledge of multiplying by 10, 100 and 1000 and the relationship between metric units to convert 3 kg to 3000 g and, with prompting, convert 3000 g to 3 kg by dividing by 1000.	I can apply my knowledge of multiplying and dividing by 10, 100 and 1000 and the relationship between metric units to convert 3.1 kg to 3100 g and 250 cm to 2.5 m.	I can convert 2.5 m to any of the less common measures such as Pico metres or Mega metres.	
To compare and order fractions whose denominators are all in the same times table.	I can identify the smaller out of 3/8 and 1/4 with supporting diagrams.	I can identify the smaller out of 2/3 and 13/18.	I can identify the smaller out of 2/3 and 13/18 and write down a fraction that is between them.	
To use column addition and subtraction with numbers of any size.	I can calculate 8234 + 3265 and 8234 – 3265 using column methods, with some prompting.	I can calculate 87,234 + 32,465 and 87,234 – 32,465 using column methods.	I can calculate 87,234 + 32,465 and 87,234 – 32,465 using formal columnar methods, describing why each step is used.	
To complete, read and interpret information in tables, including timetables.	I can complete tables, deducing what is needed from the available information, with support. I can answer questions such as 'I get to the bus stop at 8:35 a.m. and catch the first bus that arrives. How long do I have to wait if it is on time?' using an appropriate bus timetable. I can solve problems using timetables such as 'I arrive at Bodmin station at 10 a.m. When is the next train to Plymouth?'	I can complete tables and timetables, deciding what is needed from the available information. I can answer questions such as 'I get to the bus stop at 8:35 a.m. and catch the first bus that arrives. What time do I arrive at Penzance?' when looking at an appropriate bus timetable. I can solve problems using timetables such as 'I need to be in Plymouth by 10 a.m. Which is the latest train from Bodmin I can catch and be there in time?'	I can complete tables and create timetables, deciding what is needed from the available information. I can answer questions such as 'I need to get to Penzance by 9:45 a.m. What is the latest bus that I can catch from St Ives?' when using an appropriate bus timetable. I can plan a trip using public transport to a destination of my choice.	
To solve problems which require knowing important percentage and decimal equivalents.	I can solve problems such as 'Which is better: 25% commission or 0.15 of the sales?'	I can solve problems such as 'Which is more: 20% off or 0.75 of the full amount?'	I can decide which decimal and percentage equivalents are key ones and which can easily be worked out.	
To add and subtract fractions with denominators that are in the same times table.	I can calculate 3/4 + 1/2 with appropriate supporting materials.	I can calculate 3/4 + 5/12 using a written method.	I can make up addition and subtraction problems involving fractions with the same denominator and multiples of the same denominator and solve them.	
To measure and calculate the perimeter of shapes in centimetres and metres.	I can measure the perimeter of an 'L shape' drawn on a piece of paper using a ruler, with prompting.	I can measure the perimeter of an 'L shape' drawn on a piece of paper. I can measure lengths to the nearest mm.	I can estimate the perimeter of an 'L shape', and check it by measuring.	
To identify multiples and factors of a number and common factors of two numbers.	I can list the factors of numbers below 10 and arrange them in pairs that multiply to give 10. I can list multiples of numbers in the multiplication tables.	I can identify multiples or factors of a number from a set of numbers below 50 and list the factors of 40 as 1, 40; 2, 20; 4, 10; 5, 8. I recognises that 5 is a common factor of 40 and 35.	I can list the common factors of two numbers. I know that numbers with only two factors, 1 and themselves, are called prime numbers. I can solve problems involving factors and multiples.	
To multiply a three- or four-digit number by a two digit number using long multiplication.	I can calculate 3964 x 7 and 3964 x 32 using a formal written method such as the grid method.	I can calculate 3964 x 7 and 3964 x 32 using a formal written method such as the grid method or long multiplication.	I can calculate 3964 x 7 and 3964 x 32 using a formal written method such as long multiplication and relate the steps to the grid method.	
To divide numbers up to four-digits by a single-digit number using short division.	I can calculate 714 ÷ 6 using chunking and relating it to the formal written method of short division, with help I can solve division word problems knowing when to round up or down depending on the question with support.	I can calculate 7194 ÷ 6 using the formal written method of short division. I can solve division word problems knowing how to deal with remainders or decimals based on the context of the question.	I can calculate 7194 ÷ 6 using the formal written method of short division and extend it to dividing decimals involving four digits by one digit numbers. I can create and write word problems that require the remainder to be dealt with in different ways.	
To measure and draw angles.	I can draw an angle of 60° and draw a line measuring 7.4 cm.	I can draw an angle of 48° and draw a rectangle measuring 4.5 cm by 9.7 cm.	I can construct a triangle with angles of 48°, 60° and 72° and draw any rectilinear shape, with given dimensions, to the nearest millimetre.	
To know the difference between regular and irregular polygons.	I can decide if a polygon is regular by considering the lengths of the sides and the size of the angles, with prompts. I know the names of shapes with 3,4,5,6,8 sides.	I can sort a set of polygons into a Venn diagram according to whether they have equal sides and whether they have equal angles. I know that shapes in the centre are known as regular. I know the names of shapes with 3,4,5,6,7,8,9,10 sides.	I can sort a set of polygons into a Carroll diagram according to whether they have equal sides and whether they have equal angles. I realise that only the box where both are equal represents regular polygons. I can find symmetry in regular polygons and explain where regular polygons can be useful.	

Year 6 Key Skills in Mathematics

Key Objective	Developing	Secure	Mastery	My teacher agrees: (Signed)
To use negative numbers in context, and calculate intervals across zero	I can work out the difference between -8 and zero. I can answer questions such as 'How much colder is -5°C than 10°C ?'	I can work out the difference between 4 and -5 . I can answer questions such as 'How much warmer is -2°C than -10°C ?'	I can work out the connection between finding the difference between negative numbers and subtracting them. I can solve problems such as ordering the changes in temperature between day and night on the planets in the solar system.	
To convert between standard units of length, mass and time from a smaller unit of measure to a larger unit, and vice versa.	I can solve problems using measures expressed using decimals with one decimal place, with prompting.	I can solve problems using measures expressed using decimals with up to three decimal places.	I can solve problems using measures expressed using decimals with any number of decimal places.	
To write a fraction in its simplest terms by cancelling common factors.	I can identify that the numerator and denominator of $4/8$ can both be halved and then do so. With prompting, I can then repeat the process to obtain $1/2$. I can express halves, quarters and eighths all as eighths.	I can identify that four is a common factor for the numerator and denominator of $8/12$ and divide by it to get $2/3$. I can change $1/3$ to twelfths by multiplying both the numerator and denominator by four, and $3/4$ to twelfths by multiplying both the numerator and the denominator by three.	I can identify the common factors for the numerator and denominator of a fraction, realising that the highest common factor is needed to reach the simplest form in one step. I can express $2/3$ and $4/5$ as fifteenths, knowing that 15 is a common multiple of 3 and 5.	
To know and identify simple fractions, decimals and percentages that have the same value.	I can recall the decimal and percentage equivalents of halves, quarters and tenths, with prompting.	I can recall the decimal and percentage equivalents of halves, quarters, thirds, fifths and tenths in a variety of contexts.	I can recall the decimal and percentage equivalents of halves, quarters, thirds, fifths and tenths in a variety of contexts, selecting the most appropriate form to use for that context and the numbers involved.	
To generate and describe number sequences.	I can continue a growing sequence of shapes such as T-shapes made with five squares then eight squares then 11 squares, describing how to continue the sequence.	I can continue a growing sequence of shapes such as T-shapes made with five squares then eight squares then 11 squares, describing how to continue the sequence and being able to answer questions such as 'Will there be a T-shape with 100 squares in the sequence?'	I can continue a growing sequence of shapes made of squares or triangles, describing how to continue the sequence and being able to write down a formula for the n th term.	
To add and subtract fractions and mixed numbers with different denominators.	I can add and subtract fractions with different denominators using supporting diagrams.	I can add and subtract fractions with different denominators using written methods.	I can add and subtract fractions and mixed numbers with different denominators.	
To interpret and construct simple pie charts.	I can answer questions such as 'Which is the most popular pet?' from an appropriate pie chart. I can collect data and construct a pie chart to represent the results, with support and prompting. I answer questions about changes over time by interpreting line graphs.	I can answer questions such as 'There are 60 people represented on the pie chart. Estimate how many had 'dogs as pets' from an appropriate pie chart. I can construct a pie chart to represent appropriate data. I can collect data and represent it in a pie chart and interpret it. I can ask and answer questions about changes over time by interpreting line graphs.	I can write some questions that can be answered from a pie chart and some that cannot unless additional information is given. I can write some instructions for constructing a pie chart to represent appropriate data. I can collect data and represent it in a pie chart and interpret it. I can investigate questions about changes over time by interpreting line graphs.	
To calculate and interpret the mean as an average of a set of data.	I can calculate the mean of a set of data collected from real life situations.	I can calculate the mean of a set of data collected from real life situations and draw conclusions based on my answers.	I can calculate the mean of a set of data collected from real life situations and draw conclusions based on my answers. I recognise when a result is not in line with expectations.	
To multiply and divide numbers with up to three decimal places by 10, 100, 1000.	I can work out $2.1 \times 10 = 21$ and $56 \div 10 = 5.6$, applying this in the context of measurement.	I can work out $2.3 \times 1000 = 2300$ and $98 \div 1000 = 0.098$, applying this in the context of metric measures.	I can calculate $0.012 \times 600 = 7.2$, applying this in a variety of contexts including measures.	
To use simple formulae expressed in words.	I can work out the area of a rectangle using the formula $\text{area} = \text{length} \times \text{width}$.	I can work out the area of a rectangle using the formula $a = lw$.	I can deduce from the formula $a = lw$ that the formula for the width, if you know the area and length, is $w = a/l$.	
To multiply numbers up to 4 digits by a 2 digit whole number using the written method of long multiplication.	I can multiply 3 digit by 2 digit numbers using the formal method of long multiplication, with jottings to support the process.	I can multiply 4 digit by 2 digit numbers using the formal method of long multiplication.	I can multiply up to 6 digit numbers, including decimals, by 2 digit numbers using the formal method of long multiplication.	
To use long division to divide numbers up to four digits by a two-digit number.	I can divide 3 digit by 2 digit numbers using the formal method of long division, with supporting jottings for the layout.	I can divide 4 digit by 2 digit numbers using the formal method of long division.	I can divide up to 6 digit numbers, including decimals, by 2 digit numbers using the formal method of long division.	
To find percentages of quantities.	I can work out a percentage of an amount, e.g. 5% of 200 kg.	I can compare percentages and fractions of quantities, e.g. work out whether 20% off £15 is a better deal than $1/3$ off £15.	I can increase an amount by a given percentage, e.g. increase £24 by 15%.	
To use simple ratio to compare quantities	I can convert a recipe for two people to a recipe for four people.	I can convert a recipe for four people to a recipe for 12 people.	I can convert a recipe for four people to a recipe for ten people.	
To solve problems involving unequal sharing and grouping using knowledge of fractions and multiples	I can solve problems such as 'There are 30 pupils in the class. One third are boys. How many boys are there in the class?'	I can solve problems such as 'Two-thirds of the class are girls and there are 18 girls. How many boys are there in the class?'	I can solve problems such as 'Three-fifths of the class are girls. There are six boys. How many girls are there in the class?'	
To multiply pairs of fractions in simple cases.	I can multiply fractions using appropriate images and with prompts.	I can multiply fractions using written methods or appropriate diagrams and images.	I can show how to multiply fractions using a written method or an appropriate array.	
To solve missing angle problems involving triangles, quadrilaterals, angles at a point and angles on a straight line.	I can solve some missing angle problems that require use of 'angles at a point sum to 360° ' and 'angles on a straight line sum to 180° ', with prompting.	I can solve missing angle problems that require use of 'angles at a point sum to 360° ' and 'angles on a straight line sum to 180° '.	I can solve a wide variety of missing angle problems that require use of 'angles at a point sum to 360° ' and 'angles on a straight line sum to 180° '.	
To use coordinates in all four quadrants.	I can locate a point in any quadrant of a co-ordinate grid and describe the horizontal and vertical movement from the centre.	I can plot a point in any quadrant of a co-ordinate grid and describe the horizontal and vertical movement from the centre.	I can plot a point in any quadrant of a co-ordinate grid and describe the horizontal and vertical movement from the centre. I know that a change in origin would change the coordinates of any point.	
To draw and translate simple shapes on a coordinate grid, and reflect them in the axes	I can draw the image of a shape following a translation or reflection on the coordinate grid, with prompting.	I can draw the image of a shape following a translation or reflection on the coordinate grid.	I can draw the image of a shape following a combination of translations and reflections on the coordinate grid.	
To calculate the volume of cubes and cuboids.	I can estimate the size of a cubic metre using my knowledge of the length of a metre. I can solve problems such as 'A cube measures 2 cm by 2 cm by 2 cm. How many fit inside a cube with internal measurements of 6 cm by 6 cm by 6 cm?' with prompting.	I can estimate the volume of a cuboid by comparing it with a known volume such as a cubic metre. I can solve problems such as 'A cuboid measures 4 cm by 10 cm by 3 cm. How many cubic centimetres is its volume?'	I can estimate the volume of a cuboid by comparing it with a known volume such as a cubic metre and use this to estimate its weight. I can work out how many cubic centimetres there are in one cubic metre. I can calculate the volume of a cuboid.	

Key Objective	Developing	Secure	Mastering	My teacher agrees: (Signed)
To use positive integer powers and associated real roots.	I know the meaning of power notation. I know the meaning of notation for square roots and cube roots.	I can calculate with powers and roots with and without a calculator.	I can write the value of square (and cube) roots when the solution is not an integer.	
To reliably use column methods to apply the four operations with decimal values.	I can add and subtract decimals.	I can multiply decimals. I can divide a whole number by a decimal.	I can divide a decimal by a decimal.	
To write a quantity as a fraction or percentage of another.	I understand that percent means out of 100. I can write a fraction in its simplest form.	I can convert percentages into fractions. I can write one quantity as a fraction of another.	I can calculate a percentage increase or decrease.	
To use multiplicative reasoning to interpret percentage change.	I can find a percentage of an amount. I understand the relationship between percentages and their decimal equivalents.	I can use a multiplier to find a percentage of an amount. I can use a multiplier to increase or decrease by a percentage.	I can find a multiplier when the original and new amount are known. I can state the percentage change when the multiplier is known.	
To add, subtract, multiply and divide with fractions and mixed numbers.	I can convert improper fractions to mixed numbers. I can convert mixed numbers to improper fractions. I can calculate with fractions with different denominators.	I can add and subtract mixed numbers. I can multiply and divide with fractions and mixed numbers.	I can calculate with fractions in a variety of contexts such as area and perimeter.	
To check calculations using approximation, estimation or inverse operations.	I can round numbers to the nearest 10, 100 and 1000. I can round a number to any number of decimal places.	I understand estimating as the process of finding the rough value of a calculation. I can estimate calculations by rounding numbers to one significant figure.	I can use inverse operations to check solutions to calculations.	
To simplify and manipulate expressions by collecting like terms.	I know the meaning of the words 'variable', 'term' and 'expression'. I can identify like terms.	I can identify like terms in more complex cases. I can simplify expressions by adding and subtracting like terms.	I can create expressions in a variety of contexts such as area and perimeter.	
To simplify and manipulate expressions by multiplying a single term over a bracket.	I understand that ab means $a \times b$	I can multiply a single term over a bracket. I can use powers to write the result of squaring a variable.	I can construct simple expressions involving brackets in a variety of contexts such as area and perimeter.	
To substitute numbers into formulae.	I can substitute numbers into a simple formula.	I can substitute numbers into simple formula involving division. I can substitute numbers into simple formula involving squaring.	I can create formula from given information in a variety of contexts such as area and perimeter.	
To solve linear equations with one unknown.	I understand that an equation has to balance on both sides. I can solve one-step equations.	I can solve two-step and three-step equations. I know how to solve an equation by balancing both sides.	I know how to deal with fractions as solutions. I can construct an equation from given information in a variety of contexts such as area and perimeter.	
To understand and use lines parallel to the axes, $y = x$ and $y = -x$.	I understand that straight line graphs have equations.	I can recognise and plot the graph of $y = x$ I can recognise and plot the graph of $y = -x$ I can plot the graphs of lines parallel to the axes.	I can work out the equation of a graph from plotted points.	
To calculate the surface area of cubes and cuboids.	I can visualise the surface of a cuboid. I can use the formula for the area of a rectangle.	I can find the surface area of a cuboid when the three dimensions are shown. I can state the correct units for a solution to a problem.	I can use the surface area of a cuboid to find a missing dimension in a cuboid.	
To understand and use geometric notation for labelling angles, lengths, equal lengths and parallel lines.	I can recognise and draw a pair of parallel lines.	I recognise and can use the notation for parallel lines. I recognise and can use the notation for labelling lengths. I recognise and can use the notation for equal lengths. I recognise and can use the notation for labelling angles.	I can construct shapes using a compass/ protractor. I can use the correct notation on my constructions.	
To order fractions where the denominators are not multiples of each other.	I can compare fractions with the same denominators. I can convert fractions to a common denominator when they are multiples of each other.	I can convert fractions to a common denominator when the denominators are not multiples of each other. I can order the set of fractions.	I can order a mixed set of fractions, decimals and percentages.	
To identify fluently angles at a point, angles on a straight line and vertically opposite angles.	I understand that the angles on a straight line add up to 180° I understand that the angles around a point add up to 360°	I can calculate missing angles on a straight line and around a point. I understand that vertically opposite angles are equal to each other.	I can solve missing angle problems that use a combination of angle rules.	

Year 8 Key Skills in Mathematics

Key Objective	Developing	Secure	Mastery	My teacher agrees: (Signed)
To apply the four operations with negative numbers.	I can use a number line to add and subtract with negative numbers in simple cases.	I can add and subtract negative values. I can multiply and divide negative values. I can apply the order of operations when calculating with negative numbers.	I can substitute negative numbers into formulae.	
To convert numbers into standard form and vice versa.	I can write a large number in standard form. I can write a small number in standard form.	I can convert large numbers from standard form to ordinary numbers. I can convert small numbers from standard form to ordinary numbers.	I can perform simple calculations with numbers in standard form.	
To apply the multiplication, division and power laws of indices.	I know the multiplication law of indices. I know the division law of indices. I know the power law of indices.	I can use the multiplication law of indices. I can use the division law of indices. I can use the power law of indices.	I apply the multiplication, division and power laws of indices.	
To convert between terminating decimals and fractions.	I can identify when a fraction can be scaled to tenths or hundredths. I can convert a fraction to a decimal by scaling and vice versa.	I can write a decimal as a fraction. I know key decimal and fraction equivalents. I can write a fraction in its lowest terms by cancelling common factors.	I can use division to identify if a fraction is terminating or recurring. I can calculate with decimals and fractions expressing my results in their simplest form.	
To find a relevant multiplier when solving problems involving proportion.	I can find a (whole number) multiplier to move from one number to another.	I can find a (fractional) multiplier to move from one number to another. I can use a multiplier to find missing values in a proportion problem.	I can identify when a set of numbers are in proportion. I can set up a proportional reasoning table when solving problems.	
To solve problems involving percentage change, including original value problems.	I can identify and use a multiplier to increase an amount by a percentage. I can identify and use a multiplier to decrease an amount by a percentage.	I can find a percentage change for a given situation. I can identify a reverse percentage problem (finding the original value)	I can find the original value in a percentage problem.	
To factorise an expression by taking out common factors.	I can factorise an expression by taking out a numerical factor.	I can factorise an expression by taking out an algebraic factor. I can factorise an expression by taking out a numerical and an algebraic factor.	I can recognise when an expression is fully factorised.	
To change the subject of a formula when two steps are required.	I can identify inverse operations. I can identify the correct order of 'undoing' a formula.	I can change the subject of a formula involving one step. I can change the subject of a formula involving two steps. I can change the subject of a formula when the new subject is being subtracted.	I can express an equation in the form $y=mx+c$ as $m=$, $x=$ and $c=$	
To find and use the nth term for a linear sequence.	I can find the term to term rule for a linear sequence.	I can find the nth term of an ascending linear sequence. I can find the nth term of a descending linear sequence. I can use the nth term of a sequence to work out the value of any term.	I can use the nth term of a sequence to deduce whether a number is in the sequence. I can use nth term to identify a value that sequences have in common.	
To solve linear equations with unknowns on both sides.	I know how to solve an equation by balancing both sides.	I can solve an equation with unknowns on both sides. I can solve an equation with unknowns on both sides when brackets are involved. I know how to deal with negative numbers as solutions.	I know how to deal with fractions as solutions. I can construct an equation from given information.	
To plot and interpret graphs of linear functions.	I can create a set of axis. I can plot points in all four quadrants. I can substitute values into formulae. I can substitute negative values into formulae.	I know the connection between a mapping diagram, a table of values and coordinates. I can create a set of points that are on a straight line described by a formula. I can create a graph of a linear function.	I can use graphs representing formulae and equations in problem solving.	
To know and apply the formulae for circumference and area of a circle.	I can recall Pi to 2dp. I recall the formula for area and circumference of a circle.	I can find the diameter when the radius is given and vice versa. I can find the area and circumference of a circle rounding answers appropriately. I can use a scientific calculator when solving problems involving circles.	I can find the diameter of a circle when the circumference is given. I can find radius of a circle when the area is given. I can find the area and perimeter of composite shapes including parts of circles.	
To calculate theoretical probabilities for single events.	I know to write probabilities as fractions, decimals or percentages. I can use fractions, decimals and percentages when working with probabilities.	I understand, and can identify, equally likely outcomes of events. I can work out the probabilities of single events. I can use the fact that the sum of all probabilities for an event is one. I understand and use the term 'Mutually Exclusive'.	I can calculate the conditional probabilities associated with two simultaneous events. I can construct sample space diagrams and probability trees for two simultaneous events.	
To use prime factorisations to find the highest common factor and lowest common multiple of two numbers.	I understand the terms highest common factor and lowest common multiple.	I can use prime number factorisation trees to identify the product of primes. I can use the product of primes of two or more values to calculate the highest common factor and lowest common multiple.	I use prime factorisation to find the HCF and LCM during problem solving activities.	
To use the centre and scale factor to carry out an enlargement with positive integer (fractional) scale factor.	I understand the term scale factor. I understand that enlargements are created from a centre of enlargement.	I can use a positive integer scale factor to enlarge a regular polygon. I can use a fractional scale factor to reduce a regular polygon. I can identify the centre of enlargement from images of an object and its enlarged image.	I can calculate the scale factor used when looking at an object and its enlarged image. I can enlarge irregular objects and images using a positive scale factor.	
To use fractions fluently in situations involving ratio and proportion.	I understand the connection between fractions, ratio and proportion.	I can convert a given ratio into a fraction and vice versa. I can convert a given proportion into a fraction and vice versa.	I use fractions to solve ratio and proportion problems.	
To establish the size of interior and exterior angles in any given regular polygon.	I can identify interior and exterior angles. I use the formula to calculate the sum of internal angles of any polygon.	I use the sum of internal angles to calculate the interior angle of a regular polygon. I use the fact that an interior and exterior angle total 180° to find exterior angles.	I can use my knowledge of interior and exterior angles to solve missing angle problems in both regular and irregular polygons.	