



Week	36	37	38	39
W/C Date	25-Jun	2-Jul	9-Jul	16-Jul
Topic	Number and the number system	Number and the number system	Number and the number system	Calculating
Key Objectives	Write and read numbers up to and including 10000000. Compare and order numbers up to and including 10000000. Multiply numbers by 10 100 and 1000.	Divide numbers by 10. Divide numbers by 100. Divide numbers by 1000. Understand and use negative numbers when working in context, such as temperature.	Calculate intervals across zero. Find common multiples of two numbers. Find common factors of two numbers.	Carry out addition and subtraction calculations mentally involving numbers up to 4 digits. Solve addition and subtraction multi-step problems in context. Multiply a two and three-digit numbers by a two-digit.
Assessment			6M1 BAM	
Homework				

Mathematics Year 8 grades 1+ long term plan

	Assessment weeks
	Moderation week
	Data Capture
	STAR marking
	Teacher A (lead)
	Teacher B

Key Skills to be Covered

**Number:** 4 operations; BIDMAS; prime factors; rounding; ratio and proportion; fraction/decimal/percentage equivalences.  
**Algebra:** linear equations; substitution; simple rearrangements of equations; linear sequences; linear graphs.  
**Shape and Space:** Angles; area & volume; conversion between units; using scales.  
**Data and Probability:** Interpreting and drawing statistical diagrams: Pie charts; bar charts.

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
W/C Date	03-Sep	10-Sep	17-Sep	24-Sep	01-Oct	08-Oct	15-Oct		29-Oct	05-Nov	12-Nov	19-Nov	26-Nov	03-Dec	10-Dec	17-Dec		
Topic	Checking, approximating and estimating	Checking, approximating and estimating	Calculating	Calculating	Calculating: Division	Calculating: Division	Visualising and constructing		Visualising and constructing	Investigating properties of shapes	Investigating properties of shapes	Enrichment, Consolidation and Revision	Assessment 1	Algebraic proficiency: using formulae	Exploring FDP	Exploring FDP		
Key Objectives	Round a number to the nearest 10 Round a number to the nearest 100. Round a number to the nearest 1000. Round a number to the nearest whole number.	Round a number to the nearest 1 decimal place. Round a number to the nearest 2 decimal place. Understand estimating as the process of finding a rough value of an answer or calculation.	Multiply a four-digit number by a two-digit number using long multiplication. Carry out calculations involving a mixture of multiplication and division/addition and subtraction. Carry out calculations involving mixture of multiplication and addition/subtraction.	Carry out calculations involving mixture of division and addition/subtraction. Solve multi-step problems involving addition, subtraction and/or multiplication. Check the order of magnitude of the solution to a calculation, including decimals.	Divide a three-digit number by a two-digit number using a formal written method of division with no remainder and with a remainder. Divide a four-digit number by a two-digit number using a formal written method of division with a remainder and with no remainder.	Understand how to write the remainder to a division problem as a whole number remainder or as a fraction. Understand how to interpret remainder to a division problem appropriately for the context. Solve problems involving division.	Draw 2-D shapes given angles. Draw 2-D shapes given dimensions and angles. Recognise prisms and pyramids.		Classify 3-D shapes including cylinders, cones and spheres. Build 3-D shapes from nets. Draw nets of 3-D shapes. Solve 3-D problems using nets including visualising the edges (vertices) that will meet when folded.	Classify 2D shapes using given categories; e.g. number of sides, symmetry. Find unknown angles in a triangle. Find unknown angles in an isosceles triangle when only one angle is known. Find unknown angles in a quadrilateral.	Find unknown angles in regular polygons. Solve problems involving missing angles. Solve problems involving 2-D shapes. Know the names and relationships of the parts a circle.	<b>RECAP</b> Multiply & divide by 10,100,1000. Negative numbers in context and simple calculations. Rounding. 4 operations and checking size of answer.	<b>Test week and feedback.</b> Solving problems in practical contexts e.g. best buy. Using a timetable to plan a multi-stage journey.	Use a simple one-step and two step formula written in words. Use simple formula expressed in symbols. Convert between miles and kilometres.	Use common factors to simplify fractions. Use common multiples to find equivalent fractions. Compare and order fractions (fractions < 1). Compare and order fractions, including fractions > 1.	Understand a fraction is associated with division. Work out the decimal equivalents of fifths, eighths and tenths. Know simple fractions, decimals and percentages equivalences (e.g. 10%, 20%, 25%, 50%, 75%, 100%). Find equivalencies between fractions, decimals and percentages. Christmaths.		
Assessment		Review task		Review task		6M2 BAM					Review Task							
Homework																		

Week	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
W/C Date	07-Jan	14-Jan	21-Jan	28-Jan	04-Feb	11-Feb		25-Feb	04-Mar	11-Mar	18-Mar	25-Mar	01-Apr	08-Apr		
Topic	Proportional reasoning	Proportional reasoning/Sequences	Sequences/Measuring	Measuring	Angles	RECAP		Calculating fractions, decimals and percentages	Calculating fractions, decimals and percentages	Calculating fractions, decimals and percentages	Solving equations and inequalities	Calculating Space	Calculating Space	Maths for science week		

Key Objectives	Solve simple problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts; e.g. find the value of the parts, given the whole). Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts; e.g. find the value of the whole and parts, given one part). Use a scale factor to solve problems involving similar shapes. Find the scale factor of similar shapes.	Solve problems involving unequal sharing or grouping problems using fractions and multiples. Recognise and describe a linear sequence Find the next terms in a linear sequence. Find a missing term in a linear sequence.	Generate a linear sequence from its description. Solve problems involving linear sequences.  Convert between non-adjacent metric units length from the smaller unit to the larger unit; e.g. centimetres to kilograms	Convert between non-adjacent metric units length from the larger unit to the smaller unit; e.g. kilometres and centimetres. Convert between non-adjacent metric units mass from the smaller unit to the larger unit; e.g. grams to kilograms. Convert between non-adjacent metric units mass from the larger unit to the smaller unit; e.g. kilograms to grams. Convert between non-adjacent time units; e.g. hours to seconds Solve problems involving converting between measures	Find missing angles where they meet at a point. Find missing angles where they meet on a straight line. Find missing angles where they are vertically opposite. Solve problems involving missing angles.	FDP Equivalences. Multiples, factors, primes and squares. 4 operations. Linear sequences. Properties of shapes. Using formulas.	Add and subtract fractions with different denominators. Add and subtract a mixed number and a fraction, including with different denominators.	Multiply a proper fraction by a proper fraction. Divide a proper fraction by a whole number. Multiply U.t by U. Multiply U.th by U.	Calculate percentages of a quantity. Solve problems involving the use of percentages to make comparisons.	Find all combinations of two variables that solve a missing number problem with two unknowns. Find pairs of numbers that satisfy an equation with two unknowns e.g. $a + b = 15$ . Know the basic rules of algebraic notation. Express and solve missing number problems algebraically.	Recognise that shapes with the same areas can have different perimeters and vice versa. Calculate the area of a parallelogram Calculate the area of a triangle. Estimate the volume of cubes and cuboids.	Calculate the volume of cuboid, including cubes. Recognise when it is possible to use formulae to calculate area and volume. Convert between metric units of area in simple cases. Convert between metric units of volume in simple cases.	Substitution. Drawing and interpreting graphs.		
Assessment		6M5 BAM	6M4 BAM		6M10 BAM		6M7 BAM	6M8 BAM	6M9 BAM			6M11 BAM			
Homework															

Week	35	36	37	38	39	40	41	42	43	44	45	46	46
W/C Date	29-Apr	06-May	13-May	20-May		03-Jun	10-Jun	17-Jun	24-Jun				
Topic	Mathematical movement	Revision and Consolidation	End of Year Assessment	Using Scientific Formulas		Problem solving	Presentation of data	Measuring data	Roll-over New timetable.				
Key Objectives	Use coordinates to describe the position of a point in all four quadrants. Use coordinates to plot the position of a point in any of the four quadrants Draw and translate simple shapes. Carry out a reflection using one of the axes as a mirror line.	Possible opportunity to include some problem solving activities.  Revision Stage 6 "Got its".	Test week and feedback. 2 papers.  Teacher led intervention to reflect areas of strength and weakness arising from test.	Substitution and practical application.			Interpret pie charts. Construct a pie chart by measuring angles. Interpret line graphs. Construct line graphs.	Understand the meaning of 'average' as a typicality (or location). Calculate the mean of a set of discrete data. Interpret the mean of a set of discrete data. Use the mean to find a missing number in a set of data.	Year 9 begins				
Assessment	6M12 BAM						6M13 BAM						