Week	36	37	38	39	
W/C Date	25-Jun	2-Jul	9-Jul	16-Jul	
Topic					
Key Objectives					
Assessment					
Homework					

Mathematics Year 7 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	Number and the number system	Number and the number system	Number and the number system	Checking, approximating and estimating	Checking, approximating and estimating	Revision and Preparation for assessment	Calculating		Calculating	Calculating	Calculating: Division	Calculating: Division	Visualising and constructing	Visualising and constructing	Investigating properties of shapes	Investigating properties of shapes		
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.	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.		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.		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 form 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.		
Assessment			6M1 BAM		Review task					Review task		6M2 BAM				Review Task		
Homework							Baseline test											

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	Algebraic proficiency: using formulae	Exploring FDP	Exploring FDP	Proportional reasoning	Proportional reasoning/Sequences	**Sequences/** Measuring		Measuring	Angles	Calculating fractions, decimals and percentages	Calculating fractions, decimals and percentages	Calculating fractions, decimals and percentages	Solving equations and inequalities	Maths for science week		
Key Objectives	Use a simple one-step and two step formula written in words. Use simple formula expressed in symbols.	Use common factors to simplify fractions. Use common multiples to find equivalent fractions. Compare and order fractions (fractions < 1).	Understand a fraction is associated with division. Work out the decimal equivalents of fifths, eighths and tenths.	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.	Solve problems involving unequal sharing or grouping problems using fractions and multiples..	Generate a linear sequence from its description. Solve problems involving linear sequences.		Convert between non-adjacent metric units length from the larger unit to the smaller unit; e.g. kilometres and centimetres.	Find missing angles where they meet at a point. Find missing angles where they meet on a straight line.	Add and subtract fractions with different denominators. Add and subtract a mixed number and a fraction, including with	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.	Substitution. Drawing and interpreting graphs.		

	Convert between miles and kilometres.	Compare and order fractions, including fractions > 1.	Know simple fractions, decimals and percentages equivalences (e.g. 10%, 20%, 25%, 50%, 75%, 100%). Find equivalencies between fractions, decimals and percentages.	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.	Recognise and describe a linear sequence Find the next terms in a linear sequence. Find a missing term in a linear sequence.	Convert between non-adjacent metric units length from the smaller unit to the larger unit; e.g. centimetres to kilometres		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 are vertically opposite. Solve problems involving missing angles.	different denominators.			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.			
Assessment	6M3 BAM		6M6 BAM		6M5 BAM	6M4 BAM			6M10 BAM	6M7 BAM	6M8 BAM	6M9 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	01-Jul	08-Jul	15-Jul	13-May
Topic	Calculating Space	Calculating Space	Revision and Preparation for assessment	Mathematical movement		Problem solving	Presentation of data	Measuring data					
Key Objectives	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.		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.			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.					
Assessment		6M11 BAM		End of Year test.			6M13 BAM						
				6M12 BAM									