

Maths

Year 7

Autumn 1

Week	Unit Name	Learning Objectives	Resources	Assessment
1	Place Value	Recognise numbers up to one billion. Write numbers up to one billion in words. Write numbers up to one billion in figures. Number partitioning	Hegarty Maths	Weekly Progress Checks and Xmas Assessment
		Recognise numbers down to thousandths. Write numbers down to thousandths in words and figures. Number Partitioning		
2	Place Value	Work out intervals on a number line		
		Position integers and decimals on to a number line		
		Understanding inequality symbols. Comparing and ordering Integers		
3	Place Value	Comparing integers and decimals using powers of 10 and inequality symbols		
		What are decimal places What are significant figures		
		Rounding to 1, 2 and 3 significant figures		
4	Addition and Subtraction	Rounding to 1, 2 and 3 decimal places		
		Addition of: 1) Single digit numbers 2) 2 digit by 2 digit including exchanges 3) 3 digit by 3 digit no exchanges		
		Addition of: 1) Up to 4 digit by 4 digit no exchanges. 2) Up to 4 digits by 4. 3) digits including decimals no exchanges.		
5	Addition and Subtraction	Addition of: 1) Up to 4 digits by 4 digits including exchanges 2)		
		Subtraction of: 1) Single digit numbers 2) 2 digit by 2 digit including exchanges 3) 3 digit by 3 digit no exchanges		
		Subtraction of: 1) Up to 4 digit by 4 digit no exchanges. 2) Up to 4 digits by 4. 3) digits including decimals no exchanges.		

6	Addition and Subtraction	Subtraction of: Up to 4 digits by 4 digits including exchanges		
		Addition and Subtraction Worded Problems		
		Perimeter on a 1cm grid Perimeter of regular and irregular polygons		
7	Addition and Subtraction	Perimeter of compound shapes		
		Perimeter in context		
		Determine unknown angles on a line and at a point		
8	Multiplication and Division	Determine unknown angles in a triangle and a quadrilateral		
		Multiplication of 1 digit numbers. Multiplication as a visual concept		
		Long Multiplication of 1 digit by 2 and 3 digit numbers		

Maths

Year 7

Autumn 2

Week	Unit Name	Learning Objectives	Resources	Assessment
1	Multiplication and Division	Multiplication of 2/3 digits by 2/3 digits	Hegarty Maths	Weekly Progress Checks and Xmas Assessment
		Multiplication of decimals 1		
		Multiplication of decimals 2		
2	Multiplication and Division	Multiplying by 10, 100, 1000. Writing as powers		
		Multiplying by 0.1, 0.01, 0.001. Writing as powers		
		Writing in standard form both positive and negative powers		
3	Multiplication and Division	Standard form to ordinary numbers both positive and negative powers		
		Adding and subtracting standard form		
		Multiplying and Dividing Standard form		
4	Multiplication and Division	Area by counting squares. Area of squares. Area of Rectangles		
5	Multiplication and Division	Area of Compound Shapes		
		Area of Triangles		
		Area of Triangles – in context and with Compound Shapes		
6	Multiplication and Division	Division as sharing/grouping – visually Mental Division Division of integers		

		Dividing decimals by integers		
		Dividing integers by decimals		
7	Multiplication and Division	Dividing decimals by decimals		
		Multiplication and Division in context		

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Year 7

Spring 1

Week	Unit Name	Learning Objectives	Resources	Assessment
1	Indices	What are square numbers and cube numbers and how do we find them? What are square roots and cube roots and how do we find them?	Hegarty Maths	Weekly Progress Checks and Xmas Assessment
		Raising numbers to other powers and how do we work them out Power of 0 and power of 1		
		Writing numbers with different bases		
2	Indices	Multiplying and dividing indices		
		Powers raised to other powers		
		Negative powers		
3	Indices	Key fractional powers ($1/2$, $1/3$, $2/3$, $3/2$)		
		Combination of rules		
		2 or 3 operations ($x / + -$)		
4	Order of operations	3 or more operations ($x / + -$)		
		Brackets and powers		
		Inserting brackets		
5	Order of operations	Mean of a set of data		
		Midpoints of two points		

		Area of Trapezium		
6	Negative Numbers	Compound shape area		
		Positive + or – negative Negative + or - positive		
		Negative + or – negative		

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Year 7

Spring 2

Week	Unit Name	Learning Objectives	Resources	Assessment
1	Negative Numbers	Multiplying with negatives	Hegarty Maths	Weekly Progress Checks and Xmas Assessment
		Dividing with negatives		
		Raising negatives to powers		
2	Negative Numbers	2 or 3 operations including negatives		
		3 or more operations including negatives		
		Brackets and powers including negatives		
3	Number Theory	What is a factor		
4	Number Theory	What is a prime number		
		Prime factor decomposition		
		HCF – Listing		
5	Number Theory	HCF – Venn Diagram		
		Using HCF. HCF in context		
		What is a multiple		
6		LCM - listing		

	Number Theory	LCM – Venn Diagram		
		LCM in context		

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Year 7

Summer 1

Week	Unit Name	Learning Objectives	Resources	Assessment
1	Fractions	Fractions pictorially and on a number line	Hegarty Maths	Weekly Progress Checks and Xmas Assessment
		Equivalent Fractions – to include simplifying		
		Converting Improper to Mixed Numbers		
2	Fractions	Converting Mixed Numbers to Improper		
		Converting between Fractions and Decimals		
		Converting between Fractions and Percentages		
3	Fractions	Converting between Percentages and Decimals		
		Adding and subtracting fractions Visually and same denominator		
		Adding and subtracting fractions Different denominator- multiple of another		
4	Fractions	Adding and subtracting fractions Different denominator – find LCM		
		Adding and Subtracting fractions Mixed numbers		
		Adding and Subtracting fractions Mixed numbers		
5	Fractions	Adding and subtracting fractions Worded problems e.g. decimals and fractions		
		Visually, fractions of an amount, no decimal answers		

		Fractions of an amount – decimal answers		
6	Fractions	Fractions of an amount		
		Percentages of an amount – non calculator		
		Increasing and decreasing by a percentage – non calculator		

Maths

Year 7

Summer 2

Week	Unit Name	Learning Objectives	Resources	Assessment
1	Fractions	Percentages of an amount - calculator	Hegarty Maths	Weekly Progress Checks and Xmas Assessment
		Increasing and decreasing by a percentage - calculator		
		Worted Percentage problems		
2	Fractions	Reverse Percentages 1		
		Reverse Percentages 2		
		Multiply fraction by an integer		
3	Fractions	Multiply fraction by a fraction		
		Dividing fraction by an integer		
		Dividing integer by fraction		
4	Fractions	Dividing fraction by fraction		
5	Fractions	Multiplying and Dividing fractions in context		
		Fractions raised to powers		
		2-3 operations with fractions		
6	Fractions	3 or more operations with fractions		