



'Building Resilience for Future Success' Maths Group Termly Plan



Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject."

(Department for Education, Mathematics Programmes of Study: Key Stage 4, 28th September 2021)

The journey from childhood to adulthood is an important time for all children and young people, particularly for those with special educational needs and/or disabilities (SEND). It is vital that children receive the right support and guidance at the earliest opportunity to prepare them for becoming an adult, and to help them reach their full potential and lead a fulfilling life.

(Preparation for adulthood arrangements in local area: a thematic review, 16th December 2024)

Autumn Term

Week/Date	Topic/Resources	Learning Opportunities linked to DFE POS KS4, Skills Builder and Preparation for Adulthood
1 Thurs 4 th Sept	<p><u>Getting to know you lesson</u> Initial session involving a range of maths activities and tasks including engagement tasks to include all learners.</p>	
2 Thurs 11 th Sept	<p><u>BIDMAS</u> Recap of the importance of using BIDMAS to get the correct answer. <u>Tasks</u> BIDMAS codes worksheets 1-4 (progressively get more challenging)</p>	<ul style="list-style-type: none"> • <i>use mathematical language and properties precisely</i> • <i>consolidate their numerical and mathematical capability from key stage 3 and extend their understanding of the number system</i> • <i>SB – Listening, Speaking, Problem Solving</i> • <i>PfA – Employment</i>
3 Thurs 18 th Sept	<p><u>Basic percentages</u> Recap of non-calculator percentages that we would use in everyday life followed by a refresher of using a calculator for more complex calculations. <u>Tasks</u> The Sports Shop Puzzle, GCSE exam style questions</p>	<ul style="list-style-type: none"> • <i>use mathematical language and properties precisely</i> • <i>SB – Listening, Speaking, Problem Solving</i> • <i>PfA – Employment, Independent Living</i>
4 Thurs 25 th Sept	<p><u>Working with fractions</u> Recap of calculating fractions of amounts without a calculator. <u>Tasks</u> Treasure hunt style activity, GCSE style questions</p>	<ul style="list-style-type: none"> • <i>use mathematical language and properties precisely</i> • <i>SB – Listening, Speaking, Problem Solving</i> • <i>PfA – Employment, Independent Living</i>
5 Thurs 2 nd Oct	<p><u>Working with decimals</u> Looking at the link between fractions and decimals. <u>Tasks</u> Decimal bingo activity</p>	<ul style="list-style-type: none"> • <i>use mathematical language and properties precisely</i> • <i>SB – Listening, Speaking, Problem Solving</i> • <i>PfA – Employment, Independent Living</i>

<p>6 Thurs 9th Oct</p>	<p><u>Ratio</u> Looking at the link between fractions and ratio and working on combining ratios</p> <p><u>Task</u> Treasure hunt style activity, GCSE style questions</p>	<ul style="list-style-type: none"> • use mathematical language and properties precisely • extend and formalise their knowledge of ratio and proportion • identify and work with fractions in ratio problems • SB – Listening, Speaking, Problem Solving • PfA – Employment, Independent Living
<p>7 Thurs 16th Oct</p>	<p><u>Indices</u> Recapping the rules of indices, extending into negative and fractional indices if appropriate.</p> <p><u>Task</u> Cracking the codes task using the rules of indices. GCSE questions</p>	<ul style="list-style-type: none"> • use mathematical language and properties precisely • consolidate their numerical and mathematical capability from key stage 3 and extend their understanding of the number system to include powers, roots (and fractional indices) • SB – Listening, Speaking, Problem Solving • PfA – Employment, Independent Living
<p>8 Thurs 23rd Oct</p>	<p><u>Simplifying Expressions</u> Link to everyday life where we naturally abbreviate lists to make them simpler. Recap the rules of indices from week 7 when simplifying expressions that are products.</p> <p><u>Task</u> Shopping list codes & GCSE questions</p>	<ul style="list-style-type: none"> • simplifying expressions involving sums, products and powers, including the laws of indices • SB – Listening, Speaking, Problem Solving • PfA – Employment, Independent Living
<p>Half Term</p>		
<p>9 Thurs 7th Nov</p>	<p><u>Bonfire Night Murder Mystery</u> Use mathematical knowledge to crack the codes to solve the murder mystery puzzle linked to the history of Bonfire Night.</p>	<ul style="list-style-type: none"> • SB – Listening, Speaking, Problem Solving, Teamwork • PfA – Employment, Independent Living
<p>10 Thurs 14th Nov</p>	<p><u>Currencies</u> General discussion around different currencies linking them to their countries (and the flag of the country). Activities around handling our currency.</p>	<ul style="list-style-type: none"> • They should also apply their mathematical knowledge wherever relevant in other subjects and in financial contexts. • develop their use of formal mathematical knowledge to interpret and solve problems, including in financial contexts • graphs in financial contexts • SB – Listening, Speaking, Problem Solving, Teamwork • PfA – Employment, Independent Living

<p>11 Thurs 21st Nov</p>	<p><u>Knowledge and feelings about money</u> General knowledge quiz about money moving on to a task where the YP have a variety of scenarios and have to decide how they would feel and what they would do.</p>	<ul style="list-style-type: none"> • They should also apply their mathematical knowledge wherever relevant in other subjects and in financial contexts. • develop their use of formal mathematical knowledge to interpret and solve problems, including in financial contexts • graphs in financial contexts • SB – Listening, Speaking, Problem Solving, Teamwork • PfA – Employment, Independent Living
<p>12 Thurs 28th Nov</p>	<p><u>Types of Payment Cards</u> Initial task looking at the different banks and building societies we have. Then move on to look at the different types of payment cards available to use and when it appropriate to use each one. Discussion about credit and store cards and interest added.</p>	<ul style="list-style-type: none"> • They should also apply their mathematical knowledge wherever relevant in other subjects and in financial contexts. • develop their use of formal mathematical knowledge to interpret and solve problems, including in financial contexts • graphs in financial contexts • SB – Listening, Speaking, Problem Solving, Teamwork • PfA – Employment, Independent Living
<p>13 Thurs 5th Dec</p>	<p><u>Budgeting</u> Discussion about what budgeting is and why we need to do it. Moving on to a task where the YP have to design a budget that they can manage given a set of circumstances.</p>	<ul style="list-style-type: none"> • They should also apply their mathematical knowledge wherever relevant in other subjects and in financial contexts. • develop their use of formal mathematical knowledge to interpret and solve problems, including in financial contexts • graphs in financial contexts • SB – Listening, Speaking, Problem Solving, Teamwork • PfA – Employment, Independent Living
<p>14 Thurs 12th Dec</p>	<p><u>Wages and Deductions</u> Discussion about how people might get paid differently depending on the job they do. Look at the minimum wages currently in the UK. And what deductions we might have to pay.</p>	<ul style="list-style-type: none"> • They should also apply their mathematical knowledge wherever relevant in other subjects and in financial contexts. • develop their use of formal mathematical knowledge to interpret and solve problems, including in financial contexts • graphs in financial contexts • SB – Listening, Speaking, Problem Solving, Teamwork • PfA – Employment, Independent Living

15 Thurs 19 th Dec	Christmaths Activities A selection of maths activities with a Christmas theme.	<ul style="list-style-type: none"> SB – Listening, Speaking, Problem Solving, Teamwork PfA – Employment, Independent Living
Spring Term		
Week/Date	Topic/Resources	Learning Opportunities
1 Thurs 8 th Jan 2026	<u>Time Management</u> Discussion about calculating with time and the care that is needed as it is not a decimal measurement. Converting between the different units of time. Working backwards to plan a trip. <u>Task</u> TV listings ordering task, GCSE questions	<ul style="list-style-type: none"> <i>interpret and construct tables and line graphs for time series data</i> SB – Listening, Speaking, Problem Solving, Teamwork PfA – Employment, Independent Living
2 Thurs 15 th Jan	<u>Money</u> Discussion about actual money and digital money (cards/electronic payments). Recap of conversion between pence and pounds. <u>Task</u> Supermarket task, GCSE questions	<ul style="list-style-type: none"> SB – Listening, Speaking, Problem Solving, Teamwork PfA – Employment, Independent Living
3 Thurs 24 th Jan	<u>Best Buys</u> Discussion about taking care when shopping as ‘deals’ are not always the best value for money. Linking prices to the quantity/volume. <u>Task</u> Best buy task, GCSE questions	<ul style="list-style-type: none"> <i>interpret situations that describe direct and inverse proportion</i> SB – Listening, Speaking, Problem Solving, Teamwork PfA – Employment, Independent Living
4 Thurs 29 th Jan	<u>Exchange Rates</u> Discussion about different currencies (linked to previous lesson on this if appropriate) that we may encounter when travelling/going on holiday. Look at current conversion rates and what they actually mean. <u>Task</u> Which country task, GCSE questions	<ul style="list-style-type: none"> <i>convert between related compound units (rates of pay, prices) in numerical and algebraic contexts</i> SB – Listening, Speaking, Problem Solving, Teamwork PfA – Employment, Independent Living
5 Thurs 5 th Feb	<u>Timetables & Distance Charts</u> Discussion & questions about how to read & interpret a bus/train timetable. Introduce the idea of a Distance Chart and explain how we use them. <u>Task</u> Getting to Ellesmere Port task, GCSE questions	<ul style="list-style-type: none"> SB – Listening, Speaking, Problem Solving, Teamwork PfA – Employment, Independent Living

<p>6 Thurs 12th Feb</p>	<p><u>Recipes</u> Discussion about proportion and what this actually means. Link this to following a recipe and the effects of changing the quantities of ingredients. <u>Task</u> Shortbread task, GCSE questions</p>	<ul style="list-style-type: none"> • <i>extend and formalise their knowledge of ratio and proportion</i> • SB – Listening, Speaking, Problem Solving, Teamwork • PfA – Employment, Independent Living
Half Term		
<p>7 Thurs 26th Feb 2026</p>	<p><u>Household Bills</u> Activity identifying the different types of household bills we might receive and how they are calculated (looking at fixed charges and price per unit). <u>Task</u> GCSE questions</p>	<ul style="list-style-type: none"> • SB – Listening, Speaking, Problem Solving, Teamwork • PfA – Employment, Independent Living
<p>8 Thurs 5th March</p>	<p><u>Wages</u> Discussion about the differences between a wage and a salary, activity to look at the advantages/disadvantages of each & which kind of jobs might offer a salary. <u>Task</u> GCSE questions</p>	<ul style="list-style-type: none"> • <i>convert between related compound units (rates of pay, prices) in numerical and algebraic contexts</i> • SB – Listening, Speaking, Problem Solving, Teamwork • PfA – Employment, Independent Living
<p>9 Thurs 12th March</p>	<p><u>Pi Day Celebrations</u> Recap of the parts of a circle and where the value of pi comes from (how we use it in calculations for area and circumference). <u>Task</u> Pi day treasure hunt activity</p>	<ul style="list-style-type: none"> • <i>identify and apply circle definitions and properties, including: centre, radius, chord, diameter, circumference, tangent, arc, sector and segment</i> • <i>calculate arc lengths, angles and areas of sectors of circles</i> • SB – Listening, Speaking, Problem Solving, Teamwork • PfA –
<p>10 Thurs 19th March</p>	<p><u>Units of Measure</u> Brainstorm activity naming as many different units of measure as we all know. Sort the units by category of what they measure. Discussion around metric/imperial units if appropriate. Look at conversion of metric units (including area & Volume if appropriate) <u>Task</u> Wordy questions that involve measurements.</p>	<ul style="list-style-type: none"> • <i>use standard units of mass, length, time, money and other measures, including with decimal quantities</i> • SB – Listening, Speaking, Problem Solving, Teamwork • PfA – Independent Living

<p>11 Thurs 26th March</p>	<p><u>Speed, Distance, Time</u> Discussion about real life applications of speed (speed limits, athletics, F1) and the units of measure used. Look at the speed/distance/time triangle (cross curricula links with science) and how we use it. <u>Task</u> GCSE questions</p>	<ul style="list-style-type: none"> • <i>convert between related compound units (speed) in numerical and algebraic contexts</i> • <i>plot and interpret graphs (including reciprocal graphs {and exponential graphs}) and graphs of non-standard functions in real contexts, to find approximate solutions to problems such as simple kinematic problems involving distance, speed and acceleration</i> • <i>SB – Listening, Speaking, Problem Solving, Teamwork</i> • <i>PfA – Employment, Independent Living</i>
<p>12 Thurs 2nd April</p>	<p><u>Perimeter & Area Problems</u> Discussion about real life applications of perimeter and area. Identify the units used to measure. Recap of the different formulas for area (mention the GCSE Formula Sheet). Work through the area & cost problem <u>Task</u> GCSE questions</p>	<ul style="list-style-type: none"> • <i>calculate and solve problems involving: perimeters of 2-D shapes (including circles), areas of circles and composite shapes</i> • <i>compare lengths, areas and volumes using ratio notation and/or scale factors</i> • <i>SB – Listening, Speaking, Problem Solving, Teamwork</i> • <i>PfA – Employment, Independent Living</i>
<p>Summer Term</p>		
<p>Note: GCSE Students will be working through past papers during this term also</p>		
<p>Week/Date</p>	<p>Topic/Resources</p>	<p>Learning Opportunities</p>
<p>1 Thurs 23rd April 2026</p>	<p><u>BIDMAS</u> Recap of the importance of using BIDMAS to get the correct answer. <u>Tasks</u> BIDMAS codes worksheets 1-4 (progressively get more challenging)</p>	<ul style="list-style-type: none"> • <i>use mathematical language and properties precisely</i> • <i>consolidate their numerical and mathematical capability from key stage 3 and extend their understanding of the number system</i> • <i>SB – Listening, Speaking, Problem Solving</i> • <i>PfA – Employment</i>

<p>2 Thurs 30th April</p>	<p><u>Basic percentages</u> Recap of non-calculator percentages that we would use in everyday life followed by a refresher of using a calculator for more complex calculations. <u>Tasks</u> The Sports Shop Puzzle, GCSE exam style questions</p>	<ul style="list-style-type: none"> • <i>use mathematical language and properties precisely</i> • SB – Listening, Speaking, Problem Solving • PfA – Employment, Independent Living
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Half Term		
<p>6 Thurs 4th June 2026</p>	<p><u>Currencies</u> General discussion around different currencies linking them to their countries (and the flag of the country). Activities around handling our currency.</p>	<ul style="list-style-type: none"> • <i>They should also apply their mathematical knowledge wherever relevant in other subjects and in financial contexts.</i> • <i>develop their use of formal mathematical knowledge to interpret and solve problems, including in financial contexts</i> • <i>graphs in financial contexts</i> • SB – Listening, Speaking, Problem Solving, Teamwork • PfA – Employment, Independent Living

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<p>10 Thurs 2nd July</p>	<p><u>Wages and Deductions</u> Discussion about how people might get paid differently depending on the job they do. Look at the minimum wages currently in the UK. And what deductions we might have to pay.</p>	<ul style="list-style-type: none"> • They should also apply their mathematical knowledge wherever relevant in other subjects and in financial contexts. • develop their use of formal mathematical knowledge to interpret and solve problems, including in financial contexts • graphs in financial contexts • SB – Listening, Speaking, Problem Solving, Teamwork • PfA – Employment, Independent Living

<p>11 Thurs 9th July</p>	<p><u>Movie Maths – Making Millions lesson 1</u> Introduce the project. Group discussion around the cost associated with making films and the hidden costs that get overlooked. Ask the YP about their favourite films. Give the YP time to do their own research and create a draft report.</p>	<ul style="list-style-type: none"> • SB – Listening, Speaking, Problem Solving, • PfA – Independent Living
<p>12 Thurs 16th July</p>	<p><u>Movie Maths – Making Millions lesson 2</u> Recap the project and give the YP the time to create their report/poster/PowerPoint. Ask the YP to share what they have found out with the group.</p>	<ul style="list-style-type: none"> • SB – Listening, Speaking, Communication • PfA – Independent Living