

6.3 E Class - Explorer Curriculum -

Promote Facts (keywords)

Rehearsal of key content.

Careful Sequenced topics.

Encourage learners to: • Develop fluent knowledge, skills and understanding of fundamental mathematical methods and concepts • acquire, select and apply mathematical techniques to solve problems • Reason mathematically, make deductions and inferences and draw conclusions • Comprehend, interpret and communicate mathematical information in a variety of forms appropriate to the information and context.

Year	Autumn 1 2026 - 2027	Autumn 2 2026 - 2027	Spring 1 2026 - 2027	Spring 2 2026 - 2027	Summer 1 2026 - 2027	Summer 2 2026 - 2027
	<u>Topic:</u> Place value. Addition and Subtraction Directed Number <u>Suggested Key Questions:</u> What does each digit tell us? How is 3,045 different from 3,405? What happens when we divide by 10, 100, 1000 What does “add” and “subtract” mean? How are addition and subtraction linked?	<u>Topic:</u> Multiplication and Division Equivalent Fractions Addition and Subtraction of Fractions <u>Suggested Key Questions:</u> What patterns exist in multiplication? How does knowing times tables help with division? What does “Equivalent” mean What do we do to the numerator and denominator to make them the same?	<u>Topic:</u> Fraction of Amounts Sharing by a Ratio <u>Suggested Key Questions:</u> How do we find $\frac{1}{2}$ of a number? What about a $\frac{1}{4}$? How can we use division to help us? What happens when it isn't a unit fraction? How does a ratio differ to a fraction? How can we share by the same ratio? <u>Key Skills and Knowledge:</u>	<u>Topic:</u> Lists and Outcomes Statistics – Collecting and Respresenting Data <u>Suggested Key Questions:</u> How do we know when we've found every outcome? What methods can we use? How can we quickly collect our data? Which graph would show the data best? <u>Key Skills and Knowledge:</u>	<u>Topic:</u> Factors, Multiples and Primes Geometry and Position – 4 quadrant coordinates <u>Suggested Key Questions:</u> What is a factor? What is a multiple? How can we find factors of a number? How do we know if a number is prime? Can you prove a number is not prime? Which number do we read first?	<u>Topic:</u> Measures – Length and Capacity Convert Measures <u>Suggested Key Questions:</u> What tools can we use to measure length? What units would be best for 'x' object? How can we estimate a length or capacity before measuring? How can we check our measurements are sensible? How can we change cm to m? M to km? MI to I?

	<i>What does a minus sign mean?</i> <i>How can a number be smaller than zero?</i> <i>Where are negative numbers used in real life?</i> Key Skills and Knowledge: Value of each digit in numbers up to at least 1,000,000. How to read, write, and say large numbers. Effect of multiplying/dividing by 10, 100, 1,000. Addition and subtraction as inverse operations Mental strategies/paper methods Position of positive and negative numbers on a number line Rules for adding and subtracting with negatives Ordering positive and negative numbers	<i>What must be the same before fractions are added?</i> <i>How can we make denominators the same?</i> Key Skills and Knowledge: Multiplication as repeated addition Times tables up to 12x12 Check division using multiplication Meaning of numerator/denominator Multiplying/Dividing numerator and denominator by the same number Find common denominators Simplify answers	Link between fractions and division Find simple fractions (halves and quarters) Use of multiplication for non-unit fractions Link between ratio and fractions Simplify ratios Share amounts into a ratio	List outcomes systematically. Use tables, lists, or tree diagrams. Identify missing outcomes. Collect data effectively using tally marks. Draw and interpret bar charts, pictograms, Extract information to answer questions.	<i>How do we know which quadrant we are in?</i> <i>How does moving into a negative direction change the coordinates?</i> <i>How can we describe the movement from one point to another?</i> Key Skills and Knowledge: Definitions of factor, multiple, prime number. Find prime numbers up to at least 20. Find all factors/multiples of a number. Test if a number is prime. Order of coordinates (x, then y). Position of quadrants on a grid. Plot coordinates in all four quadrants. Read coordinates of given points.	<i>How can place value help us with conversions?</i> Key Skills and Knowledge: Common metric units (mm, cm, m, km; ml, l). Relationship between units (e.g., 100 cm = 1 m). Measure using a ruler or measuring vessel. Estimate and check measurements. Choose appropriate units for context. Metric conversion rules ($\times 10$, $\times 100$, $\times 1,000$ or $\div 10$, $\div 100$, $\div 1,000$). Common imperial–metric conversions (if relevant). Convert between metric units of length, mass, capacity. Apply conversions in problem contexts. Use place value understanding in conversions.
Links to Gatsby Benchmarks:	Benchmark 4 Links to STEM opportunities and careers involve Mathematics	Benchmark 2 Share key employment statistics of current job market. How is the current market useful for mathematic skills?	Benchmark 2 Share key employment statistics of current job market. How is the current market useful for mathematic skills?	Benchmark 2 Share key employment statistics of current job market. How is the current market useful for mathematic skills?	Benchmark 4 Links to STEM opportunities and careers involve Mathematics	Benchmark 2 Share key employment statistics of current job market. How is the current market useful for mathematic skills?