

Scheme Of Work

Subject	Mathematics
Learners	Year 10 Secondary School
Qualification	NCFE (EL1-EL3) Functional Skills Qualification in Maths

Intent

Our aim for the Applied Skills Pathway is to strengthen mathematical skills for Year 10 learners through practical, purposeful, and engaging learning experiences. This pathway focuses on helping students apply maths confidently to everyday and workplace situations, using numbers, measures, data, and problem solving to make sense of the world around them. Lessons are active, visual, and rooted in real contexts such as budgeting, time management, measurement, and interpreting information. Learners are encouraged to think independently, explain their reasoning, and select methods that suit different tasks. Teaching builds fluency and understanding step by step, supporting learners to apply core mathematical processes with increasing accuracy and confidence.

Through regular modelling, practice, and discussion, students develop the ability to solve problems, analyse outcomes, and check their results effectively. Ultimately, the Applied Skills Pathway prepares learners to achieve success in their NCFE Maths qualification and to use essential numeracy skills confidently in life, work, and further study.

Outcomes we want students to achieve:

The measured outcome within this subject will differ from our other subjects, as these are outcomes expected by the awarding body, which are attached as an appendix to this document.



Implementation

Prior Knowledge Expectations	<p>In this pathway, students may have gaps in applying mathematical skills confidently to everyday contexts. We assume some familiarity with whole numbers, simple addition and subtraction, times tables up to ten, telling the time, reading simple scales, and recognising common coins and notes. Many learners will need support with fluency, accuracy, reasoning, and choosing efficient methods. Where these foundations are insecure, lessons will revisit core numeracy knowledge such as place value, the four operations, estimation and rounding, use of calculators, and the language of measures and data to build a consistent skill base. Students are expected to have some experience discussing their methods with others; however, early sessions will explicitly teach mathematical talk, for example explaining steps clearly, using correct vocabulary, listening to a partner, and checking results.</p> <p>If key KS3 concepts in number, measure, shape, and data are not secure, these will be revisited and modelled through scaffolded practical activities before moving on to higher level tasks. This includes consolidating fraction, decimal, and percentage equivalence, the use of negative numbers in context, reading and drawing simple charts, interpreting timetables, perimeter and area of rectangles, and problem solving with money and time</p>
Reading	<p>Mathematical reasoning and interpretation are taught across all themes to develop both functional understanding and real world application. Strategies include:</p> <ul style="list-style-type: none">• Guided interpretation of accessible, high interest materials such as timetables, charts, maps, price lists, and data tables linked to each theme.• Teaching key strategies for identifying relevant information, recognising patterns, comparing quantities, and interpreting data presented in different forms.• Supported practice using authentic workplace and community materials such as invoices, payslips, bills, travel schedules, and infographics.• Shared problem solving and discussion to build confidence and accuracy, with teacher modelling of how to read, question, and check information effectively.• Use of visual and digital media, including graphs, interactive maps, and online data sources, to strengthen understanding and make mathematical interpretation engaging and purposeful.



Glossary	
Term	Definition
Estimate	A sensible guess or approximation based on known information.
Rounding	Adjusting a number to the nearest whole, ten, hundred, or decimal place for simplicity.
Equivalent	Two values that are the same, shown in different forms (e.g. $\frac{1}{2} = 0.5 = 50\%$).
Fraction	A part of a whole, written with a numerator and denominator.
Percentage	A way of expressing a number as parts per hundred.
Ratio	A comparison showing how one quantity relates to another.
Proportion	When two ratios or relationships are equal or balanced.
Mean	The average found by adding numbers and dividing by how many there are.
Median	The middle value in a list of numbers in order.
Mode	The most common value in a data set.
Range	The difference between the highest and lowest values in a data set.
Perimeter	The total distance around the outside of a shape.
Area	The amount of surface a shape covers, measured in square units.
Volume	The amount of space inside a 3D object, measured in cubic units.
Conversion	Changing one unit of measure to another (e.g. cm to m).
Scale	The ratio between real size and representation (e.g. 1 cm = 1 m on a map).
Data	Information collected in numerical or categorical form.
Probability	The chance that something will happen, expressed as a fraction, decimal, or percentage.
Operation	A mathematical process such as addition, subtraction, multiplication, or division.
Formula	A rule or equation that shows the relationship between different quantities.



Week-by-Week Learning Outcomes (full qualification outcomes can be found in appendix 2)

Term	Week	Weekly Inquiry Question
Autumn 1: Journeys and Identity	1	How can we count, order and describe our journeys with numbers?
	2	How can we estimate and round to make sensible decisions when travelling or planning?
	3	How can addition and subtraction help us navigate daily challenges?
	4	How can multiplication and division show us patterns and relationships in journeys?
	5	How can fractions, decimals and percentages help us describe parts of a whole journey?
	6	How can we solve real-world problems using what we've learned about numbers?
Autumn 2: Conflict and Perspective	7	How can we compare and measure distance, weight and time to make fair decisions?
	8	How can we use data and graphs to compare points of view?
	9	How can we use shape, position and direction to solve disputes or find balance?
	10	How can we use fractions and ratios to understand fairness and proportion?
	11	How can percentages help us judge value, offers and perspectives in the world around us?
	12	How can data and probability help us understand risk and perspective?



Term	Week	Weekly Inquiry Question
Spring 1: Society and Change	13	How can we use time to understand and plan changes in daily life?
	14	How can money decisions show priorities and values in society?
	15	How can patterns and sequences help us understand trends in society?
	16	How can we use formulae to solve everyday problems and identify change?
	17	How can averages help us make sense of change in society?
	18	How can we use problem solving to improve life in our communities?
Spring 2: Innovation and Discovery	19	How can we use measurement to make or design something new?
	20	How do area and perimeter help us solve real-world problems in design?
	21	How can we use scale and proportion to build or map new ideas?
	22	How can decimals and percentages help us measure progress and growth?
	23	How can we apply formulas and problem solving to innovate?
	24	How can we check and test our results like real-world problem solvers?
	25	How do shapes and patterns help us understand the world around us?



Term	Week	Weekly Inquiry Question
Summer 1: Global Connections	26	How can we use coordinates and direction to explore new places?
	27	How can we use measurement and scale to map the world?
	28	How can conversions help us make sense of global measurement systems?
	29	How can data and statistics help us understand the world?
	30	How can we solve complex global problems using mathematical reasoning?
Summer 2: Leadership and Action	31	How can maths help us solve real-world problems as a team?
	32	How can we interpret and present data to influence others?
	33	How can we use shape and measurement to plan or build for our community?
	34	How can we use averages and probability to make fair decisions?
	35	How can we use percentages, interest and budgeting to plan for the future?
	36	How can we demonstrate everything we've learned through real-world projects?



Week 2 Example: How can we estimate and round to make sensible decisions when travelling or planning?

Duration: 2.5 hours

Which of the four broad areas of need met?			
Communication and Interaction	Cognition and Learning	Physical Health and Development	Social, Emotional and Mental Health

Lesson Phase	Teacher Notes	Student Activity	Evidence & Assessment	Resources
Link (<i>Reviewing last week: How can we count, order and describe our journeys with numbers?</i>)	Revisit key skills from Week 1 through a short warm-up quiz: ordering numbers, counting objects, and identifying the largest/smallest number. Discuss how estimation is connected to counting — we use it when exact numbers aren't practical.	Students work in pairs to order number cards and estimate totals in quick challenges (e.g. "How many miles might it be to school?").	Informal questioning to assess recall; observation of participation and ability to compare quantities.	Number cards, mini whiteboards, printed distance cards (map prompts).
Explain	Introduce the key concept: estimation and rounding in real-life contexts such as planning a journey, budgeting fuel, or timing. Model rounding to the nearest 10 and 100 using place value charts. Demonstrate how rounding helps make quick, sensible decisions.	Students watch and contribute examples (e.g. $46 \approx 50$, $178 \approx 200$). Discussion: When might exact accuracy <i>not</i> be necessary?	Teacher questioning; verbal checks of understanding; student responses showing correct rounding to tens/hundreds. Collected worksheets showing rounded answers and estimates; teacher observation of reasoning and accuracy; peer	Place value chart poster, interactive whiteboard slides, visual number line.
Activity	Divide learners into differentiated groups:	Learners complete travel-themed estimation tasks, such as calculating approximate total miles on		Travel timetables, mock tickets, classroom maps, calculators (for higher levels).



	<p><i>E1–E2:</i> Estimation games with counting objects and rounding to nearest 10.</p> <p><i>E3–L1:</i> Word problems involving rounding distances, journey times, or ticket prices.</p> <p><i>L2:</i> Multi-step estimation tasks including rounding decimals and checking reasonableness of answers.</p>	a route map, estimating total cost of transport tickets, or rounding travel times. Students explain their reasoning to a partner or small group.	feedback on explanation clarity.	
R (Review)	Bring the class together to review strategies: What helped you decide whether to round up or down? When might estimation be useful in real life? Encourage self-assessment of confidence levels using a traffic-light system.	Group discussion and reflection; students share one situation where they use estimation outside school.	Verbal reflection recorded in notebooks or skills logs; teacher notes on misconceptions to revisit.	Reflection sheet, skills log.
Next (<i>Linking to Week 3: How can addition and subtraction help us navigate daily challenges?</i>)	Preview how estimation links to addition and subtraction — we use rounding to check answers or make mental calculations quicker.	Short paired challenge: estimate the total cost of two items, then calculate exactly: discuss how close the estimate was.	Exit tickets comparing estimate vs. exact; use as diagnostic for Week 3 planning.	Price cards, mini whiteboards, calculators (optional).

Level	Outcomes
■ Entry 1	1.5 Solve missing number problems up to 10.
■ Entry 2	2.1 Estimate number of items (up to 100). 2.2 Round to nearest 10.
■ Entry 3	3.1 Approximate by rounding to nearest 10 or 100.



Differentiation:

Entry 1–2	Entry 3–Level 1
Use concrete objects and visual aids (number lines, cubes). Guided group support and repetition of key vocabulary (“nearest ten,” “estimate”).	Provide structured worksheets with scaffolded questions that build from rounding whole numbers to applying estimation in short word problems.

Developmental Learning Links:

- **Functional Skills Progression:** Builds fluency in estimating, rounding, and checking results. These are key skills in Functional Skills Maths where learners must show accuracy and reasonableness in practical situations such as handling money, reading timetables, and calculating totals.
- **GCSE Readiness:** Develops number sense and approximation strategies that support GCSE objectives in mathematical reasoning and problem solving. Learners practise selecting efficient methods, explaining their thinking, and evaluating the accuracy of their results.
- **Workplace and Life Skills:** Strengthens everyday numeracy by helping learners use estimation to make sensible decisions about travel, budgeting, and time management.
- **Problem Solving and Reasoning:** Builds confidence in explaining choices, checking results, and deciding whether an answer makes sense. This supports progression to higher levels of mathematical thinking and vocational application.



Impact

Qualification Achieved	NCFE (EL1-L2) Functional Skills Qualification in Maths	
Links to National Curriculum		
<ul style="list-style-type: none"> • Builds on KS3 number, measure, and data knowledge, deepening fluency, reasoning, and problem solving. • Reinforces key mathematical processes such as calculation, estimation, and interpreting information from tables, charts, and graphs. • Supports national curriculum aims of developing mathematical fluency, reasoning mathematically, and solving problems in real contexts. • Prepares learners to apply core number, measure, and data skills to real situations in life, work, and further study. 		
Assessment of Understanding and Retention		
Formative Assessment	Summative Assessment	
Regular teacher questioning, peer discussion, and quick checks during lessons monitor understanding and build confidence. Mini tasks and quizzes assess specific skills such as estimation, rounding, or data interpretation. Learners receive immediate feedback to correct misconceptions and reinforce strategies.	End of term assessments replicate Functional Skills exam-style questions using real world scenarios. Learners complete mixed tasks involving number, measure, and data to demonstrate accuracy, reasoning, and problem solving. Final assessments track progress against NCFE standards and identify areas for further support..	
Evidence of Independent Application		
<ul style="list-style-type: none"> • Learners maintain a personal maths log or portfolio showing independent problem solving, calculations, and reflections on their progress. • Real world tasks each term allow students to apply skills beyond the classroom, such as managing money, planning journeys, or analysing information. • Students are encouraged to use maths in daily life, linking classroom learning to practical activities such as budgeting, measuring, or comparing prices. 		
Support Progress for All Pupils		
<ul style="list-style-type: none"> • Modelled examples and scaffolds are used early in the learning process, gradually reduced as confidence grows. • Visual prompts, manipulatives, and real life materials support understanding for lower levels, while stretch questions challenge higher levels. • Small group support, teacher conferencing, and peer tutoring ensure personalised feedback. • Positive reinforcement and opportunities to redraft or revisit problems help build resilience and mathematical confidence. 		
Preparation for Future Learning		
<ul style="list-style-type: none"> • The Core Skills Pathway develops practical numeracy and reasoning skills required for success in vocational study, apprenticeships, and employment. • Learners gain confidence in applying maths to realistic situations such as budgeting, interpreting data, and working with measures. • Teaching fosters independence and persistence in solving unfamiliar problems, laying strong foundations for Level 2 and GCSE Maths. 		



- Students leave equipped with the skills to make informed decisions, interpret quantitative information, and manage everyday mathematical challenges confidently.



Appendix 1: Outcomes

■ ENTRY LEVEL 1	
Unit	Assessment Criteria
Using Whole Numbers	<ul style="list-style-type: none"> <input type="checkbox"/> 1.1 Count reliably up to ten items. <input type="checkbox"/> 1.2 Order numbers up to ten. <input type="checkbox"/> 1.3 Recognise simple patterns and sequences. <input type="checkbox"/> 1.4 Solve missing number problems. <input type="checkbox"/> 2.1 Read whole numbers up to ten. <input type="checkbox"/> 2.2 Recognise numbers in different styles. <input type="checkbox"/> 2.3 Write whole numbers up to ten in words and figures. <input type="checkbox"/> 3.1 Show understanding of the vocabulary of comparing numbers. <input type="checkbox"/> 3.2 Use the vocabulary of comparing numbers. <input type="checkbox"/> 3.3 Show understanding of ordinal numbers (first, second, third).
Adding and Subtracting	<ul style="list-style-type: none"> <input type="checkbox"/> 1.1 Add single-digit numbers with totals to 10. <input type="checkbox"/> 1.2 Interpret + and =. <input type="checkbox"/> 1.3 Use related vocabulary (for example <i>and, plus, equals</i>). <input type="checkbox"/> 2.1 Subtract single-digit numbers from numbers up to 10. <input type="checkbox"/> 2.2 Interpret – and =. <input type="checkbox"/> 2.3 Use related vocabulary (for example <i>take away, minus, equals</i>). <input type="checkbox"/> 3.1 Identify and interpret symbols +, –, = in practical situations. <input type="checkbox"/> 3.2 Estimate number of items (up to 10).



■ ENTRY LEVEL 1

Unit	Assessment Criteria
	<input type="checkbox"/> 3.3 Be able to use primary functions of a calculator.
Money and Time	<input type="checkbox"/> 1.1 Recognise and select different coins. <input type="checkbox"/> 1.2 Recognise and select different notes. <input type="checkbox"/> 1.3 Identify prices expressed in whole numbers up to 10. <input type="checkbox"/> 2.1 Relate familiar events to different times, days, seasons. <input type="checkbox"/> 2.2 Demonstrate understanding of and use vocabulary related to time.
Using Size, Shape and Space	<input type="checkbox"/> 1.1 Use simple terms to describe size. <input type="checkbox"/> 1.2 Use simple terms to describe dimensions. <input type="checkbox"/> 1.3 Use simple terms to describe weight. <input type="checkbox"/> 1.4 Use simple terms to describe capacity. <input type="checkbox"/> 1.5 Use direct comparisons for size, weight and dimensions. <input type="checkbox"/> 2.1 Identify common 2-D and 3-D shapes. <input type="checkbox"/> 2.2 Follow directions using everyday positional vocabulary (<i>between, inside, near to</i>).
Using and Communicating Data	<input type="checkbox"/> 1.1 Identify simple numerical information from a list. <input type="checkbox"/> 2.1 Identify criteria to sort familiar objects. <input type="checkbox"/> 2.2 Sort and classify objects using a single criterion. <input type="checkbox"/> 2.3 Make simple lists. <input type="checkbox"/> 3.1 Use objects, simple images or whole numbers to present results. <input type="checkbox"/> 3.2 Use basic terms when identifying outcomes.



ENTRY LEVEL 2

Unit	Assessment Criteria
Using Whole Numbers and Fractions	<ul style="list-style-type: none"><input type="checkbox"/> 1.1 Count reliably up to 100 items.<input type="checkbox"/> 1.2 Order numbers up to 100.<input type="checkbox"/> 1.3 Read whole numbers up to 100.<input type="checkbox"/> 1.4 Write whole numbers up to 100.<input type="checkbox"/> 2.1 Recognise and use the words <i>half</i> and <i>quarter</i> and symbols $\frac{1}{2}$ and $\frac{1}{4}$.<input type="checkbox"/> 2.2 Identify the relationship between a half and two quarters.<input type="checkbox"/> 2.3 Find halves and quarters of small numbers of items.<input type="checkbox"/> 2.4 Find halves and quarters of simple shapes.
Addition, Subtraction and Multiplication	<ul style="list-style-type: none"><input type="checkbox"/> 1.1 Add two-digit whole numbers.<input type="checkbox"/> 1.2 Subtract two-digit whole numbers.<input type="checkbox"/> 1.3 Round to the nearest 10.<input type="checkbox"/> 1.4 Recall addition and subtraction facts to 10.<input type="checkbox"/> 2.1 Multiply single-digit whole numbers.<input type="checkbox"/> 3.1 Use and interpret +, −, × and = in practical situations to solve problems.<input type="checkbox"/> 3.2 Use estimation in solving problems and to check if answers are sensible.<input type="checkbox"/> 3.3 Solve one-step number and word problems.
Money, Time and Temperature	<ul style="list-style-type: none"><input type="checkbox"/> 1.1 Make amounts up to £1 using different coins.<input type="checkbox"/> 1.2 Calculate the cost in pence of more than one item.<input type="checkbox"/> 1.3 Calculate the cost in pounds and pence of more than one item.<input type="checkbox"/> 1.4 Calculate change from a transaction in pence and whole pounds.



ENTRY LEVEL 2

Unit	Assessment Criteria
	<ul style="list-style-type: none"><input type="checkbox"/> 2.1 Read and record common date formats.<input type="checkbox"/> 2.2 Express time on analogue clocks in hours, half hours, and quarter hours; understand time on 12-hour digital clocks.<input type="checkbox"/> 3.1 Read positive temperatures in everyday situations (e.g. from a weather chart).<input type="checkbox"/> 3.2 Identify the unit of measurement for temperature in the UK.<input type="checkbox"/> 3.3 Compare temperatures.
Using Size, Shape and Measure	<ul style="list-style-type: none"><input type="checkbox"/> 1.1 Measure length using common standard and non-standard units (e.g. metre, centimetre, paces, feet).<input type="checkbox"/> 1.2 Estimate lengths.<input type="checkbox"/> 1.3 Compare lengths (e.g. more than a metre, less than a metre).<input type="checkbox"/> 1.4 Read simple scales for length to the nearest labelled division.<input type="checkbox"/> 1.5 Choose and use appropriate units and measuring instruments.<input type="checkbox"/> 2.1 Measure weight using standard and common units (e.g. grammes, kilograms).<input type="checkbox"/> 2.2 Estimate weights.<input type="checkbox"/> 2.3 Compare weights (e.g. more than a kilogram, less than a kilogram).<input type="checkbox"/> 2.4 Read simple scales for weight to the nearest labelled division.<input type="checkbox"/> 2.5 Choose and use appropriate units and measuring instruments.<input type="checkbox"/> 3.1 Measure capacity using common standard units (e.g. litres, millilitres).<input type="checkbox"/> 3.2 Estimate capacities.<input type="checkbox"/> 3.3 Compare capacities (e.g. more than a litre, less than a litre).



ENTRY LEVEL 2

Unit	Assessment Criteria
	<input type="checkbox"/> 3.4 Read simple scales for capacity to the nearest labelled division. <input type="checkbox"/> 3.5 Choose and use appropriate units and measuring instruments.
Using and Communicating Data	<input type="checkbox"/> 1.1 State the purpose of a table or graph and the associated labels. <input type="checkbox"/> 1.2 Extract information from lists, tables, simple diagrams and bar charts. <input type="checkbox"/> 1.3 Compare numerical information from a bar chart. <input type="checkbox"/> 1.4 Collect simple numerical information. <input type="checkbox"/> 2.1 Sort and classify objects using two criteria (e.g. size, colour, shape). <input type="checkbox"/> 3.1 Use straightforward means such as tables, whole numbers, simple charts and diagrams to present results to others.

ENTRY LEVEL 3

Unit	Assessment Criteria
Using Whole Numbers, Decimals, Fractions and Percentages	<input type="checkbox"/> 1.1 Count up to 1000. <input type="checkbox"/> 1.2 Order numbers up to 1000. <input type="checkbox"/> 1.3 Compare numbers up to 1000. <input type="checkbox"/> 1.4 Read whole numbers up to 1000. <input type="checkbox"/> 1.5 Write whole numbers up to 1000. <input type="checkbox"/> 2.1 State the meaning of unit fractions (e.g. $\frac{1}{5}$, $\frac{1}{8}$, $\frac{1}{10}$).



ENTRY LEVEL 3

Unit	Assessment Criteria
	<ul style="list-style-type: none"><input type="checkbox"/> 2.2 Write common fractions.<input type="checkbox"/> 2.3 Recognise and use fractions in equivalent forms (e.g. $5/10 = 1/2$).<input type="checkbox"/> 3.1 Recognise and use common percentages (e.g. 25%, 50%).<input type="checkbox"/> 3.2 Recognise and use common percentage/fraction/equivalent values (e.g. $1/2 = 0.5 = 50\%$).<input type="checkbox"/> 4.1 State the meaning of decimals up to two decimal places.<input type="checkbox"/> 4.2 Read up to two decimal places in practical contexts (e.g. measures, money).<input type="checkbox"/> 4.3 Write up to two decimal places in practical contexts.<input type="checkbox"/> 4.4 Explain the use of a leading zero in contexts such as £0.35.
Making Calculations	<ul style="list-style-type: none"><input type="checkbox"/> 1.1 Add using three-digit numbers.<input type="checkbox"/> 1.2 Subtract using three-digit numbers.<input type="checkbox"/> 1.3 Approximate by rounding numbers less than 1000 to the nearest 10 or 100.<input type="checkbox"/> 1.4 Recall addition and subtraction facts to 20.<input type="checkbox"/> 1.5 Estimate answers to addition and subtraction calculations.<input type="checkbox"/> 2.1 Multiply two-digit whole numbers by single-digit whole numbers.<input type="checkbox"/> 2.2 Recall simple multiplication tables (2, 3, 4, 5, 10).<input type="checkbox"/> 2.3 Divide two-digit whole numbers by single-digit whole numbers.<input type="checkbox"/> 2.4 Interpret remainders in division operations.<input type="checkbox"/> 2.5 Estimate answers to multiplication and division calculations.<input type="checkbox"/> 3.1 Interpret +, -, ×, ÷ and = in practical situations.



ENTRY LEVEL 3

Unit	Assessment Criteria
	<ul style="list-style-type: none"><input type="checkbox"/> 3.2 Solve problems involving whole numbers and decimals.<input type="checkbox"/> 3.3 Use the standard order of operations in practical situations to solve multi-step calculations.<input type="checkbox"/> 3.4 Solve two-step word problems.
Money, Time and Temperature	<ul style="list-style-type: none"><input type="checkbox"/> 1.1 Add amounts of money using decimal notation.<input type="checkbox"/> 1.2 Subtract amounts of money using decimal notation.<input type="checkbox"/> 1.3 Round sums of money to the nearest £1 or 10p.<input type="checkbox"/> 1.4 Estimate and make approximate calculations relating to cost.<input type="checkbox"/> 2.1 Read time in common formats on analogue clocks and 12- or 24-hour digital clocks.<input type="checkbox"/> 2.2 Measure time in days, hours, and minutes.<input type="checkbox"/> 2.3 Record time in common formats using 12- and 24-hour systems, including am/pm.<input type="checkbox"/> 3.1 Read temperature using standard units.<input type="checkbox"/> 3.2 Compare temperature in standard units.<input type="checkbox"/> 3.3 Compare temperatures in practical contexts.
Using Size, Shape and Measures	<ul style="list-style-type: none"><input type="checkbox"/> 1.1 Estimate length and distance using non-standard and standard units.<input type="checkbox"/> 1.2 Compare length and distance using non-standard and standard units.<input type="checkbox"/> 1.3 Select and use appropriate units for measuring length.<input type="checkbox"/> 1.4 Select and use appropriate instruments for measuring length.



ENTRY LEVEL 3

Unit	Assessment Criteria
	<ul style="list-style-type: none"><input type="checkbox"/> 1.5 Read and measure length using standard and non-standard units to the nearest labelled or unlabelled division.<input type="checkbox"/> 2.1 Estimate and compare weight using non-standard and standard units.<input type="checkbox"/> 2.2 Select and use appropriate units for measuring weight.<input type="checkbox"/> 2.3 Select and use appropriate instruments for measuring weight.<input type="checkbox"/> 2.4 Read and measure weight using standard and non-standard units to the nearest labelled and unlabelled division.<input type="checkbox"/> 3.1 Estimate and compare capacity using non-standard and standard units.<input type="checkbox"/> 3.2 Select and use appropriate units for measuring capacity.<input type="checkbox"/> 3.3 Select and use appropriate instruments for measuring capacity.<input type="checkbox"/> 3.4 Read and measure capacity using standard and non-standard units to the nearest labelled and unlabelled division.<input type="checkbox"/> 4.1 Sort 2-D and 3-D shapes according to their properties (side length, angle, line of symmetry).<input type="checkbox"/> 4.2 Identify the perimeter of simple shapes.<input type="checkbox"/> 4.3 Use straightforward vocabulary related to shape (e.g. <i>side</i>, <i>angle</i>, <i>line of symmetry</i>).<input type="checkbox"/> 4.4 Follow directions using positional vocabulary including the four compass points.
Using and Communicating Data	<ul style="list-style-type: none"><input type="checkbox"/> 1.1 Extract numerical information from lists, tables, diagrams and tally charts.



ENTRY LEVEL 3

Unit	Assessment Criteria
	<ul style="list-style-type: none"><input type="checkbox"/> 1.2 Make numerical comparisons from bar charts and pictograms.<input type="checkbox"/> 2.1 Select categories before collecting data.<input type="checkbox"/> 2.2 Collect data in familiar situations.<input type="checkbox"/> 2.3 Record numerical data using a tally.<input type="checkbox"/> 2.4 Make observations about results.<input type="checkbox"/> 3.1 Use whole numbers, decimals and common fractions to present results.<input type="checkbox"/> 3.2 Present data in tables, charts and diagrams, labelling key elements appropriately.<input type="checkbox"/> 3.3 Use a simple scale to represent data in a bar chart or pictogram. <input type="checkbox"/> 3.4 Provide simple descriptions of outcomes.

LEVEL 1

Unit	Assessment Criteria
Making Calculations	<ul style="list-style-type: none"><input type="checkbox"/> 1.1 Add numbers and decimals up to 2 places using efficient written and mental methods.<input type="checkbox"/> 1.2 Subtract numbers and decimals up to 2 places using efficient written and mental methods.<input type="checkbox"/> 1.3 Approximate by rounding.<input type="checkbox"/> 1.4 Estimate answers to addition and subtraction calculations.



LEVEL 1

Unit	Assessment Criteria
	<ul style="list-style-type: none"><input type="checkbox"/> 2.1 Multiply and divide whole numbers and decimals by 10, 100 and 1000.<input type="checkbox"/> 2.2 Multiply whole numbers and decimals up to 2 places using efficient written and mental methods. <input type="checkbox"/> 2.3 Divide whole numbers and decimals up to 2 places using efficient written methods.<input type="checkbox"/> 2.4 Recall tables up to 10×10 and make connections with division facts.<input type="checkbox"/> 2.5 Estimate answers to multiplication and division calculations.<input type="checkbox"/> 3.1 Solve problems involving positive numbers using the standard order of operations to solve multi-step calculations.<input type="checkbox"/> 3.2 Solve problems involving whole numbers, fractions, decimals and percentages.<input type="checkbox"/> 3.3 Use an electronic or mechanical aid to calculate efficiently using whole numbers, fractions, decimals and percentages.<input type="checkbox"/> 3.4 Check calculations using an electronic or mechanical aid.
Money, Time and Temperature (3 credits)	<ul style="list-style-type: none"><input type="checkbox"/> 1.1 Add numbers and decimals up to 2 places using efficient written and mental methods.<input type="checkbox"/> 1.2 Multiply and divide sums of money.<input type="checkbox"/> 1.3 Record sums of money using appropriate conventions.<input type="checkbox"/> 2.1 Read time in common formats, on analogue clocks, and 12- and 24-hour digital clocks and timetables.<input type="checkbox"/> 2.2 Use different instruments to measure time in days, hours, minutes and seconds.<input type="checkbox"/> 2.3 Record time in common formats and using 12- and 24-hour formats.<input type="checkbox"/> 2.4 Add and subtract times in hours and minutes.



LEVEL 1

Unit	Assessment Criteria
	<ul style="list-style-type: none"><input type="checkbox"/> 2.5 Convert units of time.<input type="checkbox"/> 3.1 Read, estimate, measure and compare temperature using common units and instruments.<input type="checkbox"/> 3.2 Read temperature scales to the nearest labelled and unlabelled division.
Numbers, Decimals, Fractions and Percentages (3 credits)	<ul style="list-style-type: none"><input type="checkbox"/> 1.1 Read and write positive numbers, including large numbers.<input type="checkbox"/> 1.2 Order and compare positive numbers, including large numbers.<input type="checkbox"/> 1.3 Recognise negative numbers in practical contexts (e.g. temperatures).<input type="checkbox"/> 2.1 Read and write common fractions and mixed numbers.<input type="checkbox"/> 2.2 Order and compare common fractions and mixed numbers.<input type="checkbox"/> 2.3 Express one number as a fraction of another (e.g. 10 as a fraction of 30).<input type="checkbox"/> 2.4 Use fractions to find parts of whole-number quantities or measurements (e.g. $\frac{2}{3}$ or $\frac{3}{4}$).<input type="checkbox"/> 3.1 Read and write decimals up to three decimal places.<input type="checkbox"/> 3.2 Order and compare decimals up to three decimal places.<input type="checkbox"/> 4.1 Read and write simple percentages; order and compare simple percentages.<input type="checkbox"/> 4.2 Recognise simple percentage increase and decrease.<input type="checkbox"/> 4.3 Find simple percentage parts of quantities and measures.<input type="checkbox"/> 4.4 Recognise common percentage, fraction and decimal equivalences.<input type="checkbox"/> 4.5 Use equivalences to find part or whole number quantities.
Numerical Relationships, Algebra and Ratios (2 credits)	<ul style="list-style-type: none"><input type="checkbox"/> 1.1 Recognise multiples of 2 to 9, up to 100.<input type="checkbox"/> 1.2 Recognise multiples of 10, 50, 100 and 1000.



LEVEL 1	
Unit	Assessment Criteria
	<input type="checkbox"/> 1.3 Know square numbers up to 10×10 . <input type="checkbox"/> 1.4 Identify factors of numbers. <input type="checkbox"/> 1.5 Recall multiplication facts up to 10×10 and make connections with division facts. <input type="checkbox"/> 2.1 Form word expressions from simple expressions in symbols. <input type="checkbox"/> 2.2 Evaluate simple expressions and formulae. <input type="checkbox"/> 2.3 Translate simple word problems into symbols (+, −, ÷, × and numbers). <input type="checkbox"/> 3.1 Work out simple ratio as the number of parts. <input type="checkbox"/> 3.2 Explain direct proportion as the same rate of increase or decrease. <input type="checkbox"/> 3.3 Use understanding of direct proportion to make simple calculations.
Using Probability (2 credits)	<input type="checkbox"/> 1.1 Use the vocabulary of probability to talk about the likelihood of events and possible outcomes. <input type="checkbox"/> 1.2 Show understanding that some events are certain to happen and some are impossible. <input type="checkbox"/> 2.1 Calculate probability by the number of ways the event can happen divided by the total number of possible outcomes. <input type="checkbox"/> 2.2 Express probability using fractions, decimals and percentages, with the probability scale of 0 to 1.
Using and Communicating Data (3 credits)	<input type="checkbox"/> 1.1 Use understanding of title, labels and simple scales to extract information from lists, tables, diagrams, charts and line graphs.



LEVEL 1

Unit	Assessment Criteria
	<ul style="list-style-type: none"><input type="checkbox"/> 1.2 Use understanding of title, labels and simple scales to interpret information from lists, tables, diagrams, charts and line graphs.<input type="checkbox"/> 2.1 Identify appropriate methods for collecting data.<input type="checkbox"/> 2.2 Collect discrete data in tests and from observations.<input type="checkbox"/> 2.3 Organise discrete data so that it can be easily transferred into a suitable format for sharing.<input type="checkbox"/> 2.4 Find the arithmetical average (mean) for a set of data.<input type="checkbox"/> 2.5 Find the arithmetical range for a set of data.<input type="checkbox"/> 2.6 State how very high or low figures can distort the average (mean).<input type="checkbox"/> 3.1 Use whole numbers, decimals, fractions and percentages to present results.<input type="checkbox"/> 3.2 Represent data in tables, charts, diagrams and line graphs to support the understanding of others.<input type="checkbox"/> 3.3 Select suitable methods, formats and scales to present and describe outcomes.
Using Size, Shape and Space (3 credits)	<ul style="list-style-type: none"><input type="checkbox"/> 1.1 Choose and use appropriate instruments for measuring length and distance.<input type="checkbox"/> 1.2 Choose and use appropriate units for measuring length and distance.<input type="checkbox"/> 1.3 Read scales to the nearest labelled and unlabelled division.<input type="checkbox"/> 1.4 Add and subtract units of measure for length and distance.<input type="checkbox"/> 1.5 Convert units of measure within the same system.<input type="checkbox"/> 2.1 Choose and use appropriate instruments for measuring weight.<input type="checkbox"/> 2.2 Choose and use appropriate units for measuring weight.



LEVEL 1

Unit

Assessment Criteria

- 2.3 Read scales to the nearest labelled and unlabelled division.
- 2.4 Add and subtract units of measure for weight.
- 2.5 Convert units of measure within the same system.
- 3.1 Choose and use appropriate instruments for measuring capacity.
- 3.2 Choose and use appropriate units for measuring capacity.
- 3.3 Read scales to the nearest labelled and unlabelled division.
- 3.4 Add and subtract units of measure for capacity.
- 3.5 Convert units of measure within the same system.
- 4.1 Solve problems using the mathematical properties of regular 2-D shapes.
- 4.2 Draw 2-D shapes in different orientations using grids (e.g. in diagrams or plans).
- 4.3 Work out the perimeter of simple shapes.
- 4.4 Work out the area of rectangles.
- 4.5 Work out the volume of shapes (e.g. cuboids).
- 4.6 Work out dimensions from drawings with simple shapes (e.g. 1 cm represents 1 m).
- 4.7 Follow directions using appropriate positional vocabulary, including the eight compass points.



LEVEL 2

Unit	Assessment Criteria
Making Calculations	<ul style="list-style-type: none"><input type="checkbox"/> 1.1 Add and subtract whole numbers, fractions and decimals up to 3 places using efficient written and mental methods.<input type="checkbox"/> 1.2 Multiply and divide whole numbers, fractions and decimals up to 3 places using efficient written and mental methods.<input type="checkbox"/> 1.3 Explain the use of the words <i>multiple</i> and <i>factor</i> in interpreting multiplication and division facts.<input type="checkbox"/> 1.4 Approximate decimals when solving practical problems.<input type="checkbox"/> 1.5 Apply appropriate strategies to check answers.<input type="checkbox"/> 2.1 Solve problems involving positive and negative numbers using the standard order of operations to solve multi-stage calculations.<input type="checkbox"/> 2.2 Solve problems efficiently involving whole numbers, fractions, decimals and percentages.
Money, Time and Temperature	<ul style="list-style-type: none"><input type="checkbox"/> 1.1 Calculate with sums of money.<input type="checkbox"/> 1.2 Use currency exchange rates to convert between currencies.<input type="checkbox"/> 2.1 Calculate, measure and record time in different formats and in complex contexts.<input type="checkbox"/> 2.2 Interpret dates and times written in different formats.<input type="checkbox"/> 2.3 Select and use appropriate measuring instruments for different tasks (for example, timers on appliances, clocks, watches).<input type="checkbox"/> 2.4 State the relationship between units of time (for example, <i>sec, min, hr, day, week, month, year</i>).<input type="checkbox"/> 3.1 Estimate, measure and compare temperature.<input type="checkbox"/> 3.2 Identify the different scales used to measure temperature.



LEVEL 2	
Unit	Assessment Criteria
	<input type="checkbox"/> 3.3 Convert temperatures from Celsius to Fahrenheit and vice versa. <input type="checkbox"/> 3.4 Read and record temperature accurately from a variety of devices.
Numbers, Decimals, Fractions and Percentages	<input type="checkbox"/> 1.1 Read and write positive and negative numbers of any size. <input type="checkbox"/> 1.2 Order and compare positive and negative numbers of any size. <input type="checkbox"/> 2.1 Order and compare amounts or quantities. <input type="checkbox"/> 2.2 Evaluate one number as a fraction of another. <input type="checkbox"/> 3.1 Order, approximate and compare decimals to solve practical problems. <input type="checkbox"/> 4.1 Order and compare percentages. <input type="checkbox"/> 4.2 Recognise simple percentage increase and decrease. <input type="checkbox"/> 4.3 Find percentage parts of quantities and measurements. <input type="checkbox"/> 4.4 Evaluate one number as a percentage of another. <input type="checkbox"/> 4.5 Identify equivalences between fractions, decimals and percentages (<i>for example, fractions, decimals and percentages are different ways of expressing the same thing</i>).
Numerical Relationships, Algebra and Ratio	<input type="checkbox"/> 1.1 Explain how words and symbols in expressions and formulae are used to represent variable quantities (numbers), not things. <input type="checkbox"/> 1.2 Explain the order in which elements of an algebraic expression must be worked out (e.g. contents of brackets should be worked out first). <input type="checkbox"/> 1.3 Evaluate expressions and make substitutions in given formulae in words and symbols to produce results. <input type="checkbox"/> 2.1 Calculate ratio (e.g. 3:2).



LEVEL 2	
Unit	Assessment Criteria
	<input type="checkbox"/> 2.2 Calculate direct proportion.
Using and Communicating Data	<input type="checkbox"/> 1.1 Extract discrete data from lists, tables, diagrams, charts and line graphs. <input type="checkbox"/> 1.2 Extract continuous data from lists, tables, diagrams, charts and line graphs. <input type="checkbox"/> 1.3 Interpret and use continuous and discrete data from lists, tables, diagrams, charts and line graphs. <input type="checkbox"/> 2.1 Collect discrete data from tests and observations. <input type="checkbox"/> 2.2 Collect continuous data from tests and observations. <input type="checkbox"/> 2.3 Identify appropriate methods for collecting discrete and continuous data. <input type="checkbox"/> 2.4 Organise discrete data. <input type="checkbox"/> 2.5 Organise continuous data. <input type="checkbox"/> 3.1 Find the mean, median and mode. <input type="checkbox"/> 3.2 Use the mean, median and mode as appropriate to compare data. <input type="checkbox"/> 3.3 Find the range in sets of data. <input type="checkbox"/> 3.4 Use the range to describe the spread within sets of data. <input type="checkbox"/> 3.5 Explain how high or low values can distort a data set. <input type="checkbox"/> 4.1 Use whole numbers, decimals and fractions and percentages to present results. <input type="checkbox"/> 4.2 Represent discrete and continuous data in tables, charts, diagrams and line graphs. <input type="checkbox"/> 4.3 Draw conclusions from tables, charts, diagrams and line graphs. <input type="checkbox"/> 4.4 Select and use appropriate methods and forms to present and explain outcomes.



LEVEL 2	
Unit	Assessment Criteria
Using Probability	<ul style="list-style-type: none"> <input type="checkbox"/> 1.1 Explain the difference between <i>independent</i> and <i>combined</i> events in the context of probability. <input type="checkbox"/> 1.2 Identify the range of possible outcomes of combined events. <input type="checkbox"/> 2.1 Calculate probability for independent and combined events. <input type="checkbox"/> 2.2 Record the range of possible outcomes of combined events in tree diagrams or in tables.
Using Size, Shape and Space	<ul style="list-style-type: none"> <input type="checkbox"/> 1.1 Estimate, measure and compare length and distance using metric and imperial units. <input type="checkbox"/> 1.2 Calculate length and distance using units within the same system. <input type="checkbox"/> 1.3 Read scales to different levels of accuracy, including reading between marked divisions. <input type="checkbox"/> 1.4 Calculate length and distance between systems using conversion tables and scales and approximate conversion factors (e.g. $1 \text{ in} = 2.54 \text{ cm}$). <input type="checkbox"/> 2.1 Estimate, measure and compare weight using metric and imperial units. <input type="checkbox"/> 2.2 Calculate weight within the same system. <input type="checkbox"/> 2.3 Read scales to different levels of accuracy, including reading between marked divisions. <input type="checkbox"/> 2.4 Calculate weight between systems using conversion tables, scales and approximate conversion factors (e.g. $1 \text{ kg} = 2.2 \text{ lbs}$). <input type="checkbox"/> 3.1 Estimate, measure and compare capacity using metric and imperial units. <input type="checkbox"/> 3.2 Calculate capacity within the same system. <input type="checkbox"/> 3.3 Read scales to different levels of accuracy, including reading between marked divisions. <input type="checkbox"/> 3.4 Calculate capacity between systems using conversion tables and scales and approximate conversion factors (e.g. $1 \text{ pint} = 568 \text{ ml}$).



LEVEL 2	
Unit	Assessment Criteria
	<ul style="list-style-type: none"><input type="checkbox"/> 4.1 Recognise and name a range of 2-D representations of 3-D shapes (e.g. <i>maps, plans</i>).<input type="checkbox"/> 4.2 Solve problems involving mathematical properties, 2-D shapes and parallel lines.<input type="checkbox"/> 4.3 Draw 2-D shapes in different orientations using grids (e.g. <i>reflect and rotate</i>).<input type="checkbox"/> 4.4 Apply appropriate formulae for finding perimeters and areas of regular shapes (e.g. <i>rectangular and circular surfaces</i>).<input type="checkbox"/> 4.5 Apply appropriate formulae for finding areas of composite shapes.<input type="checkbox"/> 4.6 Apply appropriate common formulae for finding volumes of regular shapes (e.g. <i>cuboid or cylinder</i>).<input type="checkbox"/> 4.7 Work out dimensions from scale drawings (e.g. <i>1:2</i>).<input type="checkbox"/> 4.8 Follow directions using a range of positional vocabulary.



Appendix 2: Outcomes met mapped out

Autumn 1: Journeys and Identity

Week & Focus Question	Focus Strand	Entry 1 Outcomes	Entry 2 Outcomes	Entry 3 Outcomes	Level 1 Outcomes	Level 2 Outcomes
Week 1: How can we count, order and describe our journeys with numbers?	Using numbers and the number system	<input type="checkbox"/> EL1.N1 Read, write, order and compare numbers up to 20. <input type="checkbox"/> EL1.N2 Use whole numbers to count up to 20 items including zero.	<input type="checkbox"/> EL2.N1 Count reliably up to 100 items. <input type="checkbox"/> EL2.N2 Read, write, order and compare numbers up to 200.	<input type="checkbox"/> EL3.N1 Count, read, write, order and compare numbers up to 1000.	<input type="checkbox"/> L1.N1 Read, write, order and compare large numbers (up to one million).	<input type="checkbox"/> L2.N1 Read, write, order and compare positive and negative numbers of any size.
Week 2: How can we estimate and round to make sensible decisions when travelling or planning?	Using numbers and the number system	<input type="checkbox"/> EL1.N3 Add numbers which total up to 20, and subtract numbers from numbers up to 20.	<input type="checkbox"/> EL2.N9 Approximate by rounding to the nearest 10, and use this rounded answer to check results.	<input type="checkbox"/> EL3.N5 Approximate by rounding numbers less than 1000 to the nearest 10 or 100 and use this rounded answer to check results.	<input type="checkbox"/> L1.N12 Approximate by rounding to a whole number or to one or two decimal places.	<input type="checkbox"/> L2.N2 Carry out calculations with numbers up to one million, including strategies to check answers such as estimation and approximation.
Week 3: How can addition and subtraction help us navigate daily challenges?	Using numbers and the number system	<input type="checkbox"/> EL1.N4 Recognise and interpret the symbols +, – and = appropriately.	<input type="checkbox"/> EL2.N5 Add and subtract two-digit numbers.	<input type="checkbox"/> EL3.N2 Add and subtract using three-digit whole numbers.	<input type="checkbox"/> L1.N11 Add, subtract, multiply and divide decimals up to two decimal places.	<input type="checkbox"/> L2.N10 Add, subtract, multiply and divide decimals up to three decimal places.
Week 4: How can multiplication and division show us	Using numbers and the number system	<input type="checkbox"/> EL1.N2 Use whole numbers to count up to 20 items including zero	<input type="checkbox"/> EL2.N6 Multiply whole numbers in the range 0×0 to	<input type="checkbox"/> EL3.N3 Divide three-digit whole numbers by single-	<input type="checkbox"/> L1.N3 Multiply and divide whole numbers and	<input type="checkbox"/> L2.N12 Follow the order of precedence



Week & Focus Question	Focus Strand	Entry 1 Outcomes	Entry 2 Outcomes	Entry 3 Outcomes	Level 1 Outcomes	Level 2 Outcomes
patterns and relationships in journeys?		(reinforced through repeated addition).	12×12 (times tables). <input type="checkbox"/> EL2.N8 Divide two-digit whole numbers by single-digit whole numbers and express remainders.	and double-digit whole numbers and express remainders. <input type="checkbox"/> EL3.N4 Multiply two-digit whole numbers by single- and double-digit whole numbers.	decimals by 10, 100 and 1000.	of operators, including indices.
Week 5: How can fractions, decimals and percentages help us describe parts of a whole journey?	Fractions, decimals and percentages	<input type="checkbox"/> EL1.M5 Recognise coins and notes and write them in numbers with the correct symbols (£ and p), where these involve numbers up to 20.	<input type="checkbox"/> EL2.N10 Recognise simple fractions (halves, quarters and tenths) of whole numbers and shapes. <input type="checkbox"/> EL2.N11 Read, write and use decimals to one decimal place.	<input type="checkbox"/> EL3.N7 Read, write and understand thirds, quarters, fifths and tenths including equivalent forms. <input type="checkbox"/> EL3.N8 Read, write and use decimals up to two decimal places.	<input type="checkbox"/> L1.N10 Read, write, order and compare decimals up to three decimal places. <input type="checkbox"/> L1.N16 Recognise and calculate equivalences between common fractions, percentages and decimals.	<input type="checkbox"/> L2.N4 Identify and know the equivalence between fractions, decimals and percentages. <input type="checkbox"/> L2.N5 Work out percentages of amounts and express one amount as a percentage of another.
Week 6: How can we solve real-world problems using what we've learned about numbers?	Problem solving and application	<input type="checkbox"/> EL1.H11 Read numerical information from lists. <input type="checkbox"/> EL1.H13 Read and draw simple charts and diagrams including a tally chart, block diagram/graph.	<input type="checkbox"/> EL2.H22 Extract information from lists, tables, diagrams and bar charts.	<input type="checkbox"/> EL3.H21 Extract information from lists, tables, diagrams and charts and create frequency tables.	<input type="checkbox"/> L1.H27 Represent discrete data in tables, diagrams and charts including pie charts, bar charts and line graphs.	<input type="checkbox"/> L2.H26 Work out the probability of combined events including the use of diagrams and tables, including two-way tables.



Autumn 2: Conflict and Perspective

Week	Focus Strand	Entry 1 Outcomes	Entry 2 Outcomes	Entry 3 Outcomes	Level 1 Outcomes	Level 2 Outcomes
Week & Focus Question	Focus Strand	Entry 1 Outcomes	Entry 2 Outcomes	Entry 3 Outcomes	Level 1 Outcomes	Level 2 Outcomes
Week 7: How can we compare and measure distance, weight and time to make fair decisions?	Using common measures	<input type="checkbox"/> EL1.M8 Describe and make comparisons in words between measures of items including size, length, width, height, weight and capacity.	<input type="checkbox"/> EL2.M14 Use metric measures of length including millimetres, centimetres, metres and kilometres. <input type="checkbox"/> EL2.M15 Use measures of weight including grams and kilograms.	<input type="checkbox"/> EL3.M14 Use and compare measures of length, capacity, weight and temperature using metric or imperial units to the nearest labelled or unlabelled division.	<input type="checkbox"/> L1.M20 Convert between units of length, weight, capacity, money and time in the same system.	<input type="checkbox"/> L2.M14 Convert between metric and imperial units of length, weight and capacity using a conversion factor or conversion graph.
Week 8: How can we use data and graphs to compare points of view?	Handling information	<input type="checkbox"/> EL1.H12 Sort and classify objects using a single criterion.	<input type="checkbox"/> EL2.H24 Sort and classify objects using two criteria.	<input type="checkbox"/> EL3.H22 Interpret information, make comparisons and record changes from different formats including bar charts and simple line graphs.	<input type="checkbox"/> L1.H28 Group discrete data and represent grouped data graphically.	<input type="checkbox"/> L2.H25 Use the mean, median, mode and range to compare two sets of data.
Week 9: How can we use shape, position and direction to solve disputes or find balance?	Shape and space	<input type="checkbox"/> EL1.M9 Identify and recognise common 2D and 3D shapes including circle, cube, rectangle (including square) and triangle. <input type="checkbox"/> EL1.M10 Use everyday positional vocabulary to describe	<input type="checkbox"/> EL2.M19 Recognise and name 2D and 3D shapes including pentagons, hexagons, cylinders, cuboids, pyramids and spheres. <input type="checkbox"/> EL2.M21 Use appropriate positional vocabulary to describe	<input type="checkbox"/> EL3.M19 Sort 2D and 3D shapes using properties including lines of symmetry, length, right angles and angles in rectangles and triangles. <input type="checkbox"/> EL3.M20 Use appropriate positional	<input type="checkbox"/> L1.M24 Draw 2D shapes and demonstrate understanding of line symmetry and the relative size of angles. <input type="checkbox"/> L1.M26 Use angles when	<input type="checkbox"/> L2.M22 Calculate values of angles and/or coordinates within 2D and 3D shapes. <input type="checkbox"/> L2.M19 Use coordinates in 2D, positive and negative, to specify the positions of points.



Week Week & Focus Question	Focus Strand	Entry 1 Outcomes	Entry 2 Outcomes	Entry 3 Outcomes	Level 1 Outcomes	Level 2 Outcomes
		position and direction including left, right, in front, behind, under and above.	position and direction including between, inside, outside, middle, below, on top, forwards and backwards.	vocabulary to describe position and direction including eight compass points and full, half and quarter turns.	describing position and direction, and measure angles in degrees.	
Week 10: How can we use fractions and ratios to understand fairness and proportion?	Fractions and ratio	<input type="checkbox"/> EL1.N1 Read, write, order and compare numbers up to 20 (applied in simple sharing contexts).	<input type="checkbox"/> EL2.N10 Recognise simple fractions (halves, quarters and tenths) of whole numbers and shapes.	<input type="checkbox"/> EL3.N7 Read, write and understand thirds, quarters, fifths and tenths including equivalent forms.	<input type="checkbox"/> L1.N17 Work with simple ratio and direct proportions.	<input type="checkbox"/> L2.N11 Understand and calculate using ratios, direct proportion and inverse proportion.
Week 11: How can percentages help us judge value, offers and perspectives in the world around us?	Percentages and problem solving	<input type="checkbox"/> EL1.M5 Recognise coins and notes and write them in numbers with the correct symbols (£ and p).	<input type="checkbox"/> EL2.M12 Calculate money in pence up to one pound and in whole pounds of multiple items and write with the correct symbols (£ or p).	<input type="checkbox"/> EL3.M10 Calculate with money using decimal notation and express money correctly in writing in pounds and pence.	<input type="checkbox"/> L1.M19 Calculate discounts in multiples of 5% on amounts of money.	<input type="checkbox"/> L2.M13 Calculate amounts of money, compound interest, percentage increases, decreases and discounts, including tax and simple budgeting.

Spring 1: Society and Change

Week & Focus Question	Focus Strand	Entry 1 Outcomes	Entry 2 Outcomes	Entry 3 Outcomes	Level 1 Outcomes	Level 2 Outcomes
Week 13: How can we use time to understand and plan changes in daily life?	Measures: Time	<input type="checkbox"/> EL1.M6 Read 12-hour digital and analogue clocks in hours.	<input type="checkbox"/> EL2.M13 Read and record time in common date formats, and read time displayed on analogue clocks in hours, half hours and	<input type="checkbox"/> EL3.M12 Read, measure and record time using am and pm.	<input type="checkbox"/> L1.M20 Convert between units of time in the same system.	<input type="checkbox"/> L2.M15 Calculate using compound measures including rates of pay and speed (applied in time-based contexts).



Week & Focus Question	Focus Strand	Entry 1 Outcomes	Entry 2 Outcomes	Entry 3 Outcomes	Level 1 Outcomes	Level 2 Outcomes
		<input type="checkbox"/> EL1.M7 Know the number of days in a week, and months and seasons in a year. Be able to name and sequence.	quarter hours, and understand hours from a 24-hour digital clock.	<input type="checkbox"/> EL3.M13 Read time from analogue and 24-hour digital clocks in hours and minutes.		
Week 14: How can money decisions show priorities and values in society?	Money and finance	<input type="checkbox"/> EL1.M5 Recognise coins and notes and write them in numbers with the correct symbols (£ and p).	<input type="checkbox"/> EL2.M12 Calculate money in pence up to one pound and in whole pounds of multiple items and write with the correct symbols (£ or p).	<input type="checkbox"/> EL3.M10 Calculate with money using decimal notation and express money correctly in writing in pounds and pence. <input type="checkbox"/> EL3.M11 Round amounts of money to the nearest £1 or 10p.	<input type="checkbox"/> L1.M18 Calculate simple interest in multiples of 5% on amounts of money. <input type="checkbox"/> L1.M19 Calculate discounts in multiples of 5% on amounts of money.	<input type="checkbox"/> L2.M13 Calculate amounts of money, compound interest, percentage increases, decreases and discounts, including tax and simple budgeting.
Week 15: How can patterns and sequences help us understand trends in society?	Sequences and number patterns	<input type="checkbox"/> EL1.N1 Read, write, order and compare numbers up to 20 (applied to simple patterns).	<input type="checkbox"/> EL2.N3 Recognise and sequence odd and even numbers up to 100.	<input type="checkbox"/> EL3.N6 Recognise and continue linear sequences of numbers up to 100. <input type="checkbox"/> EL3.N9 Recognise and continue sequences that involve decimals.	<input type="checkbox"/> L1.N6 Calculate the squares of one-digit and two-digit numbers.	<input type="checkbox"/> L2.N12 Follow the order of precedence of operators, including indices (linked to pattern generation).
Week 16: How can we use formulae to solve everyday problems and identify change?	Using formulae and algebraic thinking	<input type="checkbox"/> EL1.N4 Recognise and interpret the symbols +, – and = appropriately.	<input type="checkbox"/> EL2.N4 Recognise and interpret the symbols +, –, ×, ÷ and = appropriately.	<input type="checkbox"/> EL3.M18 Use a suitable instrument to measure mass and length (linked to practical substitution).	<input type="checkbox"/> L1.N5 Use simple formulae expressed in words for one- or	<input type="checkbox"/> L2.N3 Evaluate expressions and make substitutions in given formulae in words and symbols.



Week & Focus Question	Focus Strand	Entry 1 Outcomes	Entry 2 Outcomes	Entry 3 Outcomes	Level 1 Outcomes	Level 2 Outcomes
					two-step operations.	
Week 17: How can averages help us make sense of change in society?	Data handling and averages	<input type="checkbox"/> EL1.H11 Read numerical information from lists.	<input type="checkbox"/> EL2.H22 Extract information from lists, tables, diagrams and bar charts.	<input type="checkbox"/> EL3.H21 Extract information from lists, tables, diagrams and charts and create frequency tables.	<input type="checkbox"/> L1.H29 Find the mean and range of a set of quantities.	<input type="checkbox"/> L2.H23 Calculate the median and mode of a set of quantities. <input type="checkbox"/> L2.H24 Estimate the mean of a grouped frequency distribution from discrete data.
Week 18: How can we use problem solving to improve life in our communities?	Problem solving and checking	<input type="checkbox"/> EL1.N3 Add numbers which total up to 20, and subtract numbers from numbers up to 20.	<input type="checkbox"/> EL2.N8 Divide two-digit whole numbers by single-digit whole numbers and express remainders.	<input type="checkbox"/> EL3.N3 Divide three-digit whole numbers by single- and double-digit whole numbers and express remainders.	<input type="checkbox"/> L1.N7 Follow the order of precedence of operators.	<input type="checkbox"/> L2.N2 Carry out calculations with numbers up to one million, including strategies to check answers such as estimation and approximation.

Spring 2: Innovation and Discovery

Week & Focus Question	Focus Strand	Entry 1 Outcomes	Entry 2 Outcomes	Entry 3 Outcomes	Level 1 Outcomes	Level 2 Outcomes
Week 19: How can we use measurement to make or design something new?	Using common measures	<input type="checkbox"/> EL1.M8 Describe and make comparisons in words between measures of items including size, length, width, height, weight and capacity.	<input type="checkbox"/> EL2.M14 Use metric measures of length including millimetres, centimetres, metres and kilometres. <input type="checkbox"/> EL2.M15 Use measures of weight including grams and kilograms.	<input type="checkbox"/> EL3.M14 Use and compare measures of length, capacity, weight and temperature using metric or imperial units to the nearest labelled or unlabelled division.	<input type="checkbox"/> L1.M20 Convert between units of length, weight, capacity, money and time in the same system.	<input type="checkbox"/> L2.M14 Convert between metric and imperial units of length, weight and capacity using a conversion factor or conversion graph.



Week & Focus Question	Focus Strand	Entry 1 Outcomes	Entry 2 Outcomes	Entry 3 Outcomes	Level 1 Outcomes	Level 2 Outcomes
			<input type="checkbox"/> EL2.M16 Use measures of capacity including millilitres and litres.			
Week 20: How do area and perimeter help us solve real-world problems in design?	Shape, space and measure	<input type="checkbox"/> EL1.M9 Identify and recognise common 2D and 3D shapes including circle, cube, rectangle (including square) and triangle.	<input type="checkbox"/> EL2.M19 Recognise and name 2D and 3D shapes including pentagons, hexagons, cylinders, cuboids, pyramids and spheres.	<input type="checkbox"/> EL3.M19 Sort 2D and 3D shapes using properties including lines of symmetry, length, right angles and angles including in rectangles and triangles.	<input type="checkbox"/> L1.M22 Calculate the area and perimeter of simple shapes including those that are made up of a combination of rectangles.	<input type="checkbox"/> L2.M16 Calculate perimeters and areas of 2D shapes including triangles and circles, and composite shapes (formulae given except for triangles and circles).
Week 21: How can we use scale and proportion to build or map new ideas?	Shape and scale	<input type="checkbox"/> EL1.M10 Use everyday positional vocabulary to describe position and direction including left, right, in front, behind, under and above.	<input type="checkbox"/> EL2.M21 Use appropriate positional vocabulary to describe position and direction including between, inside, outside, middle, below, on top, forwards and backwards.	<input type="checkbox"/> EL3.M20 Use appropriate positional vocabulary to describe position and direction including eight compass points and including full, half and quarter turns.	<input type="checkbox"/> L1.M21 Recognise and make use of simple scales on maps and drawings.	<input type="checkbox"/> L2.M18 Calculate actual dimensions from scale drawings and create a scale diagram given actual measurements.
Week 22: How can decimals and percentages help us measure progress and growth?	Decimals and percentages	<input type="checkbox"/> EL1.N3 Add numbers which total up to 20, and subtract numbers from numbers up to 20.	<input type="checkbox"/> EL2.N11 Read, write and use decimals to one decimal place.	<input type="checkbox"/> EL3.N8 Read, write and use decimals up to two decimal places.	<input type="checkbox"/> L1.N14 Calculate percentages of quantities, including simple percentage increases and decreases by 5% and multiples thereof.	<input type="checkbox"/> L2.N6 Calculate percentage change (any size increase or decrease) and original value after percentage change.
Week 23: How can we apply formulas and problem solving to innovate?	Using formulae and problem solving	<input type="checkbox"/> EL1.N4 Recognise and interpret the symbols +, - and = appropriately.	<input type="checkbox"/> EL2.N4 Recognise and interpret the symbols +, -, ×, ÷ and = appropriately.	<input type="checkbox"/> EL3.M18 Use a suitable instrument to measure mass and	<input type="checkbox"/> L1.N5 Use simple formulae expressed in words for one- or two-step operations.	<input type="checkbox"/> L2.N3 Evaluate expressions and make substitutions in given



Week & Focus Question	Focus Strand	Entry 1 Outcomes	Entry 2 Outcomes	Entry 3 Outcomes	Level 1 Outcomes	Level 2 Outcomes
				length (linked to substitution practice).		formulae in words and symbols.
Week 24: How can we check and test our results like real-world problem solvers?	Accuracy and evaluation	<input type="checkbox"/> EL1.H11 Read numerical information from lists.	<input type="checkbox"/> EL2.N9 Approximate by rounding to the nearest 10, and use this rounded answer to check results.	<input type="checkbox"/> EL3.N5 Approximate by rounding numbers less than 1000 to the nearest 10 or 100 and use this rounded answer to check results.	<input type="checkbox"/> L1.N12 Approximate by rounding to a whole number or to one or two decimal places.	<input type="checkbox"/> L2.N2 Carry out calculations with numbers up to one million, including strategies to check answers such as estimation and approximation.

Summer 1: Global Connections

Week & Focus Question	Focus Strand	Entry 1 Outcomes	Entry 2 Outcomes	Entry 3 Outcomes	Level 1 Outcomes	Level 2 Outcomes
Week 25: How do shapes and patterns help us understand the world around us?	Shape and space	<input type="checkbox"/> EL1.M9 Identify and recognise common 2D and 3D shapes including circle, cube, rectangle (including square) and triangle.	<input type="checkbox"/> EL2.M19 Recognise and name 2D and 3D shapes including pentagons, hexagons, cylinders, cuboids, pyramids and spheres.	<input type="checkbox"/> EL3.M19 Sort 2D and 3D shapes using properties including lines of symmetry, right angles and angles in rectangles and triangles.	<input type="checkbox"/> L1.M24 Draw 2D shapes and demonstrate an understanding of line symmetry and the relative size of angles.	<input type="checkbox"/> L2.M22 Calculate values of angles and/or coordinates within 2D and 3D shapes.
Week 26: How can we use coordinates and direction to explore new places?	Position, direction and mapping	<input type="checkbox"/> EL1.M10 Use everyday positional vocabulary to describe position and direction including left, right, in front, behind, under and above.	<input type="checkbox"/> EL2.M21 Use appropriate positional vocabulary to describe position and direction including between, inside, outside, middle, below, on top, forwards and backwards.	<input type="checkbox"/> EL3.M20 Use appropriate positional vocabulary to describe position and direction including eight compass points and including full, half and quarter turns.	<input type="checkbox"/> L1.M26 Use angles when describing position and direction, and measure angles in degrees.	<input type="checkbox"/> L2.M19 Use coordinates in 2D, positive and negative, to specify the positions of points.



Week & Focus Question	Focus Strand	Entry 1 Outcomes	Entry 2 Outcomes	Entry 3 Outcomes	Level 1 Outcomes	Level 2 Outcomes
Week 27: How can we use measurement and scale to map the world?	Measurement and scale	<input type="checkbox"/> EL1.M8 Describe and make comparisons in words between measures of items including size, length, width, height, weight and capacity.	<input type="checkbox"/> EL2.M18 Read and use simple scales to the nearest labelled division.	<input type="checkbox"/> EL3.M18 Use a suitable instrument to measure mass and length.	<input type="checkbox"/> L1.M21 Recognise and make use of simple scales on maps and drawings.	<input type="checkbox"/> L2.M18 Calculate actual dimensions from scale drawings and create a scale diagram given actual measurements.
Week 28: How can conversions help us make sense of global measurement systems?	Measurement and conversion	<input type="checkbox"/> EL1.M8 Describe and make comparisons in words between measures (linked to early conversion awareness).	<input type="checkbox"/> EL2.M14 Use metric measures of length including millimetres, centimetres, metres and kilometres. <input type="checkbox"/> EL2.M17 Read and compare positive temperatures.	<input type="checkbox"/> EL3.M14 Use and compare measures of length, capacity, weight and temperature using metric or imperial units.	<input type="checkbox"/> L1.M20 Convert between units of length, weight, capacity, money and time in the same system.	<input type="checkbox"/> L2.M14 Convert between metric and imperial units of length, weight and capacity using a conversion factor or conversion graph.
Week 29: How can data and statistics help us understand the world?	Handling information and data	<input type="checkbox"/> EL1.H11 Read numerical information from lists.	<input type="checkbox"/> EL2.H22 Extract information from lists, tables, diagrams and bar charts.	<input type="checkbox"/> EL3.H23 Organise and represent information in appropriate ways including tables, diagrams, simple line graphs and bar charts.	<input type="checkbox"/> L1.H27 Represent discrete data in tables, diagrams and charts including pie charts, bar charts and line graphs.	<input type="checkbox"/> L2.H28 Draw and interpret scatter diagrams and recognise positive and negative correlation.
Week 30: How can we solve complex global problems using mathematical reasoning?	Problem solving and reasoning	<input type="checkbox"/> EL1.N3 Add numbers which total up to 20, and subtract numbers	<input type="checkbox"/> EL2.N9 Approximate by rounding to the nearest 10, and use	<input type="checkbox"/> EL3.N5 Approximate by rounding numbers less than 1000 to the nearest 10 or 100	<input type="checkbox"/> L1.N15 Estimate answers to calculations using fractions and decimals.	<input type="checkbox"/> L2.N2 Carry out calculations with numbers up to one million, including strategies to check



Week & Focus Question	Focus Strand	Entry 1 Outcomes	Entry 2 Outcomes	Entry 3 Outcomes	Level 1 Outcomes	Level 2 Outcomes
		from numbers up to 20.	this rounded answer to check results.	and use this rounded answer to check results.		answers such as estimation and approximation.

Summer 2: Leadership and Action

Week & Focus Question	Focus Strand	Entry 1 Outcomes	Entry 2 Outcomes	Entry 3 Outcomes	Level 1 Outcomes	Level 2 Outcomes
Week 31: How can maths help us solve real-world problems as a team?	Problem solving and application	<input type="checkbox"/> EL1.N2 Use whole numbers to count up to 20 items including zero. <input type="checkbox"/> EL1.N3 Add numbers which total up to 20, and subtract numbers from numbers up to 20.	<input type="checkbox"/> EL2.N5 Add and subtract two-digit numbers. <input type="checkbox"/> EL2.N6 Multiply whole numbers in the range 0×0 to 12×12 (times tables).	<input type="checkbox"/> EL3.N2 Add and subtract using three-digit whole numbers. <input type="checkbox"/> EL3.N4 Multiply two-digit whole numbers by single- and double-digit whole numbers.	<input type="checkbox"/> L1.N4 Use multiplication facts and make connections with division facts. <input type="checkbox"/> L1.N17 Work with simple ratio and direct proportions.	<input type="checkbox"/> L2.N11 Understand and calculate using ratios, direct proportion and inverse proportion. <input type="checkbox"/> L2.N12 Follow the order of precedence of operators, including indices.
Week 32: How can we interpret and present data to influence others?	Handling information and communication	<input type="checkbox"/> EL1.H13 Read and draw simple charts and diagrams including a tally chart, block diagram/graph.	<input type="checkbox"/> EL2.H25 Take information from one format and represent the information in another format, including the use of bar charts.	<input type="checkbox"/> EL3.H23 Organise and represent information in appropriate ways including tables, diagrams, simple line graphs and bar charts.	<input type="checkbox"/> L1.H27 Represent discrete data in tables, diagrams and charts including pie charts, bar charts and line graphs.	<input type="checkbox"/> L2.H25 Use the mean, median, mode and range to compare two sets of data. <input type="checkbox"/> L2.H28 Draw and interpret scatter diagrams and recognise positive and negative correlation.
Week 33: How can we use shape and measurement to plan or build for our community?	Shape, space and measure	<input type="checkbox"/> EL1.M9 Identify and recognise common 2D and 3D shapes including circle, cube,	<input type="checkbox"/> EL2.M20 Describe the properties of common 2D and 3D shapes	<input type="checkbox"/> EL3.M19 Sort 2D and 3D shapes using properties including lines of	<input type="checkbox"/> L1.M25 Interpret plans, elevations and nets of simple 3D shapes.	<input type="checkbox"/> L2.M17 Use formulae to find volumes and surface areas of 3D shapes including cylinders.



Week & Focus Question	Focus Strand	Entry 1 Outcomes	Entry 2 Outcomes	Entry 3 Outcomes	Level 1 Outcomes	Level 2 Outcomes
		rectangle (including square) and triangle.	including number of sides, corners, edges, faces, angles and base.	symmetry and right angles.		<input type="checkbox"/> L2.M20 Understand and use common 2D representations of 3D objects.
Week 34: How can we use averages and probability to make fair decisions?	Data and reasoning	<input type="checkbox"/> EL1.H12 Sort and classify objects using a single criterion.	<input type="checkbox"/> EL2.H24 Sort and classify objects using two criteria.	<input type="checkbox"/> EL3.H21 Extract information from lists, tables, diagrams and charts and create frequency tables.	<input type="checkbox"/> L1.H29 Find the mean and range of a set of quantities. <input type="checkbox"/> L1.H30 Understand probability on a scale from 0 (impossible) to 1 (certain) and use probabilities to compare the likelihood of events.	<input type="checkbox"/> L2.H23 Calculate the median and mode of a set of quantities. <input type="checkbox"/> L2.H26 Work out the probability of combined events including the use of diagrams and tables, including two-way tables.
Week 35: How can we use percentages, interest and budgeting to plan for the future?	Finance and numeracy	<input type="checkbox"/> EL1.M5 Recognise coins and notes and write them in numbers with the correct symbols (£ and p).	<input type="checkbox"/> EL2.M12 Calculate money in pence up to one pound and in whole pounds of multiple items and write with the correct symbols (£ or p).	<input type="checkbox"/> EL3.M10 Calculate with money using decimal notation and express money correctly in writing in pounds and pence.	<input type="checkbox"/> L1.M18 Calculate simple interest in multiples of 5% on amounts of money. <input type="checkbox"/> L1.M19 Calculate discounts in multiples of 5% on amounts of money.	<input type="checkbox"/> L2.M13 Calculate amounts of money, compound interest, percentage increases, decreases and discounts, including tax and simple budgeting.
Week 36: How can we demonstrate everything we've learned through real-world projects?	Consolidation and assessment	<input type="checkbox"/> EL1.H11 Read numerical information from lists. <input type="checkbox"/> EL1.M7 Know the number of days in a week, and months and seasons in a year. Be able to name and sequence.	<input type="checkbox"/> EL2.H22 Extract information from lists, tables, diagrams and bar charts. <input type="checkbox"/> EL2.M13 Read and record time in common date formats, and read time displayed on	<input type="checkbox"/> EL3.H22 Interpret information, make comparisons and record changes from different formats including bar charts and simple line graphs.	<input type="checkbox"/> L1.N16 Recognise and calculate equivalences between common fractions, percentages and decimals. <input type="checkbox"/> L1.M23 Calculate the volumes of cubes and cuboids.	<input type="checkbox"/> L2.N7 Order, add, subtract and compare amounts or quantities using proper and improper fractions and mixed numbers. <input type="checkbox"/> L2.M21 Draw 3D shapes to include plans and elevations.



Week & Focus Question	Focus Strand	■ Entry 1 Outcomes	■ Entry 2 Outcomes	■ Entry 3 Outcomes	■ Level 1 Outcomes	■ Level 2 Outcomes
			analogue clocks in hours, half hours and quarter hours.			

