

Topic	Week	Elementary 2
Round numbers and measures to an appropriate degree of accuracy (for example, to a number of decimal places or significant places)	Week 1	Round a number to any given number of decimal places
		Round a number to any given number of significant figures.
Use approximation through rounding to estimate answers		Rounding the nearest 10, 100, 1000
		Rounding to significant figures recap and estimate using 1 significant figure.
	Week 2	Estimate the following questions (a) 456×19 (b) 0.498 A football team are taking supporters to a final. They hire 126 coaches Each coach seats 53 people The cost per person will be £28 Estimate how much it will take all these supporters to the cup final.
		Estimation Consolidation. Include division questions
Multiply any two positive integers together		Using the grid method. e.g. 768×4972

		<p>Students should be able to use formal methods where applicable. Solve word problems involving large numbers</p> <p>A machine makes chocolates It makes 125,000 chocolates per hour The machine works 8 hours a day for 6 days a week. How many chocolates will be produced by the machine in 26 weeks?</p>
Multiply any decimal by a one or two digit number	Week 3	<p>Multiply</p> <p>(a) 6.42×19 (b) 0.00634×6</p>
		<p>Tiles cost £1.85 each Mike buys 67 tiles He has £200. How much money will he have left?</p>
Multiply any two numbers including decimals (See E3.3)		Assess multiplication and estimation topics before moving on.
Understand and use standard mathematical formulae		Students can collect like terms in an algebraic expression.
	Week 4	Students can expand brackets and collect like terms in an algebraic
		Students can substitute into expressions and formulae.

		<p>Students should be able to write a formula from words.</p> <p>A taxi firm charges 25p per mile and a standard charge of £2. Write down an formulae for the total cost T</p> <p>A small box of sweets contains 12 sweets A large box contains 26 sweets</p>
		<p>Generate common everyday formulae</p> <ul style="list-style-type: none"> - Area of a square - Area of a rectangle - Area of a triangle <p>Substitute into these formulae. e.g. working backwards.</p>
	Week 5	Volume
		Speed/ time/ time
		<p>Use formulae from science and other areas of mathematics.</p> <p>where is 'force', is 'mass' and is 'acceleration'. Find the force of an object with mass 10g, moving with acceleration 3m/s².</p>
Find pairs of numbers which satisfy an equation with two unknowns		<p>How many pairs of values can you find that satisfy the following equation</p> <p>(a) $x+y=10$</p> <p>(b) $2p-q=10$</p> <p>Students could present their results in the form of a table in preparation for</p>
Use the standard	Week 6	Angle notation. eg. labelling angle CAB etc.

conventions for labelling the sides and angles of triangle ABC		To be able to measure different types of angles. Acute Obtuse Reflex
		To be able to draw different types of angles. Acute Obtuse Reflex
		To know basic angle facts including angle sums in triangles and
	Week 7	To be able to find missing angles in a straight line and around a point.
		To understand the words interior and exterior angles.
Derive and apply formulae to calculate and solve problems involving the area of triangles, squares,		Find areas of squares, rectangles, triangles and parallelograms.
		Find perimeter of squares and rectangles. Deriving formulae. Include shapes
	Week 8	Given the area of a rectangle, find the length of a side.
	Functional area questions.	
Derive and use the sum of angles in a triangle and quadrilateral.		Angles in quadrilaterals and triangles.
		Form and solve equations
	Week 9	Angles in isosceles angles. Angles in equilateral triangles

		<p>Students should know the angle properties of the following quadrilaterals</p> <ul style="list-style-type: none"> · Square · Rectangle · Kite · Parallelogram · Rhombus
Apply the properties of angles at a point on a straight line, vertically opposite angles		Vertically opposite angles and angles on a straight line together combined
		Missing angles in more complex shapes.
Change freely between related standard units (for example time, length, area, volume/capacity and mass	Week 10	<p>Students should be able to convert between</p> <ul style="list-style-type: none"> · mm - cm - m - km · milli second - seconds – minutes – hours – days – week · ml – l · mg – g – kg - t · mm² – cm² – m²
		<p>David completed a race in 201 minutes. Nima completed the same race in 3 hours 15 minutes. Who completed the race first?</p>
		<p>Which is longer? 487cm, or 0.9km</p>
Use unit pricing to solve problems (e.g. 3 apples cost £1.80, how much do 5 apples cost?).		<p>A box of 12 pencils costs £1.32 How much do 5 of these pencils cost?</p>
	Week 11	<p>In a week a machine produces 400000 bags of crisps. How many bags does it make in 7 hours?</p>

		<p>Cereal comes in three different sized boxes</p> <p>Single 150grams 35p Medium 750 grams £1.60 Family 1.4kg £3.05</p> <p>Which box provides the best value?</p>
Elementary 3 Exam prep and review		Revision
		Revision
	Week 12	Revision
		Revision
		Exam
		Exam review