

Week 1

Estimations

- Rounding up and rounding down, to the nearest whole number and to the nearest 10, 100 or 1000 depending upon the question.
- Simple problems after rounding up or down.
- These should be mental arithmetic and not calculations.

Significant Figures and Decimal Places

- Rounding calculations up or down to either Significant Figures and/or Decimal Places.

Week 2

Prime Numbers, Prime Factors, Highest Common Factors (HCF) & Lowest Common Multiple (LCM).

- Expressing a given number as a product of its Prime Factors.
- Finding the HCF of two numbers.
- Work out the LCM of two or more numbers.

Fractions

- Converting fractions to having a different denominator.
- Adding, Subtracting and multiplying fractions.

Week 3

Calculator Skills: Using a scientific calculator

- Use the following functions, $\sqrt{\quad}$ square root, $\sqrt[3]{\quad}$ third root x^2 the power of 2 and x^3 to the power of 3.

Week 4

Ratios

- Ratios in the form of 2 : 3 and ratios involving cooking ingredients.

Conversion factors

You need to be conversant of the following:

- Pounds to Kilograms and Kilograms to Pounds.
- Miles to Kilometres and Kilometres to Miles.
- Gallons to Litres and Litres to Gallons.

Week 5

Percentages

- Taking one value as a percentage of a second value.
- Calculate Simple Interest.
- Calculate Compound Interest.
- Calculate the depreciation value of a specific item.
- Work out the cost of sale items.

Week 6

Correctly identify angles

- Angles on a straight line, around a point and parallel lines.
- Interior and exterior angles in regular shapes

Perimeters, Areas and Volumes

- The perimeter of a Rectangle, Triangle and Circle. (circumference)
- Area of a Rectangle, Triangle, Trapezium and Circle. No formula given.
- Volume of a Cuboid, Cylinder and Prisms, (Triangular and Trapezium only)

Week 7

Pythagoras

- You must remember the formula for calculating the length of a side of a right angled triangle when given the lengths of two of the sides. $(a^2 = b^2 + c^2)$.

Week 8

Algebra

- Factorising expressions, Expanding the brackets, Adding and subtracting like terms and Solving equations.
- Writing Algebraic expressions from given information.

Week 9

Number Sequences or Number Patterns

- Complete the number pattern.
- Explain in words how you would continue the pattern.
- Find the n th term in the sequence using the formula: $dn + (a - d)$

Week 10

Graphs

- Scatter Graphs:- Plot points, Draw the line of Best Fit, State the Correlation.
- Speed Distance Time Graphs:- Take data from the graph, Complete the graph.
- Straight Line Graphs:- Complete the table of Results, Draw the graph and take data from the graph.

Week 11

Statistics

- Work out the following from given data:- Mode, Median, Mean and Range.
- Complete a Cumulative Frequency table.
- Draw a Cumulative Frequency graph.
- From the graph find the Median, Lower and Upper Quartile values.

Week 12

Probability

- Work out simple Probabilities from data given.
- Remembering all Probabilities add up to ONE.
- Complete Tree Diagrams.
- Work out all the possible outcomes from the Tree Diagram.