

There will be a quick revision session in school from 8.40am until 9.00am before the exam where tips and facts will be gone through for all tiers as well as a revision session on Wednesday 6th June lessons 4 & 5 and 1 hour after school.

Higher Tier Revision List

- Reciprocal ($1 \div ?$)
- Rounding to sig figs & decimal places
- Equivalence between fractions, decimals and percentages
- LCM and HCF and prime factor form
- Electricity bills
- Find fractions of a quantity
- Find percentages of a quantity including compound interest
- Percentage increase / decrease
- Reverse percentages – finding the original amount
- Using a calculator and rounding appropriately
- Ratio – sharing into a given ratio, finding a missing part, map scales, bearings
- Distance / time graphs and compound measures: Speed = $\frac{\text{Distance}}{\text{Time}}$ and Density = $\frac{\text{Mass}}{\text{Volume}}$
- nth term – linear and quadratic sequences
- Lower and upper bounds
- \times / \div algebraic terms with indices and easier rules of indices
- Substitution including of negative values and word formulae
- Expanding double brackets and simplifying
- Factorising quadratics $x^2 \pm ?x \pm ?$ and difference of 2 squares
- Lots of solving equations – with brackets, with x terms on both sides, with 1 fraction, with 2 or more fractions (multiply all terms by LCM and cancel with denominator)
- Word problems involving equations
- Simultaneous equations
- Trial and improvement
- Inequalities and shading inequality regions
- Dimensions
- Drawing quadratic graphs and cubic graphs
- Finding the equation of a straight line graph $y = mx + c$; finding the gradient of a line and parallel lines and perpendicular lines
- Finding the coordinates of the midpoint of a line
- Using graphs to solve quadratic equations (grade A) – by drawing on a second line and finding the point of intersection of the 2 graphs
- Changing the subject of the formula
- Angles in parallel lines, quadrilaterals, at a point etc
- Exterior and interior angles in polygons, tessellation
- Congruent shapes and similar shapes
- Nets and properties of 2D and 3D shapes
- Converting between measures
- Conversion graphs and travel graphs
- Translate, reflect and rotate a shape
- Scale drawings?
- Area of parallelogram, trapezium, **circle** and circumference of a circle
- Volume of prisms, spheres and pyramids
- Pythagoras' theorem
- Trigonometry in 90° triangles – SOH CAH TOA
- Similar triangles and shapes
- Area and volume of similar shapes
- All types of probability – sample space, decimal values in a table, probability trees and wordy questions without replacement
- Relative frequency
- Population density
- Mean, median, mode and range
- Mean from a frequency table
- Estimate of a mean (find midpoints first)
- Frequency polygons (plot midpoint against frequency)
- Scatter graphs, grouped frequency diagrams, box and whisker plots, cumulative frequency diagrams, pie charts – drawing only

- Histograms
- Surveys / questionnaires
- Sampling
- Time, timetables etc.
- Money questions e.g. tax, exchange rates, electricity bills etc.
- Imperial Conversions
- Straight line graphs
- AER
- Sine/cosine rule
- Trapezium rule
- Velocity/time graphs
- Arc length, area of a sector, area of a triangle
- Graph transformations
- Simplifying algebraic fractions
- Quadratic formula

Use a CALCULATOR in the calculator paper!! and bring yours – you may not know how to use the school ones and there may not be enough to go around. Don't work out sums mentally or on paper – just use your calculator and write down what buttons you've pressed – these will form part of your workings!

- Make sure you bring all the equipment you need: Pen, pencil, long ruler, rubber, protractor, compasses
- Underline any key words and read all of the question carefully – including the first paragraph!
- Write down any **UNITS, DEGREES OF ACCURACY, FORMULA** and anything else that may get you extra marks including your WORKINGS OUT!!
- Don't forget any answers involving money MUST be rounded to 2 d.p.
- If asked to write to an appropriate degree of accuracy round your answers to whole numbers or 1 d.p. if values are given to nearest whole number or 1 decimal place – you must state this in brackets too!