

# Year 8 Summer Exam Revision List

Year 8 Assessment 1	Learning objective
1.3 14 Equations	To find missing numbers in simple calculations
	To solve equations involving one operation
	To solve equations involving two operations
	To use algebra to set up and solve equations
	To identify and solve multi-step linear equations
2.3 15 Equations and formulae	To solve equations involving brackets
	To solve equations where the answers are fractions or negative numbers
	To solve equations with the variable on both sides
	To solve equations with fractions and fractional coefficients
	To solve simple equations involving squares
	To change the subject of a formula, including formulae involving squares
	To factorise linear expressions
Year 8 Assessment 2	Learning objective
2.3 1 Working with numbers	To know and use highest common factors (HCF)
	To know and use lowest common multiples (LCM)
	To know and use powers and roots
	To be able to identify the prime factors of any integer
	To be able to use and apply number skills in a real-life situation
2.3 8 Number	To multiply and divide by negative powers of 10
	To round to a specific number of significant figures
	To write a large number in standard form
	To multiply with numbers in standard form
	To apply standard form to solve a problem in a real-life context
Year 8 Assessment 3	Learning objective
1.3 13 Symmetry	To recognise shapes that have reflective symmetry
	To draw lines of symmetry on a shape
	To recognise shapes that have rotational symmetry
	To find the order of rotational symmetry for a shape

<b>1.3 13 Symmetry</b>	To be able to reflect a shape in vertical and horizontal mirror lines
	To use a coordinate grid to reflect shapes in lines, including $y = x$
	To be able to rotate a shape
	To apply aspects of symmetry in real-life contexts
<b>2.3 2 Geometry</b>	To be able to translate a shape
	To enlarge a 2D shape by a scale factor
<b>2.3 11 Shape and Ratio</b>	To use ratio to compare lengths, areas and volumes of 2D and 3D shapes
	To be able to read and use map scales efficiently
	To use and apply skills and knowledge of area, ratio and data handling in a real-life context.
<b>2.3 14 Circles</b>	To know the definition of a circle and be able to name the parts of a circle
	To establish the relationship between the circumference and diameter of a circle ( $\pi$ )
	To calculate the circumference of a circle
	To calculate the area of a circle
	To use and apply knowledge of number and circles to solve multi-step problems in real-life contexts
<b>Year 8 Assessment 4</b>	<b>Learning objective</b>
<b>2.3 6 Surface area and volume of prisms</b>	To convert between metric units for area and for volume
	To calculate the surface area of a prism
	To calculate the volume of a prism
	To apply knowledge of area and work systematically to solve a problem
<b>2.3 4 Percentages</b>	To write one quantity as a percentage of another
	To use a multiplier to calculate a percentage change
	To work out a change in value as a percentage increase or decrease
	To apply percentages when analysing a real-life situation
	To work out reverse percentages
<b>1.3 10 Co-ordinates and graphs</b>	To draw a graph using a simple linear rule
	To know the connection between pairs of coordinates and the relationship shown in an equation and a graph
	To recognise and draw the graphs of $y = x$ and $y = -x$
	To recognise and draw graphs of the form $x + y = a$
<b>2.3 7 Graphs</b>	To develop graphical fluency with a range of linear representations
	To know the gradient of a line from its linear equation
	To establish the equation of a line in the form $y = mx + c$ from its graph
	To draw graphs from real-life situations to show the relationship between two variables

	To solve problems involving more than one variable in a real-life context
<b>Year 8 Assessment 5</b>	<b>Learning objective</b>
<b>1.3 6 Statistics</b>	To calculate and use the mode, median and range of a set of data
	To calculate and use the mean average of a set of data
	To be able to read and interpret different statistical diagrams
	To create and use a tally chart
	To understand continuous data and use grouped frequency
	To develop a greater understanding of data collection
	To apply data handling skills to a real-life situation
<b>2.3 16 Comparing data</b>	To create a grouped frequency table from raw data
	To interpret frequency diagrams
	To draw a frequency diagram from a grouped frequency table
	To be able to compare data from two sources
	To recognise when a statistical chart may be misleading
<b>1.3 15 Interpreting data</b>	Be able to interpret and present data in order to make valid comparisons
	To read and interpret data from pie charts
	To use a scaling method to draw a pie chart
<b>2.3 9 Interpreting data</b>	To use the averages and range to compare and interpret data sets
	To interpret different charts seen in the media
	To use and apply data handling skills in a real-life context