

GCSE Maths Foundation Initial Stage Revision Checklist

Number	Round numbers to the nearest 10, 100, 1000 etc.	
	Add and subtract three-digit numbers, without the use of a calculator. Add and subtract using numbers with up to two decimal places without the use of a calculator.	
	Multiply and divide numbers with no more than one decimal digit by an integer between 1 and 10, without the use of a calculator. Multiply and divide any number by 10, 100 and 1000 without the use of a calculator.	
	Multiply and divide a three-digit number by a two-digit number. Multiply numbers with up to two decimal places by an integer, with or without a calculator.	
	Calculate a fraction of a given quantity. Identify fractions of a shape.	
	Recall the fraction to decimal conversions of familiar simple fractions (tenths, hundredths, half, quarters, fifths). Convert simple fractions of a whole to percentages of the whole and vice versa.	
	Calculate simple percentages of quantities, without the use of a calculator.	
	Order decimals (ordering up to five decimals and knowing that, eg, 5.07 is smaller than 5.3).	
	Solve problems using the four operations on integer and decimal numbers using a calculator.	
	Work out starting times, finishing times and intervals.	
	Perform calculations involving the use of brackets and the order of operations.	
Order positive and negative temperatures. Solve problems involving temperature changes.		

Algebra	Continue simple sequences. Explain how to find the next number in a simple pattern. Recognise and describe patterns in number.	
	Use formulae expressed in words or symbols, substituting positive numbers into the formula to find the value of the subject (usually in context).	
	Use simple function machines to deal with inputs and outputs, recognising basic inverse functions. Solve simple equations involving	

	one operation.	
	Use axes and coordinates in four quadrants, including using points identified by geometrical information.	
	Construct and interpret simple graphs, including conversion graphs.	

Geometry and Measures	Use: kilometres, metres, centimetres and millimetres; kilograms and grams; litres and millilitres. Convert measurements from one metric unit to another. Interpret scales on a range of measuring instruments.	
	Make sensible estimates of a range of measures in everyday settings.	
	Measure and draw angles to the nearest degree. Identify acute, obtuse, reflex and right angles. Recall and use properties of angles at a point, angles at a point on a straight line (including right angles), perpendicular lines and opposite angles at a vertex.	
	Recognise regular polygons (pentagon, hexagon, octagon). Recognise simple solids (cube, cuboid, sphere, cylinder, cone). Recognise the terms circle, centre, radius, diameter and circumference. Recognise types of triangle (isosceles, equilateral, scalene).	
	Find the perimeter of straight-sided shapes. Find areas of irregular shapes and volumes of simple solids. Find the area of a rectangle.	
	Use and interpret street plans and simple maps, including: simple grid references (of the form A6, J3 etc), left and right, clockwise and anticlockwise and compass directions.	
	Recognise and complete reflection symmetry of 2-D shapes.	
	Understand that reflections are specified by a mirror line. Transform triangles and other 2-D shapes by reflection, using a given line.	

Statistics	Understand and use the vocabulary of probability, including terms such as 'fair', 'evens', 'certain', 'likely', 'unlikely' and 'impossible'. Understand and use the probability scale.	
	Find all possible ways of listing up to four objects.	
	Calculate the mean, median, mode and range of discrete data.	
	Draw and interpret simple frequency tables, charts, pictograms and bar charts for discrete data.	
	Extract and use information from common two-way tables including timetables.	