Mathematics – Y7 Assessment Descriptors

	Foundation	Developing	Securing	Exceeding	Excelling
Year 7 Autumn term	Confidently and independently be able to… • Find next terms in simple linear sequences. Draw the next terms in a picture sequence. • Understand and use < and > symbols. Add and subtract positive integers up to 50 without a calculator. Have a reasonable knowledge of times tables up to 10 x10. Order positive and negative integers. • Identify lines of reflection symmetry in basic 2D shapes and co-ordinates in the first quadrant. Reflect basic shapes in horizontal and vertical lines. • Order numbers up to 1000, including decimals with 1 decimal place. Use place value to make approximations. Round numbers to nearest 10, 100, 1000. • Find frequencies using tally marks. Complete a frequency table. • Solve basic number problems using proportion. Write ratios from pictures.	Confidently and independently be able to… • Describe a sequence using words. Identify missing terms in a sequence. • Add and subtract positive integers mentally and using written methods. Solve simple addition and subtraction calculations involving negative numbers. • Identify all lines of symmetry of a shape. Identify rotational symmetry. Enlarge shapes without a centre. • Multiply and divide whole numbers by 10, 100, 1000. Order decimals to 3 decimal places. • Find the mode, median and range for a set of data. • Write simple equivalent ratios. Simplify ratios.	Confidently and independently be able to… • Generate sequences from geometrical patterns. Given the general rule of a linear sequence, generate terms. • Multiply and divide by a single digit positive integer and negative integers. • Reflect shapes in diagonal mirror lines of symmetry. Translate shapes horizontally and vertically. Rotate shapes through 90, 180, 270 degrees about a centre. Identify co-ordinates in all four quadrants. • Multiply and divide non integers by 10, 100, 1000. Round to one significant figure. Multiply by 0.1, 0.01 or 0.001. Multiply and divide by multiples of 10, 100 and 1000. • Calculate the mean, median, mode and range for a set of data. Choose appropriate measures of average for different data sets. • Divide amounts into a given ratio.	Confidently and independently be able to… • Find the formula for sequences generated from simple geometrical patterns and rules for ascending linear sequences. • Multiply and divide any 3 digit by 2 digit numbers. Use efficient written methods of with positive and negative integers. • Identify transformations. Perform basic single transformations (reflections and translations) on a Cartesian grid. Rotate shapes about a centre on a Cartesian grid (centres may not be at the origin). • Estimate calculations using figures rounded to one significant figure. Round to 2 or more significant figures and to 1 or 2 decimal places. • Make decisions based on given averages and range. Solve problems involving averages. Understand the effect on the mean and median of altering the data. • Convert between ratios and fractions. Calculate original amounts when given one part using ratios.	Confidently and independently be able to… • Find general rules for ascending and descending linear sequences. Generate terms of non - linear sequences. • Choose correct calculation method to solve problems. • Enlarge 2-D shapes, given a centre of enlargement and a positive whole-number scale factor on a Cartesian grid. Describe single transformations fully using appropriate mathematical language. • Write large numbers using standard form. Use efficient written methods to multiply by decimals; divide by decimals by transforming to division by an integer. Convert between numbers written in ordinary form and in standard form. • Find the mean and median of discrete data given in a table. Estimate the mean for grouped data. • Solve problems by changing ratios. Find lengths on similar triangles.