# Park House School - Year 9 June Assessments

# **Maths Assessment Manifest**

- You will have 2 Maths papers
- Each paper will be 60 marks
- Each paper will be 60 minutes

### **Checklist**

### <u>Number</u>

Topics	Red	Amber	Green
I can find primes, factors and multiples			
I can express a number as a product of prime factors			
I can find the highest common factor and lowest common multiple of numbers			
I can complete calculations involving + - x and ÷			
I can work out calculations using the order of operations			
I can use a calculator in calculations			
I can find the reciprocal of a number			
I can convert between fractions, decimals and percentages			
I can add/subtract/multiply/divide fractions			
I can round numbers			
I can find the error interval of a number			
I can find squares, square roots, cubes and cube roots of numbers			
I can simplify expressions involving indices, including negative and fractional			
I can write recurring decimals as fractions			

#### <u>Algebra</u>

Topics	Red	Amber	Green
I can simplify algebraic expressions			
I can substitute numbers into algebraic expressions and equations			
I can change the subject of a formula			
I can expand a single bracket			
I can factorise an expression into a single bracket			
I can factorise quadratics into double brackets			

I can read and draw inequalities		
I can solve inequalities		
I can plot and read coordinates in all 4 quadrants		
I can draw straight line graphs and read the gradient and y-intercept off a graph		
I can solve linear equations		
I can form and solve linear equations		
I can solve a pair of simultaneous equations		
I can find the next term and nth term of linear sequences		
I can simplify algebraic fractions by factorising		
I can simplify expressions involving indices		
I can calculate quadratic nth term		

### Ratio and proportion

Topics	Red	Amber	Green
I can write a sentence as a ratio, simplify ratios and find equivalent ratios			
I can share amounts into a ratio			
I can find quantities in a ratio when given one ratio or the difference			
I can find percentages of amounts with and without a calculator			
I can increase/decrease numbers by a percentage and calculate percentage change			
I can answer reverse percentage problems			
I can calculate percentage change and compound interest problems			
I can answer value for money problems			
I can answer ingredients problems			
I can answer problems involving direct and inverse proportion			

# Geometry

Topics	Red	Amber	Green
I can find missing angles on a straight line, around a point, in triangles and in quadrilaterals			
I can find missing angles in polygons			
I know the properties of 2D and 3D shapes			
I can find the area and perimeters of shapes			
I can find the area and circumference of circles and parts of circles			
I can find the volumes of prisms and cylinders			
I can find the surface areas of cuboids, triangular prisms and cylinders			
I can convert metric units to other metric units			

## **Probability**

Topics	Red	Amber	Green
I can use the probability scale			
I can calculate the probability of an event happening			
I can calculate the probability of an event not happening			
I can calculate the relative frequency			
I can use probability tree diagrams to calculate probabilities			
I can complete a Venn diagram and use it to calculate probabilities			
I can use the product rule for counting			

## **Statistics**

Topics	Red	Amber	Green
I can calculate averages from a list			
I can plot points on a scatter graphs, describe the correlation and relationship, draw the line of best fit and use the line of			
best fit to calculate values			
I can draw and interpret line graphs			
I can draw and interpret frequency polygons			
I can represent information in a two way table			
I can construct a cumulative frequency graph			