## 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
Number

| Topics | Red | Amber |
| :--- | :--- | :--- |
| 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 $\div$ |  |  |
| I can work out calculations using the order of operations |  |  |
| I can use 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 |  |  |
| Algebra |  |  |
| Topics |  |  |
| 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 |  |  |


| 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 |  |  |  |

