



ORANGE HIGH SCHOOL

ASSESSMENT TASK NOTIFICATION

Subject	Mathematics
Topic	End of Course Examination
Class Teacher	10MA3 - Harrison, 10MA4 - Stevenson
Head Teacher	Ms Stevenson
Year	10 – Stage 5.2
Date Notification Given	Week 3 – Friday 30 th October
Date of Examination	Week 5 – Friday 13 th November
Weighting	45%

Assessment Outline

In class examination – 1.5 hours (Double Period)

Topics to be covered:

SEMESTER 1 CONTENT

Measurement -Units of Measurement, Significant Figures, Scientific Notation – Large & Small Numbers, Accuracy of Measurement, Pythagoras Theorem – Finding the Hypotenuse and Shorter Side, Perimeter and Area of Triangles, Quadrilaterals, Circles and Sectors and Composite Shapes, Surface Area & Volume – Prisms and Cylinders,

Algebraic Expressions and Indices - Terminology and Substitution, The Four Operations, Expanding Brackets, Factorising, Algebraic Fractions, Addition, Subtraction, Division and Multiplication, Index Laws, Negative Indices

Probability -Theoretical Probability, Venn Diagrams and Two-Way Tables, Mutually and Non-Mutually Exclusive Events, Two- Step Experiments, Probability Tree Diagrams, Dependant and Independent Events

Single Variable and Bivariate Statistics -Types of Data, Mean, Mode and Median, Range, Frequency Tables, Dot Plots, Stem and Leaf Plots – including Back-to-Back, Frequency Histograms and Polygons, Shape of a Frequency Distribution, Comparing Data Sets, Quartiles and Interquartile Range, Box and Whisker Plots – including Parallel Boxplots, Scatter Plots, Bivariate Data involving Time and Statistics in the Media

Equations and Linear Relationships -Solving Linear Equations – One Step, Two Step, including Fractions, Brackets and Pronumerals on Both Sides, Linear Inequalities, Gradient-Intercept Formula, x and y-intercepts Finding the Equation of a Line, Distance of an Interval, Midpoint of an Interval, Parallel and Perpendicular Lines

SEMESTER 2 CONTENT

Geometrical Figures – Complementary, Supplementary and Vertically Opposite Angles, Angles at a point, Parallel lines- alternate, co-interior, corresponding angles, Types of triangles, Exterior angle of a triangle, Angle sum of a Triangle, Types of Quadrilaterals, Angle sum of Quadrilaterals, Angle sum of Polygons, Congruent Triangle tests and proofs, Similar Figures and Scale Factor, Missing sides of Similar Figures, Scale Drawing.

Trigonometry – Pythagoras' Theorem, Trigonometric Ratios, Finding the missing side, Finding the missing angle, Rounding to Degrees, Minutes, Seconds, Angles of Elevation and Depression, Bearings, Problems involving Bearings, Sine Rule, Cosine Rule, Area of a non-right angled triangle.

Quadratic Expressions and Equations – Expanding Binomial Products, Perfect Squares, Difference of 2 Squares, Factorising Monic Trinomials.

Required equipment

- Black or Blue pen or pencil, eraser and ruler.
- Scientific Calculator

Non-completion of Task:

If you know you are going to be away on the day that the task is due, you must make alternative arrangements with your teacher beforehand. If you are suddenly away on the day that the task is due, you must contact your teacher or Head Teacher on your return to school. Documentation will be required in both cases.

Plagiarism:

Plagiarism, the using of the work of others without acknowledgement, will incur serious penalties and may result in a zero award. Any cheating will also incur penalties.

Failure to follow the above procedures may result in a zero award.

The policies and procedures that are outlined on the ROSA booklet will be followed regarding the non-completion of assessment tasks.

Outcomes Assessed

- **MA5.2-11MG** calculates the surface areas of right prisms, cylinders and related composite solids
- **MA5.2 7NA** applies index laws to operate with algebraic expressions involving integer indices
- **MA5.2-17SP** describes and calculates probabilities in multi-step chance experiments
- **MA5.2-16SP** investigates relationships between two statistical variables, including their relationship over time
- **MA5.2-9NA** uses the gradient-intercept form to interpret and graph linear relationships
- **MA4-17MG** Classifies, describes and uses the properties of triangles and quadrilaterals and determines congruent triangles to find unknown side lengths and angles.
- **MA5.1.-11MG** describes and applies the properties of similar figures and scale drawings
- **MA5-2-13MG** applies trigonometry to solve problems, including problems involving bearings
- **MA5.2-6NA** simplifies algebraic fractions and expands and factorises quadratic expressions