

ORANGE HIGH SCHOOL

ASSESSMENT TASK NOTIFICATION

Subject	Year 10 5.3 Mathematics
Торіс	Task 2 – Mid Course Examination
Class Teacher	Mrs Edwards
Head Teacher	Mrs Edwards
Year	10MA1
Date Given	Week 2, Term 2 2024
Date Due	Week 4, Term 2 2024
Weighting	30%

Assessment Outline

Examination – 1 period

Measurement

- Converting Units of Length, Area & Volume
- Measures of Digital Information
- Significant Figures
- Limits of Accuracy
- 3D Pythagoras
- Perimeter of Simple and Composite Shapes
- Area of Simple and Composite Shapes
- Volume and Surface Areas of Prisms, Cylinder, Pyramids, Cones & Spheres

Surds and Indices

- Simplifying Surds
- Adding & Subtracting Surds
- Multiplying & Dividing Surds
- Binomial Expansions with Surds
- Rationalising Denominators
- Index Laws (Multiplying, Dividing, Power of a Power, Zero Index, Negative Indices & Fractional Indices)
- Exponential Equations -Exponential Growth & Decay
- Scientific Notation

Probability

- Simple Probability
- Venn Diagram & Two Way Tables
- Mutually Exclusive & Non-Mutually Exclusive Events
- Two-Step Experiments and Arrays
- Multistep Experiments & Tree Diagrams
- Conditionally Probability
- Dependent and Independent Events

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 classes.

<u>Plagiarism:</u>

Plagiarism, the using of the work of others without acknowledgement will incur serious penalties and may result in 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 noncompletion of assessment tasks.

Outcomes Assessed

Course Outcomes:

MA5.3-1WM uses and interprets formal definitions and generalisations when explaining solutions and/or conjectures

MA5.3-2WM generalises mathematical ideas and techniques to analyse and solve problems efficiently

MA5.2-7NA applies index laws to operate with algebraic expressions involving integer indices

MA5.3-6NA performs operations with surds and indices

MA5.3-13MG applies formulas to find the surface areas of right pyramids, right cones, spheres and related composite solids

MA5.3-14MG applies formulas to find the volumes of right pyramids, right cones, spheres and related composite solids

MA5.1-9MG interprets very small and very large units of measurement, uses scientific notation, and rounds to significant figures

MA5.3-15MG applies Pythagoras' theorem, trigonometric relationships, the sine rule, the cosine rule and the area rule to solve problems, including problems involving three dimensions

MA5.2-17SP describes and calculates probabilities in multi-step chance experiments

Examination Structure

The examination will be separated into three sections:

Section 1 – Basic Understanding Grades D/E

This section will contain questions requiring students to demonstrate a basic knowledge of content and understanding of course concepts, applying skills and processes in some familiar contexts.

Section 2 - Sound Understanding Grades B/C

This section will contain questions requiring students to demonstrate sound knowledge of content and understanding of course concepts. Students will be required to solve routine problems of up to 3 steps in familiar and unfamiliar situations. They will apply some connections between concepts to attempt non-routine problems.

Section 3 – High Understanding Grade A

This section will contain questions requiring students to demonstrate extensive knowledge of content and understanding of course concepts and apply highly developed skills and processes in a range of contexts. Students will be required to make connections between concepts to solve problems in familiar and unfamiliar situations. They will use multiple connections between concepts to solve non routine problems.