



# ORANGE HIGH SCHOOL

## ASSESSMENT TASK NOTIFICATION

<b>Subject</b>	Mathematics
<b>Topics</b>	Measurement, Surds & Indices, Probability
<b>Class Teacher</b>	SOOD, BROWN
<b>Head Teacher</b>	Stevenson
<b>Year</b>	10 5.3
<b>Date Given</b>	Week 3 – Thursday 12/5/22
<b>Date Due</b>	Week 5 – Thursday 26/5/22
<b>Weighting</b>	25%

### Assessment Outline

#### 1 DOUBLE PERIOD In-Class Examination

Topics assessed:

<u>Measurement</u>	<u>Surds &amp; Indices</u>	<u>Probability</u>
-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 of Prisms, Cylinder, Pyramids, Cones & Spheres -Surface Area of Prisms, Cylinder, Pyramids, Cones & Spheres	-Irrational Numbers -Simplifying Surds -Adding & Subtracting Surds -Multiplying & Dividing Surds -Binomial Expansions with Surds including Perfect Squares & Difference of Two Squares -Rationalising Denominators -Index Laws (Multiplying, Dividing, Power of a Power, Zero Index, Negative Indices & Fractional Indices) -Exponential Equations -Exponential Growth & Decay -Scientific Notation	-Simple Probability -Venn Diagram & Two Way Tables -Mutually Exclusive & Non-Mutually Exclusive Events -Two-Step Experiments and Arrays -Multistep Experiments & Tree Diagrams

#### Required equipment

- Black or Blue Pen or Pencil
- Eraser
- School Approved 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.**

### Course Outcomes:

- **MA5.1–1WM** uses appropriate technology, diagrams and symbols in mathematical contexts
- **MA5.3-2WM** generalises mathematical ideas and techniques to analyse and solve problems efficiently
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- **MA4-12MG** calculates the perimeters of plane shapes and the circumferences of circles
- **MA4-13MG** uses formulas to calculate the areas of quadrilaterals and circles, and converts between units of area
- **MA5.1-8MG** calculates the areas of composite shapes, and the surface areas of rectangular and triangular prisms
- **MA5.2-11MG** calculates the surface areas of right prisms, cylinders and related composite solids
- **MA4-14MG** uses formulas to calculate the volumes of prisms and cylinders, and converts between units of volume
- **MA5.2-12MG** applies formulas to calculate the volumes of composite solids composed of right prisms and cylinders
- **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
- **MA5.3-15MG** applies Pythagoras' Theorem, ~~trigonometric relationships, the sine rule, the cosine rule and the area rule~~ to solve problems, including problems involving three dimensions
- **MA5.3-6NA** performs operations with surds and indices
- **MA5.2-7NA** applies index laws to operate with algebraic expressions involving integer indices
- **MA5.1–2WM** selects and uses appropriate strategies to solve problems
- **MA5.1–13SP** calculates relative frequencies to estimate probabilities of simple and compound events.
- **MA5.2–17SP** describes and calculates probabilities in multi-step chance experiments