ORANGE HIGH SCHOOL

ASSESSMENT TASK NOTIFICATION

Subject	Mathematics
Topic	Semester One Content, Properties of Geometrical Figures, Measurement, Right-Angled Triangles, Indices
Class Teacher	Lummis & Arnott
Head Teacher	Edwards
Year	9 Stage 5.2
Date Given	Week 4, Term 4 (Monday 30th October)
Date Due	Week 6, Term 4 (Monday 13th November)
Weighting	35%

Assessment Outline

2 periods – In class examination

Topics assessed:

- **Semester One Content (Topics)**
  - Financial Mathematics
  - Expressions & Equations

- **Properties of Geometrical Figures**
  - Classifying & Naming Angles
  - Complementary & Supplementary Angles
  - Vertically Opposite Angles & Angles at a Point
  - Parallel Line Properties
  - Classifying and Angle Sum of Triangles
  - Types and Angle Sum of Quadrilaterals
  - Angle Sum of Polygons
  - Similar Figures and Similar Triangles
  - Congruent Triangles

- **Indices**
  - Index Notation & Factor Trees
  - Multiplying & Dividing with Indices
  - Power of a Power and the Zero Index
  - Negative Indices
  - Scientific Notation
  - Significant Figures
  -

- **Right-Angled Triangles:**
  - Pythagoras' Theorem – Finding the Hypotenuse
  - Pythagoras' Theorem – Finding the Short Side
  - Using Trigonometry to Find an Unknown Side Length
  - Using Trigonometry to Find an Unknown Angle
  - Angles Elevation & Depression
  - Bearings

- **Measurement:**
  - Limits of Accuracy
  - Converting Digital Units
  - Converting Units of Length
  - Perimeter
  - Circumference of Circles
  - Perimeter of Sectors and Composite Shapes
  - Area of Plane Shapes (squares, rectangles, triangles, parallelograms, kites/rhombuses, trapeziums)
  - Area of Circles & Sectors
  - Surface Area of Prisms & Cylinders
  - Converting Units of Volume and Capacity
  - Volume of Prisms & Cylinders

Required equipment

- Black or Blue pen or pencil
- 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.

Course Outcomes:

- **MA5.1-4NA** solves financial problems involving earning, spending and investing money
- **MA5.2-4NA** solves financial problems involving compound interest
- **MA5.2-6NA** simplifies algebraic fractions
- **MA5.1-5NA** operates with algebraic expressions involving positive-integer and zero indices, and establishes the meaning of negative indices for numerical bases
- **MA5.2-7NA** applies index laws to operate with algebraic expressions involving integer indices
- **MA5.2-8NA** solves linear and simple quadratic equations
- **MA5.1-8MG** calculates the areas of composite shapes, and surface areas of rectangular and triangular prisms
- **MA5.2-11MG** calculates the surface areas of right prisms, cylinders and related composite solids
- **MA5.2-12MG** applies formulas to calculate the volumes of composite solids composed of right prisms and cylinders
- **MA5.1-9MG** interprets very small and very large units of measurement, uses scientific notation, and rounds to significant figures
- **MA5.2-13MG** applies trigonometry to solve problems, including problems involving bearings
- **MA5.1-11MG** describes and applies the properties of similar figures and scale drawings
- **MA5.2-14MG** calculates the angle sum of any polygon and uses minimum conditional to prove triangles are congruent or similar