



# ORANGE HIGH SCHOOL

## ASSESSMENT TASK NOTIFICATION

<b>Subject</b>	Year 10 Mathematics 5.2
<b>Topic</b>	End of Course Examination
<b>Class Teacher</b>	Ms Bulmer, Mr Gurjar
<b>Head Teacher</b>	Mrs Edwards
<b>Year</b>	2023
<b>Date Given</b>	26/10/2023
<b>Date Due</b>	09/11/2023
<b>Weighting</b>	35%

### Assessment Outline

#### **Period 1 in-class examination**

*Topics assessed:*

Measurement *from semester one*

Algebraic expressions and indices *from semester one*

Probability *from semester one*

Single variable and bivariate statistics *from semester one*

Geometrical figures

- Congruent and similar triangle proofs
- Using congruence or similarity to find side lengths or angle sizes
- Solving problems with polygons involving internal and external angles

Working Mathematically

#### **Period 4 in-class examination**

*Topics assessed:*

Equations and linear relationships

- Systematically solving linear equations, with one-step, two-step, three-step, or variable on both sides
- Solving simultaneous equations algebraically or graphically
- Graphing linear relationships using various techniques
- Solving questions involving properties of lines including gradient, intercepts, distances, midpoints
- Interpreting linear graphs
- Solving inequalities and graphing solutions

Trigonometry

- Recognising names of sides, and correct trigonometric ratio for given problems
- Finding missing angles or sides in right-angled triangles from trigonometric equations
- Solving questions with angle of elevation/depression or bearings

Quadratic expressions and quadratic equations

- Expanding and simplifying binomial expressions
- Factorising monic quadratic expressions

Working Mathematically

**Required equipment**

- Black or Blue pen or pencil
- Calculators are allowed

**Course Outcomes:**

- selects appropriate notations and conventions to communicate mathematical ideas and solutions  
**MA5.2-1WM**
- interprets mathematical or real-life situations, systematically applying appropriate strategies to solve problems **MA5.2-2WM**
- constructs arguments to prove and justify results **MA5.2-3WM**
- solves financial problems involving compound interest **MA5.2-4NA**
- recognises direct and indirect proportion, and solves problems involving direct proportion **MA5.2-5NA**
- simplifies algebraic fractions, and expands and factorises quadratic expressions **MA5.2-6NA**
- applies index laws to operate with algebraic expressions involving integer indices **MA5.2-7NA**
- solves linear and simple quadratic equations, linear inequalities and linear simultaneous equations, using analytical and graphical techniques **MA5.2-8NA**
- uses the gradient-intercept form to interpret and graph linear relationships **MA5.2-9NA**
- calculates the surface areas of right prisms, cylinders and related composite solids **MA5.2-11MG**
- applies formulas to calculate the volumes of composite solids composed of right prisms and cylinders **MA5.2-12MG**
- applies trigonometry to solve problems, including problems involving bearings **MA5.2-13MG**
- calculates the angle sum of any polygon and uses minimum conditions to prove triangles are congruent or similar **MA5.2-14MG**
- uses quartiles and box plots to compare sets of data, and evaluates sources of data **MA5.2-15SP**
- investigates relationships between two statistical variables, including their relationship over time **MA5.2-16SP**
- describes and calculates probabilities in multi-step chance experiments **MA5.2-17SP**

**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.**