

JUNIOR ASSESSMENT TASK – STAGE 5

Part 1 and 2

Faculty – Science	Stage 5 – Year 10	Topic: Individual Student Research Project
<p>Task Description:</p> <p>This is a practical task that require you to conduct a major project on an area of your choosing.</p> <p>Your project must be based on one of the four major disciplines of science:</p> <ul style="list-style-type: none"> - Physics - Chemistry - Biology - Earth and Environmental Science (including Marine studies) <p>The project must fall into one of the following categories:</p> <ul style="list-style-type: none"> - A scientific investigation - Model/Diorama (of a theoretical concepts or idea) - Invention (solution to a specified problem) <p><i>If you have an idea that does not fit into one of the above categories you must get approval from your class teacher or Mr Shea</i></p> <p>Presentation of project: (What do you need to hand in?) All students must submit the following:</p> <p><u>Part 1</u></p> <p>A portfolio of their project. The portfolio must be in the form of an A4 plastic display folder and submitted for approval and review at the end of term 1 as well as being submitted with the completed project. (see additional information for specific requirements) <u>DUE DATE Term 1 Week 10, Thursday 4th April</u></p> <p><u>Part 2</u></p> <p>Submit a revised portfolio with improvements made from feedback given by your teacher in part 1 and completion of the new components including results, discussion, conclusion and bibliography. In addition, the project must be able to be displayed. Students will need to have some form of display for their project. This could take the form of a poster, model, interactive media, a combination of these types or any other form of display. Note: All projects will be displayed in the <i>Orange High School Science Fair</i> during National Science Week. Each student is allocated a display area of 1.0m x 1.0m If your display requires more space you must speak to Mr Shea <u>Due Date Term 3 Week 4 Date Wednesday 14th August</u></p>		
<p>Date Given: Week 2 Term 1 (7th February – 8th February)</p>	<p align="center">DUE DATES</p> <ul style="list-style-type: none"> - Part 1 Portfolio: Week 10 Term 1 Thursday 4th April - Part 2 Project: Week 4 Term 3 Date Wednesday 14th Aug 	

Outcomes to be Assessed:

WS5.2 Students plan first-hand investigations by:

- a. planning and selecting appropriate investigation methods, including fieldwork and laboratory experimentation, to collect reliable data
- d. specifying the dependent and independent variables for controlled experiments

WS5.3 Students choose equipment or resources for an investigation by:

- a. identifying appropriate equipment and materials
- b. identifying the appropriate units to be used in collecting data

WS6 Students conduct investigations by:

- a. individually and collaboratively using appropriate investigation methods, including fieldwork and laboratory experimentation, to collect reliable data
- b. safely constructing, assembling and manipulating identified equipment
- f. evaluating the effectiveness of the planned procedure, considering risk factors and ethical issues, and suggesting improvements as appropriate

WS7.2 Students analyse data and information by:

- a. analysing patterns and trends, including identifying inconsistencies in data and information
- b. describing relationships between variables
- c. assessing the validity and reliability of first-hand data
- d. using knowledge of scientific concepts to draw conclusions that are consistent with evidence

Task Guidelines:

You will be expected to:

- **Individually complete a Scientific Research Project**
- **Submit a portfolio of the project in an A4 plastic display folder**
- **Present the project in a manner that allows it to be displayed as part of the Orange High School Science Fair**

Penalties:

Failure to complete the task with a sustained and diligent effort or because you are absent may lead to:

- **A zero mark**
- **The issuing of a warning letter explaining that you have not met the course learning outcomes according to the requirements of the NSW Board of Studies**

Please note: that 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.