

Part 2: Portfolio Outline

- Title: Clear statement of the intent of your project.
- Abstract: A short paragraph that highlights the different problems that will need to be overcome in order for your project to be a success.
- Purpose: Construct a sentence using appropriate scientific terminology to describe what it is that you are attempting to complete.
- Expectation
 - **For Inventions or Models/Diorama**: A statement of intent: Describe what you are attempting to complete. Including the aim of the project and proposed audience.
 - **For Investigations**: Hypothesis: For those conducting an investigation an If... then statement is required. Also, include the dependent, independent and controlled variables. And a comment on 'the control' part of the experiment.
- Materials used:
 - **For Inventions or Models/Diorama**: This also including research that you have completed. Including reasons for the chosen topic and a brief history of the concept.
 - **For Investigations**: This section of the report should list all the materials that you are intending to use. This list can be added to should your project take an unforeseen turn later on, however, should contain all major pieces, including where they were obtained.
- Risk assessment: Your safety assessment should be detailed, including **hazards/dangers, risks** and **precautions** to be taken to minimise them.
Note: Models/diorama/invention: you need to create some potential risk associated with your research e.g. risk of infection from a disease you are researching
- Progress journal: The journal should have in it, dates that relate to the work completed so far, such as, gathering information, development of ideas, purchase of equipment, setting aside an area to conduct the project, etc.
- Procedural writing:
 - **For Investigations**: Written using appropriate scientific terminology and structures. The procedure should be a working outline of how you conducted, make or design the project, including any diagrams and can be considered as a work in progress, not the finished outline. This procedure should include an outline of your results table, ready to collect data in part 2.
 - **For Models/Diorama/Invention**: Create a design procedure on how the model is constructed. The procedure is to include every step, so that it can be replicated. Include a labelled diagram and photos of steps during the construction process

- Results
 - **For Investigations:** Display clear and comprehensive results from your investigation in an appropriate format – tables and a graphs
 - **For Models/Diorama/Invention:** Include diagrams/pictures. That have clear labels of parts of invention/model/diorama. Pictures must be labelled and annotated with a description.

- Discussion
 - **For Investigations:** Identify trends seen in the data. Discuss the accuracy, reliability and validity of the investigation and how these may be improved. What was learned from this investigation, how this relates to previous research and how it could be useful in the future. Problems and Solutions: Identify any problems encountered in performing your investigation or producing your model, and explain how you overcame them.
 - **For Models/Diorama/Inventions:** Discuss in further detail the scientific concepts behind your model or invention and how these were modelled in your model, or applied in your invention. Discuss how accurately and clearly your model communicates these concepts, or how effectively your model applies them to meet its purpose, and how either of these could be improved. Problems and Solutions: Identify any problems encountered in performing your investigation or producing your model, and explain how you overcame them.

- Conclusion
 - **For Investigations:** Clear, logical, scientific summary of findings, supported with evidence from results. Link between dependent and independent variable. States whether supports or opposes the hypothesis.
 - **For Models/Diorama/Invention:** An explanation of the success of the model. Describe how this model worked on subjects you aimed at teaching. Supports this with evidence.

- Bibliography:

Gather information from a range of sources and reference them including the website link/book or article name, the author, and the date produced (book or article) or accessed (website). Use a referencing style such as Harvard or APA. If using direct quotations from these sources use “quotation marks”. However, do not rely on these, use your own words and understanding.

Presentation details

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. In addition to this you will be assessed on your understanding through short conversations with two teachers throughout the fair. **The marking criteria for this is attached at the end.**

Note: 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.