

Year 10: Independent Research Project (IRP)

Your task:

- Choose **one** of the research questions below and conduct your research using the Internet.

Research Question 1: Investigate the effects increased carbon dioxide can have on the aquatic environment.

Research Question 2: Investigate the effects increased acidity can have on the aquatic environment (specifically coral).

- You need to find previous studies/research carried out on this concept and write down your findings.
- Write down your background information on why increased Carbon dioxide or acidity levels are harmful or beneficial to the aquatic environments.
- Think of how you would test the effects of increased carbon dioxide or increased acidity levels on an aquatic environment using the apparatus below.

Apparatus

You must email Mrs Hollero (chollero@parra.catholic.edu.au) of the apparatus you need by **10am, Wednesday 13 September** *absolute latest*.

- Keep in mind that the apparatus you order must be obtainable in a school science laboratory environment (for example we cannot obtain samples of coral or sea water).

Procedure

- You will need to plan your procedure. Ensure that you are precise with measurements and details
- Write a purpose, hypothesis, apparatus list, risk assessment, procedure, prior to performing the experiment.

The experiment

- Follow your procedure using your apparatus.
- You have a maximum of 3 lessons to complete your practical investigation.
- Observe and record your results using an appropriate medium i.e- table, graph, qualitative results
- Add your results, conclusion and discussion to your scientific report.

Timeline

- Tues 12 Sept, period 5: Research and book materials
- Wed 13 Sept, 10am: all materials must be booked, otherwise students must provide their own materials
- Thurs 14 Sept, period 2: Research and plan investigation
- Fri 15 Sept, period 4: Conduct practical investigations
- Tues 19 Sept, period 3: Conduct practical investigation / research / prac write up
- Thurs 21 Sept, period 3: Conduct practical investigation / research / prac write up
- Fri 22 Sept, period 3: **SCIENTIFIC REPORT DUE**