



Sample one-day primary science extension programme

The world's your oyster!

A one-day intense science experience with lots of practical hands-on investigation in a real science teaching laboratory with knowledgeable and passionate educators!

Please have own cut lunch and a drink bottle with water.

Warm clothing and weatherproof jacket are needed and closed toed foot-ware is compulsory in the laboratory.

Hot water is available if students wish to bring cup-a-soups etc for lunch.

- 9:30 am Arrive New Zealand Marine Studies Centre
Introduction to facilities
Overview of the programme
Introducing the oyster!
- Oyster teams
- 9:45 am Laboratory and Aquarium. The world of the Oyster Whanau!
Discovering bivalves. Using a simple visual classifying tool
- 10:00 am Laboratory. The world of the Oyster.
5 stations in "touch" with the world:
The bags
The wall
The sounds
In "taste" with the world:
Salinity
Acidity
- 10:45 am Morning tea
- 11:00 am A more detailed intro to acidity – the PH probe. Carbon dioxide and ocean acidity.
Where in the world are the Oysters??!
Oysters rock!!
- 11:30 am Laboratory. Living in an oxygen rich world!
Setting up the long term investigation into one of the Oyster's main needs.
The Big 'O'! And the effect it and its neighbours have on the chemistry of the sea (oxygen and acidity).

- 12:00 pm Laboratory. The changing World (of the Oyster)!
- Shells, bivalves , processes of biosynthesis, growth, wear and breakdown (present, past and future!)
- Activity – a timeline of Oyster wear and tear.
- Activity- A little chemistry experiment –down to the “hard grind” of some science investigation!
- Calcium carbonate and acidity
- 1:00 pm LUNCH
- 1:30 pm Check our long term investigation and record the data.
- 1:45 pm Linking to the big picture – climate change and ocean acidification !
- 2:00 pm Seminar room. Review and wrap up
- Return to the theme and the conceptual tool. Is the World your oyster?
- Farewell.
- 2:10 pm Depart NZMSC for Dunedin

Notes:

Worksheets – where relevant, these are provided, please ensure you copy sufficient for the group

Teams – most activities and challenges will be done as small cooperative and collaborative teams of 4-5 students, which we will set up near the start of the programme.

Students should bring – pencils, pens, a clipboard (if you have one).