

UNDER THE SEA - A FUZZY SITUATION.

The year is 2020. Jenny and Rick are really excited because their family has been chosen to live for a year in an experimental underwater research station, Tangaroa, off the coast of the Poor Knight's Islands. Jenny and Rick's mother will be chief of the research laboratory, while their father is chief chef and communications officer.

There will be five families from different countries taking part in this experiment to see whether it may be possible one day to establish an undersea colony. The families will have their own living modules with bedrooms, bathrooms and a small family room, and these will all connect to a central module with the kitchen and dining room, lounge, combined gym and games room, research labs and school room.

There will be ten children between the ages of seven and fourteen in Tangaroa, and their education will be by computer and virtual reality tapes. The students will also be expected to take part in some of the scientific experiments in the ocean around the lab, and they have all been given training with deep scuba gear and minisubs.

One of the major experiments the team will be involved with will be an assessment of the ongoing environmental impact from the 'Valdoz' tragedy of 2015 when the supertanker 'Valdoz', carrying one of the last shipments of crude oil to the Marsden Point Refinery, sank after hitting the Elizabeth Reef on the mainland coast, just to the west of the Poor Knights.

Because of the depth of the lab, the inhabitants will not be able to return to the surface during the year. When they do return to the surface, they will have to spend a considerable time decompressing at wait stations on the way up so that they do not contract the deadly bends.

A permanent platform will be stationed above Tangaroa, to provide air, communications and supply packages. A wave-powered generator will provide necessary electricity.

Jenny and Rick think that the whole experience is going to be a great adventure. They still know, though, that there are going to be some problems with life in Tangaroa, and they want to be prepared for these. Help them to brainstorm the problems they might face during the next year. Choose a major underlying problem and brainstorm some possible solutions to this problem.

- Robyn Boswell, 1995