

Penguin Properties

You need ★ maps (see copymaster) ★ a classmate

TECHNOLOGY

Animal habitats are often destroyed by people or other animals. Sometimes, technological products can be used to modify environments so that they better meet the needs of particular animals.

Changes to the environment always seem to be negative.



They don't have to be. We can do things that make a positive difference.

In some places, the activities of humans and predators such as cats and dogs have damaged the fragile environments in which kororā (little penguins) live. However, the use of man-made nest boxes in some “at risk” areas has had a positive impact on penguin numbers.

Over time, the design of the boxes has been improved, and the penguins can now be monitored by the Department of Conservation with very little disturbance.

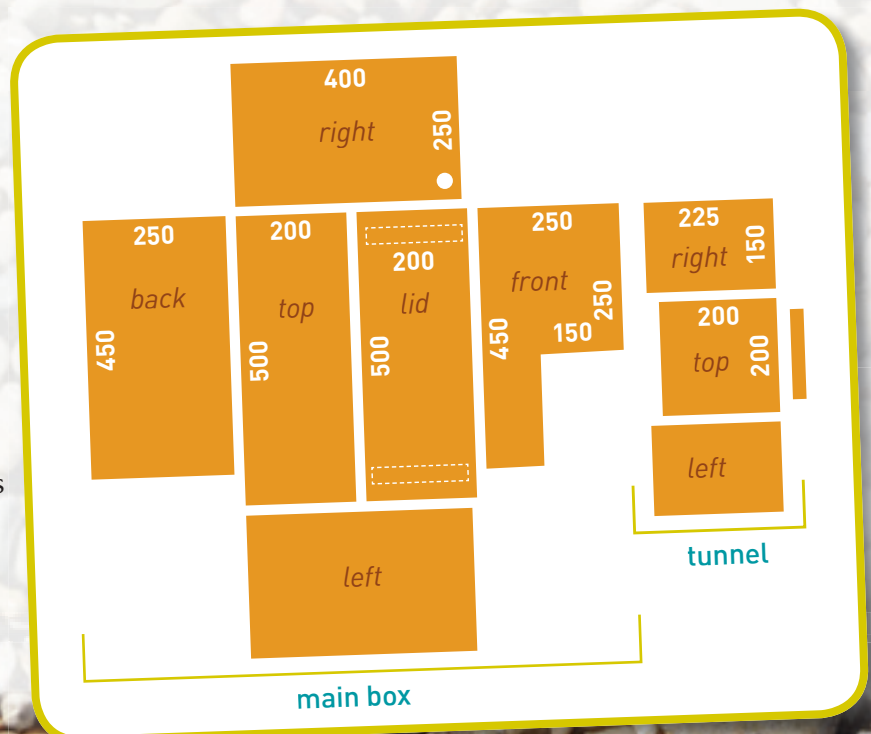
Activity

A group of Wellington students want to make and place nest boxes on the coast near their school.

1. The students use this Department of Conservation nest box design:

The measurements shown are all in millimetres (mm). The timber used is 25 mm thick.

Using the information in the diagrams, create drawings of the front, plan, and side views of a completed nest box. Include measurements.



2.

- a. If boxes are too close, the penguins will fight. What else should be considered when deciding where to place the boxes?
- b. The positions of four penguin boxes are shown on the map. Calvin has a copy of the map and wants to know where the boxes are. Work out a way to use grid references to communicate the position of the boxes over the phone.
- c. Add two more boxes to one of your copies of the map (your master copy). Give a classmate your other copy, without the new penguin boxes marked on it.
- d. Explain your reference system and then use it to tell your classmate where the new boxes are. Your classmate marks the position of the new boxes on their copy of the map.
- e. Compare the two maps. Did your classmate locate the boxes correctly?

