

# Rusting nails

## This task is about planning a fair test.

Jayden wanted to find out if nails rust more quickly in salt water than in fresh water.


He decided to put one nail in salt water and one in fresh water to find out what happened. He knew that if he wanted this to be a fair test it was important to change only one thing and keep everything else the same. (In science these things are called *variables*).

- a) For planning a fair test to find out **whether nails rust more quickly in salt water or fresh water**, which things would you need to keep the same?

Show this on the chart below by selecting *yes* or *no*.

Sort of water	<i>yes/ no</i>
Amount of water	<i>yes/ no</i>
Time nails are in the water	<i>yes/ no</i>
Type of nail	<i>yes/ no</i>

- b) Highlight one thing in each box in the chart below so Jayden knows exactly what he needs to do to set up a fair test. The first one has been done for you.

Nail 1 

Nail 2

### Planning for a fair test. Question: Will nails rust more quickly in fresh water or salt water?

Nail 1	Nail 2
Steel nail Copper nail	Steel nail Copper nail
Fresh water Salt water	Fresh water Salt water
100ml (metal is partially covered) 500ml (metal is fully covered)	100ml (metal is partially covered) 500ml (metal is fully covered)
1 week 2 weeks	1 week 2 weeks