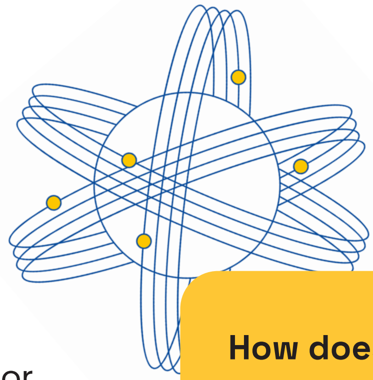
Bouncy Egg



Predict:

Scientists like to make predictions, or hypotheses, before they do experiments. It helps them figure out what to expect and why things happen the way they do.

Have a go at making your best guess using the questions below:

1. Do you think the egg will get bigger or smaller after it's been sitting in the vinegar?
2. What do you think will happen to the egg shell?
3. What do you think will happen to the yolk of the egg?

TĪMATA! LET'S GET STARTED!

What you will need:

- Egg - *hēki*
- Jar (with a lid)
- Vinegar - *winika*

Instructions:

1. Pour some vinegar into a jar. Make sure you have enough to cover your egg.
2. Place your egg into the jar and close the lid.
3. Now it's time to be patient, wait 3-4 days before opening the jar.
4. Gently drop the egg onto a surface (start low and work your way higher... be careful, it can get messy!)

How does it work?

An eggshell is hard and protective, **made mostly of calcium carbonate** —just like chalk and seashells.

When vinegar (an acid) reacts with the calcium carbonate it fizzes, releasing **carbon dioxide bubbles.**

What's left is the stretchy membrane —strong enough to hold the egg and flexible enough to make it bouncy!

As the shell disappears, water from the vinegar moves through the egg, making the egg fill up with water and grow!

Reflect:

- How did the egg feel when you touched it after it had been in vinegar for a few days?
- What role did the vinegar (acid) play in this experiment?
- Why do you think the vinegar only affects the shell?

Extra for experts!

- Add a few drops of food colouring to your vinegar before adding the egg.
- Grab a torch and shine a light through your shell less egg!