



# Growing plants

## Can you grow your own lunch?



Plants have their own life cycle, just like all living things. Plants start as seeds. In the right conditions, seeds sprout stems and leaves. Later in their life, they bloom with flowers and fruits. These flowers and fruits make the seeds for the next generation of plants. You can see them inside fruits like apples, peppers and tomatoes. Let's grow a tomato plant!

We recommend using heirloom tomatoes or an open-pollinated variety for the best results, as these seeds will produce an identical plant to the original. Sometimes, supermarket tomatoes are infertile, or produce plants with less favourable traits.

Why not experiment with different tomatoes to see which seeds produce fruit, and how similar they are to the original?

## Method

- You'll need something to grow the plants in. If you don't have a spare plant pot, you can make one out of a cardboard tube (see side box).
- Fill about three-quarters of your plant pot with soil.
- Chop a tomato into slices, no thicker than 1cm wide - ask someone responsible to help with using the sharp knife.
- Lay a tomato slice on top of the soil – make sure to choose a slice with seeds on it.
- Cover the tomato slice in a thin layer of soil and dampen the soil with a bit of water.



## Making a plant pot

- Take a toilet roll or kitchen roll tube.
- Cut four lines, equally-spaced, a quarter of the way down the tube.
- Fold the four flaps inwards to make the base.
- Tape the flaps shut.
- Don't worry if there are gaps where the flaps don't overlap – this will help drain excess water.

## The waiting game

It will take time for your seeds to start growing, this is called germination. After around a week, you'll spot small shoots emerging from the soil. As the plant grows, look for the different parts: leaves, stem, roots. How do they change as the plant grows?



## What plants need

Now that your seeds have germinated, it's time to think about what plants need to grow and be healthy:

- Sunlight – place your seedling on a windowsill so it has light once it has started growing.
- Water – water the pot regularly, just enough to dampen the soil through.
- Air – plants need gases from the air, especially carbon dioxide.
- Nutrients – plants get nutrients from the soil. The slice of tomato we buried with our seeds will provide even more nutrients.
- Warmth – the seeds will start to grow sooner if kept at warmer temperatures like you find indoors.



**Safety** Wash hands after handling the soil.

## Become a scientist!

Once you have started growing your tomato plant, experiment with different environments and conditions to see what happens.

Check out other activities to try at home on our website and send us a message if there's anything you want to see us cover!

