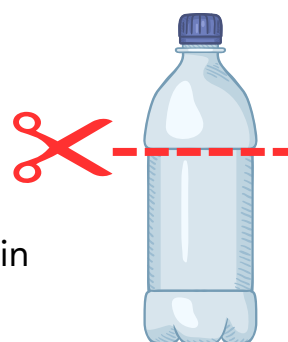


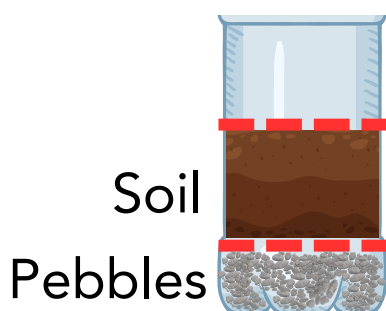
MAKE A GREENHOUSE

We've explored how the Earth has different climates, and how humans can recreate these on a small scale, so let's create our own greenhouse, and create a warm, wet climate!

- You will need:
- Bottle
 - Scissors
 - Soil
 - Pebbles
 - Plant seeds (e.g. grass or basil)
 - Water

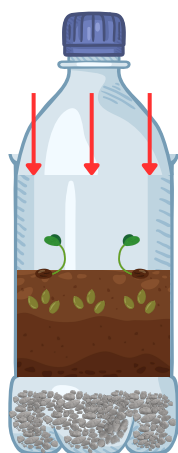
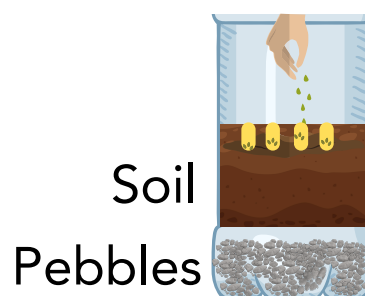


- Step 1: With a grown-ups help, cut the bottle in two, 1/3 from the top.



- Step 2: Fill the base 1/4 deep with pebbles, then add soil around twice as deep as the pebbles.

- Step 3: Make small holes in the soil, and add a pinch of seeds, spread amongst the holes, before covering with the soil.



- Step 4: Add enough water to wet, but not soak the soil, then squeeze the top of the bottle into place. Place in the sun then watch the plants grow!

Top Tip!

To avoid adding too much water, you could use a spray bottle to add water to the bottle - too much water and the seeds won't grow! Instead of adding seeds you could also add a plant like ivy!

MAKE A GREENHOUSE

Demonstration explained: We live in the United Kingdom, a temperate climate, but by trapping the moisture in the bottle, and placing it in sunlight where the bottle can warm up through the day, you are essentially creating a 'tropical' environment for your plants to grow! The tropics are a warm and humid place, and you'll see the humidity in the bottle after a while as water droplets condense on the inside of the bottle.

This is a great practical demonstration to see how important the water cycle is to plants as well, with the bottle trapping everything inside and creating a closed system. This means the plants give off water (through evaporation), which then condenses on the bottle side and runs back into the soil to once again be taken up by the plants in a loop. This will last for several days to a couple of weeks in your bottle, as long as it is well sealed!

