



## Grow your own mini catchment

In this activity you will make your own mini catchment to observe the different stages of the hydrological cycle.



55 mins



1-2 people

**Preparation time:** 15 minutes

**Activity time:** 30 minutes

**Difficulty:** medium

### Equipment required

- For a temporary classroom project use a 1.25 – 2 L soft drink bottle or a takeaway container with a lid. For a more permanent project use a sealable glass container
- a cup of sand, stones and gravel
- garden soil
- water
- small plants, seedlings and grasses (weeds work wonders)
- bottle cap or similar to hold water
- scissors
- sticky tape
- small trowel, bucket and gloves to collect the materials

### Instructions

**Step 1** Take your clean container and remove the lid. If using a rinsed soft drink bottle, remove the label from your bottle and carefully cut the bottle in half (adult supervision will be required).

**Step 2** Add a layer of gravel, followed by a layer of sand in the bottom of your container for drainage. Build up one end of the container with a sloping edge to make a small hill or mountain.

**Step 3** Spoon the soil into the bottle until it is around 1/3 full. Make small holes in the soil and place in your plants. Add other features like sticks, moss and pebbles to your mini garden.

**Step 4** Water the plants until the soil is soaked through.

**Step 5** Fill a small dish (bottle lid) with water and add to your catchment by placing at the bottom of the slope.

**Step 6** Place the lid on your container to seal your mini catchment. If using the soft drink bottle, place the top half back onto the bottom and seal with sticky tape.

**Step 7** Place your mini catchment in a spot with adequate sunlight near a window. Do not take off the lid.

**Step 8** Over the next couple of weeks, observe how water moves through the mini catchment environment. Can you see the different stages of transpiration, evaporation, condensation, precipitation and runoff? Create a journal to record what happens.