



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.