

# Observing a transpiring plant

When leaves are in sunlight they release water through the process of transpiration.

You can see this process happening by placing a leaf or a small branch into a zip-lock plastic bag while it is still attached to the rest of the plant.

## Materials

- A square zip-lock bag that is about 20cm wide and 20cm long.
- A plant that is growing in the sun and has leaves or small branches that can fit inside the plastic zip-lock bag.
- A small measuring cup. The type used for measuring medicine is ideal.



Measuring cup

## Method

This experiment works best when you put the bag on the leaf between 9am and 10am in the morning and you check it between 2pm and 3pm in the afternoon.

- Choose a leaf or small branch and put it inside the plastic zip-lock bag.
- Between 9 and 10 am. Seal the zip-lock bag carefully on either side of the stem of the leaf or branch taking care to ensure it is still attached to the whole plant.
- Between 2 and 3 pm. Remove the bag from the leaf or branch. Be careful not to let any of the water run out.
- Measure and record how much water is inside of the bag. Also record the temperature, how sunny the day is and how many leaves were in the bag. (You can record the number of leaves by taking a photograph.)
- Note. Leaves transpire more on a hot sunny day (summer time) than they do on cold cloudy days (winter).