

## Rate of Evaporation – Student Activity

In many areas of Australia rainfall evaporates back into the atmosphere before it gets a chance to sink into the soil. We can measure this rate of evaporation.

$$\frac{\text{Original volume of water} - \text{final volume of water}}{\text{Time in minutes}} = \text{rate of evaporation in mL per minute}$$

Materials required per student or group:

- Water
- Measuring cylinder
- Beaker, bowl, cup saucer and plate or other, container for holding water
- Area of flat paving, concrete, asphalt or a hot window sill
- Timer

Using the measuring cylinder, pour the same volume of water into different containers.

Expose the containers for a known time.

Enter your results in the table provided.

Calculate the rate of evaporation using the equation above.

Which variables do we have to keep the same to make this a “Fair Test”? \_\_\_\_\_

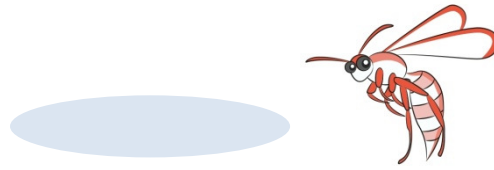
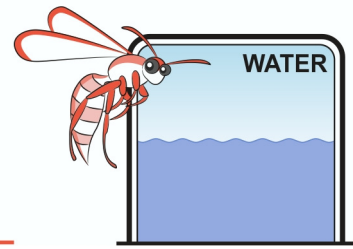
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Which variable did we change? \_\_\_\_\_

### RESULTS

Container	Original volume of water (mL)	Final volume of water (mL)	Volume evaporated	Time	Rate of evaporation ( )

## Rate of Evaporation – Student Activity



What variable or factor caused the difference in rate of evaporation? \_\_\_\_\_



After swimming, two students needed to dry their towel before packing it to take home. One laid theirs out flat on the grass. The other student folded theirs neatly into four and laid that on the grass. Which towel would dry first?

\_\_\_\_\_

Explain your answer. \_\_\_\_\_

\_\_\_\_\_

**Interesting Fact** Aboriginal people used to dig wells to reach groundwater. Before they moved on they would fill the well with clean sand. This would not only stop animals fouling the water but also reduced loss by evaporation. 90cm of sand reduces evaporation almost to zero. This is also why some Aboriginal people would bury themselves in sand to stop sweat loss in extreme heat.