

Effect of surface area on evaporation rate

This task is about the relationship between surface area and evaporation.

Task: To show that surface area influences the rate of evaporation

- Trace around the top of these three containers; petri dish, measuring cylinder, 100 mL beaker, on a piece of graph paper.
- Calculate the surface area of each container by counting the squares on the graph paper.
- Pour 25 mL of water into each container.
- Leave the 3 containers in the same place for 3 days.
- Measure the volume of water left.

a) Complete the results chart.

	Surface area	Original volume of H ₂ O (mL)	Final volume of H ₂ O (mL)	Water loss (mL)
Petri dish				
Beaker				
Measuring cylinder				

b) i) Which container lost the most water over the 3 days? _____

ii) Why did this container lose more water?

iii) Explain what happens when water evaporates.

c) How could the rate of water loss in this experiment be increased?
