

Unit 5D: Changing State



Learnanywhere

Changing State



Some useful words

Evaporation	when a liquid changes to a vapour (gas)
Condensation	when a vapour changes to a liquid
Boiling temperature	the temperature at which a liquid boils, for water it is 100 C
State	the 3 states are solid, liquid and gas
Change of state	when a substance changes from one state to another

Evaporation



Other liquids



How quick does a puddle dry up?



Which puddle do you think will dry up the quickest? Why do you think this?

What factors do you think affect how quickly a puddle dries up?

Temperature **Wind** **Volume of water** **Surface area of puddle**

Choose one of these to investigate

...cont

Make a prediction. What do you think you will find?

What apparatus will you need?

Explain how you will carry out your experiment?

What will you measure?

How will you record your results?

How will you keep the test fair?

Support slide



The bowls represent puddles with different surface areas

Which of the bowls of water do you think will dry up the quickest? Why do you think this?

To make sure the test is fair, each 'puddle' must have the same volume of water in it and they need to be kept in a room at the same temperature.

The time it takes for each 'puddle' to evaporate needs to be recorded. We will check the 'puddles' every day to see which evaporates the quickest

Drying



How do these appliances help things dry more quickly?

Condensation

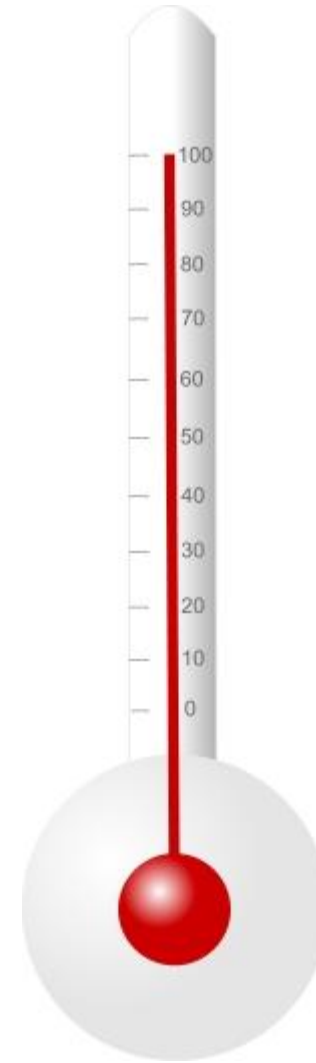


Where else do we see condensation?

More Condensation



Boiling Water



Melting Ice



Take the temperature of the ice and water every 5 minutes for 2 - 3 hours. Record the results.

Time	Temperature

...cont

What temperature did you end up at?

What do you think would have happened if the room was 10 degrees hotter?

Change of State

SOLID

LIQUID

GAS

The Water Cycle

