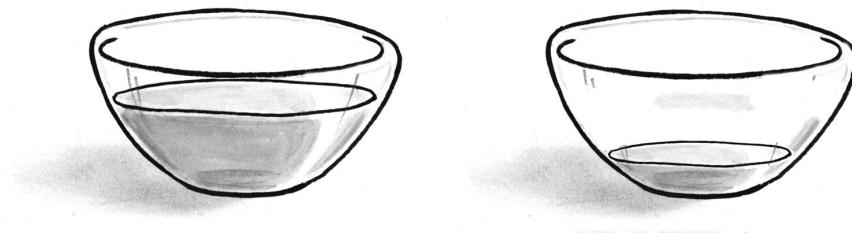




It evaporated!

Background knowledge

Water left in a bowl will slowly disappear. The water evaporates into water vapor, the gas phase of water. The water vapor mixes with the air. *Evaporation* is a type of phase change in which matter changes from a liquid to a gas. Some liquids evaporate more quickly than others. Liquids with high boiling points (those that boil at very high temperatures) tend to evaporate more slowly than those with lower boiling points.



Science activity

Number the liquids listed below in order of how fast you would expect them to evaporate at room temperature. Explain why you think this is so.

☐

water

☐

rubbing
alcohol

☐

vegetable oil

.....

.....

.....

How do you think you can make the water evaporate more quickly?

.....

.....

Science investigation



Take extra care - ask an adult to supervise you.

What happens when a liquid evaporates from your skin? Gently rub some water on your upper arm. Wait a few minutes and describe what you feel on your arm. Repeat this experiment, but this time apply some rubbing alcohol on your upper arm. Wait a minute and describe what you feel. You can try this with other liquids.

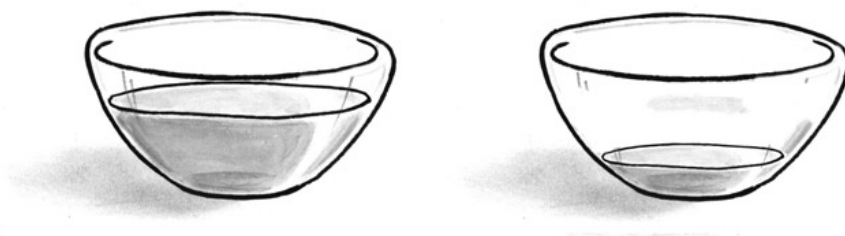




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Science activity

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- | | | |
|--------------------|------------------------------|----------------------------|
| <div>2</div> water | <div>1</div> rubbing alcohol | <div>3</div> vegetable oil |
|--------------------|------------------------------|----------------------------|

Alcohol, water, oil. Since you can smell alcohol, it is more volatile. It has a lower boiling point than water or oil. Oil has the highest boiling point of the liquids.

How do you think you can make the water evaporate more quickly?

The water could be made to evaporate more quickly by heating it.

Science investigation

❗ When a liquid evaporates from your skin, it removes heat. This causes the sensation of cooling. The more volatile the liquid, the faster the evaporation and cooling effect. Alcohol feels cooler because it evaporates faster.

