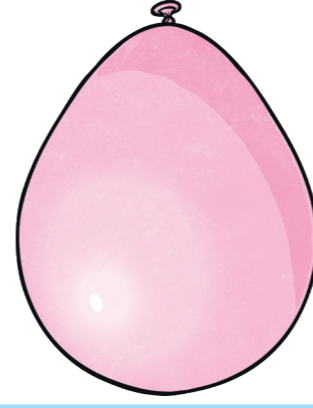




You investigated how gases have mass and take up space by using balloons and bubbles.

You forgot that the substance exists in different states depending on the temperature.



You set up a slow-flowing liquid demonstration.



Move forward 1

Go back 1 space

Move forward 3

You were able to give examples of solids, liquids and gases.

Move forward 3

You forgot that not all substances could be easily classified.

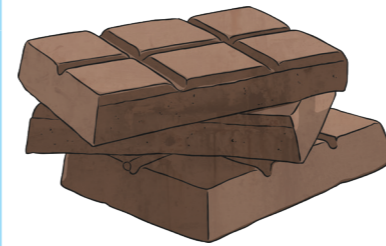
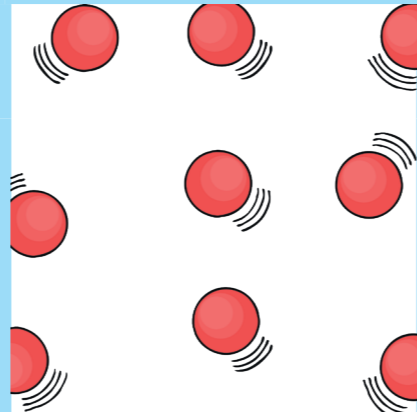
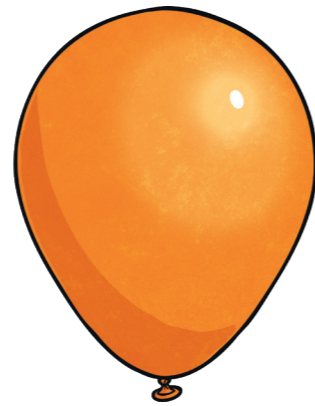
Go back 3 spaces



Start

Move forward 1

You remember how particles are arranged and move in solids, liquids and gases.



Go back 2 spaces

You forgot that liquid could be poured.



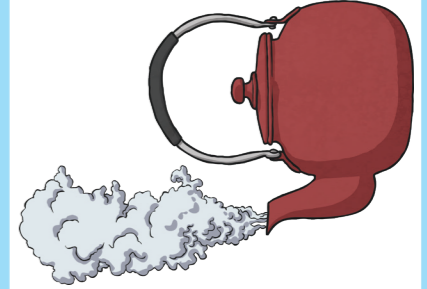
Solids, Liquids and Gases

Place your used True or False? cards here.

Place your Question Time! cards here.

Go back 1 space

You forgot the name of the gases that make up air.



Move forward 2

You learn about Aboriginal and Torres Strait Islander peoples' understanding of evaporation and how it helps them to conserve water.

True or False?

Lemonade is a liquid and bubbles in lemonade are a gas.

True

True or False?

Helium inside a balloon is a gas.

True

True or False?

Gases can be squashed.

True

True or False?

Sand is a liquid.

False

True or False?

Solids can change shape on their own.

False

True or False?

Gases don't weigh anything.

False

True or False?

The particles in a solid are close together and still.

True

True or False?

Particles in a gas move quickly, spread out and fill the space available.

True



True or False?

Sugar is a solid.

True

True or False?

When heated, chocolate changes into a solid.

False

True or False?

When a solid changes to a liquid, it is called melting.

True

True or False?

Particles in a liquid cannot move.

False

True or False?

Some materials can change from one state of matter to another and back again.

True

True or False?

Evaporation is the term given for a solid changing to a gas.

False

True or False?

Liquids have a fixed shape.

True

True or False?

Liquids have a fixed volume.

True



Question Time

If you put something in a container, how would you tell if it was a liquid?

It floats in the container.	It fills only part of the container.	It becomes the same shape as the container.
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Question Time

Non-Newtonian fluids don't always behave the same way as 'normal' liquids. Which is a non-Newtonian fluid?

cornflour slime	apple juice	sand
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Question Time

Why do bubbles have mass and take up space?

They are full of liquid.	They are magic.	They are filled with gases.
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Question Time

Liquids take this state when they evaporate.

gases	solids	rain
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Question Time

What does water become when it is cooled?

ice	steam	dry ice
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Question Time

Things take this form when they freeze.

liquid	gas	solid
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Question Time

Dry ice is a solid gas (carbon dioxide). What makes dry ice so different from ice made from water?

It changes directly from solid to gas (sublimation) leaving no residue.	It can be found in Antarctica.	It is created from snow.
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Question Time

What happens to particles as you heat them up?

They move around faster, get further apart and spread out.	They become still and cold.	They disappear.
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Question Time

Add a word to complete the sentence.
To change a solid to a gas you need to...

heat it.	cool it.	mix it.
----------	----------	---------

Question Time

Add a word to complete the sentence.
To change a liquid to a solid you need to...

heat it.	cool it.	mix it.
----------	----------	---------

Question Time

What makes each state of matter different?

amount of energy and movement particles	number of particles	size of particles
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Question Time

Water changes to this state at 100°C.

solid	gas	liquid
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Question Time

Which of the states of matter changes its shape and volume to fill the container it is in?

solid	liquid	gas
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Question Time

The process of a gas changing state into a liquid is called?

condensation	melting	evaporation
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Solids, Liquids and Gases Game Instructions

You will need:

- Dice
- Counters
- Game Cards

This game is for 2-4 players.

Each player receives a counter and places them at the start position.

The player who is youngest begins.

1. Roll the dice.
2. The player moves their counter the number of spaces that they rolled on the dice.
3. If the player lands on a picture square, they do not need to answer a question.
4. If the player lands on a picture to do with solids, liquids or gases, they must pick a card from either pile and pass it to the player on their left.
5. The person to the left asks the question. If the player answers incorrectly, they stay on the same space.
6. If the player answers correctly, they may move forward two spaces. If the player answers incorrectly, they stay on the same space.
7. If the player lands on a space with words, they must read the statement and move forward or backwards accordingly.

The first player to reach the star at the finish line wins.

To extend the game, you may go around the board more than once.