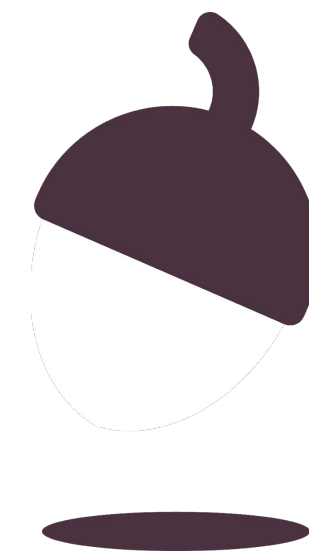


Chemistry - Key Stage 3
Particles - Lesson 1

Solids, Liquids and Gases

(Downloadable student document)

Miss Mason



OAK
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Which of the following statements best describes the arrangement of particles in a solid?

Option 1

They have a random arrangement where all of them are touching.

Option 2

They have a regular arrangement where none of them are touching.

Option 3

They have a regular arrangement where all of them are touching.

Option 4

They have a random arrangement where some of them are touching but others aren't.



Which of the following statements best describes the arrangement of particles in a liquid?

Option 1

They have a random arrangement where all of them are touching.

Option 2

They have a regular arrangement where none of them are touching.

Option 3

They have a regular arrangement where all of them are touching.

Option 4

They have a random arrangement but all particles are still touching



Which of the following statements best describes the arrangement of particles in a gas?

Option 1

They have a random arrangement where none of them are touching.

Option 2

They have a regular arrangement where none of them are touching.

Option 3

They have a regular arrangement where all of them are touching.

Option 4

They have a random arrangement where some of them are touching but others aren't.



Independent practice

State of Matter	Arrangement of particles	Movement of particles
Solid		
Liquid		
Gas		



Compare the arrangement and movement of particles in a **solid to the arrangement and movement of particles in a **gas**.**

Particles in a solid are arranged in a...

However, particles in a gas are arranged in a...

The movement of particles in a solid involves... whereas the movement of particles in a gas involves...



Match the property to the state of matter

Can be compressed

Changes shape to fit its
container

Has a fixed shape

High density

Low density

Changes volume to fill the room

Cannot be compressed



Independent task

Explain why it is easy to compress an empty water bottle but not a full water bottle. (Use your knowledge of the properties of the different states of matter to help you with this).

The main state of matter found in an empty bottle of water is...

It would be possible to compress this bottle because...

The main state of matter found in a full bottle of water is...

It wouldn't be possible to compress this bottle because...

