Tick 'true' or 'false'.

a Liquids are able to change shape.

☐ true

☐ false

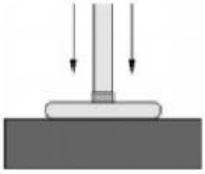
b Liquids do not have a fixed volume.

☐ true

☐ false

Circle 'yes' or 'no'.

a Can a gas be squashed?

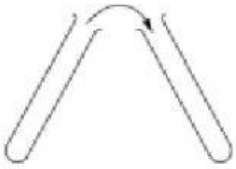


Yes No

b Can a gas spread out?

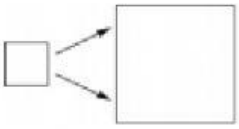
Yes No

c Can a gas flow?



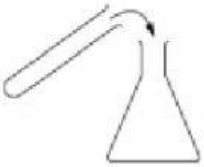
Yes No

d Can the volume of a gas change?



Yes No

e Can a gas change shape?



Yes No

LIVEWORKSHEETS

Tick (✓) the correct boxes to summarise the properties of solids, liquids and gases.

Property	Solids	Liquids	Gases
Have a fixed shape			
Can change shape			
Have a fixed volume			
Volume can change			
Can easily be compressed			
Cannot easily be compressed			
Can flow easily			

Which of these materials will have the most similar properties?

A air, oxygen, ice

B water, iron, air

C iron, stone, wood

D oil, water, wood

All liquids:

A have a fixed volume and take the shape of their container.

B have a fixed volume and a fixed shape.

C will spread out until their volume has doubled.

D can change their volume but not their shape.

The mass of a certain volume of material is the material's:

A concentration.

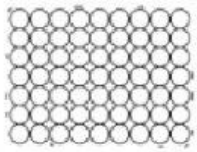
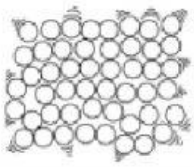
B weight.

C density.

D pressure.

LIVEWORKSHEETS

Complete the table below about the particle theory of matter and the properties of the three states of matter.

State	Solid	_____	Gas
Drawing of particles			
Spaces between the particles	Very small spaces between the particles		
Freedom of movement of particles		Particles can move around each other	
About shape			Changes shape to fill container
About volume	Have a fixed volume		Spread out, have no fixed volume

In which state are the particles close together but can still move past each other?

A gases only

B liquids only

C solids only

D all three states

A gas can be squashed because:

A the particles are held tightly in place.

B there are no particles.

C the particles are far apart.

D the particles are squashy.

The particles in solids:

A do not move at all.

B vibrate in one place.

C can move past each other.

D can move freely in all directions.

Which is the best description of a solid?

A The particles are very close together.

B The particles are as far apart as possible.

C The particles are quite close together.

D There are no particles.

LIVEWORKSHEETS