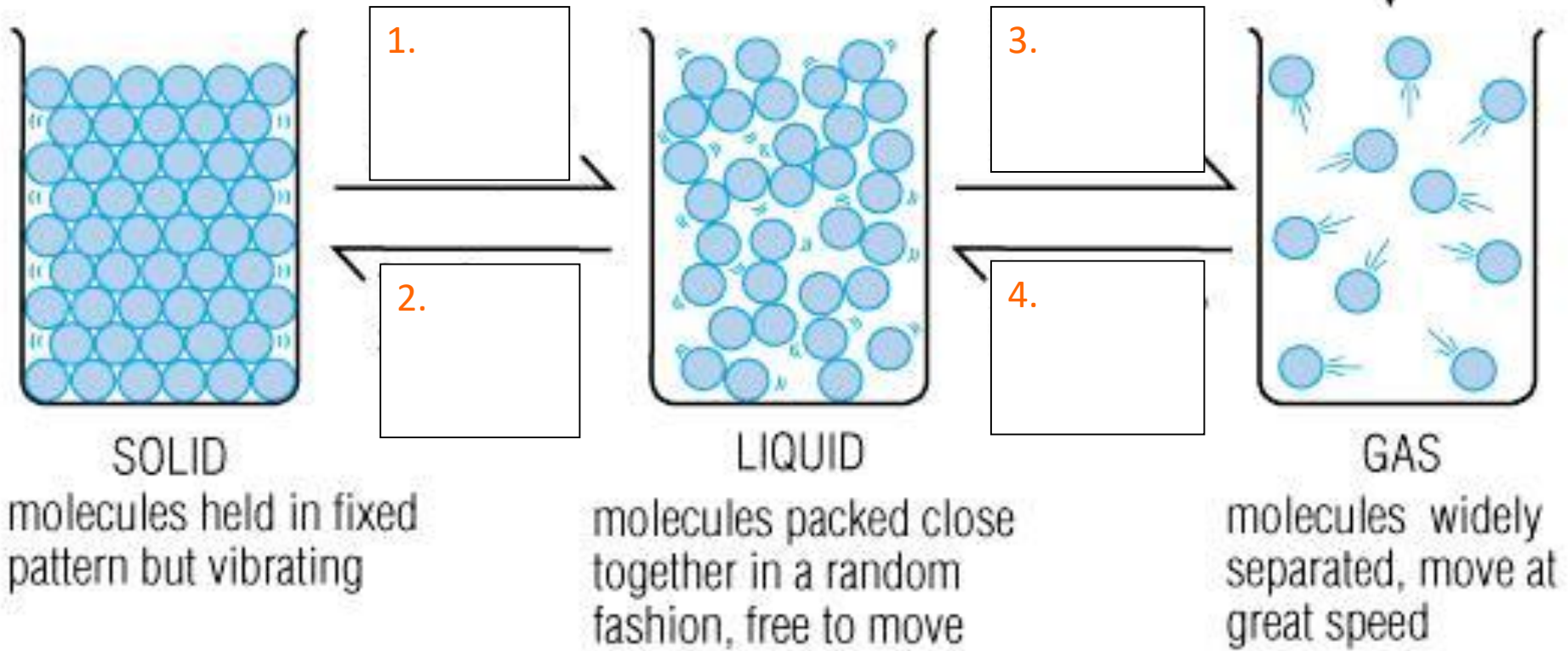


Lesson 3

Lesson	Resources	Context
3	<p data-bbox="471 803 1263 996">Ice cubes, 500ml beaker, access to water, Bunsen burner, tripod, gauze, matches (to light Bunsen).</p> <p data-bbox="471 1096 1045 1215">Sheet for student – slide 2 A4 plain paper</p>	<p data-bbox="1294 803 1769 922">Modelling changes of state.</p> <p data-bbox="1294 1096 1760 1286">Assessment phase of drawing a cartoon strip.</p>

subliming



Starter – Title: Changing state

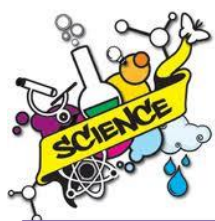
	Activity	Expectations
All	What are the three forms that water can take?	Write the answers in your book.
+	What processes does water undertake to become these three different forms.	Discuss with the person next to you.

ANSWERS:

Solid (ice) – freezes.

Liquid (water) – melts or condenses.

Gas (water vapour) – evaporates or sublimation.



Title: Changing State

Homework: Learn the keywords for the topic for a spelling test.

Level	Learning Objectives	Key Words	SPAG
All	Identify the different changes of state.	Evaporate Condensation Sublimination	<ul style="list-style-type: none">To use accurate terminology when explaining ideas
Most	Describe how to change from one state to another.		
Some	Explain how the changes happen in terms of energy.		



Main Activity – Modelling

Changing Matter

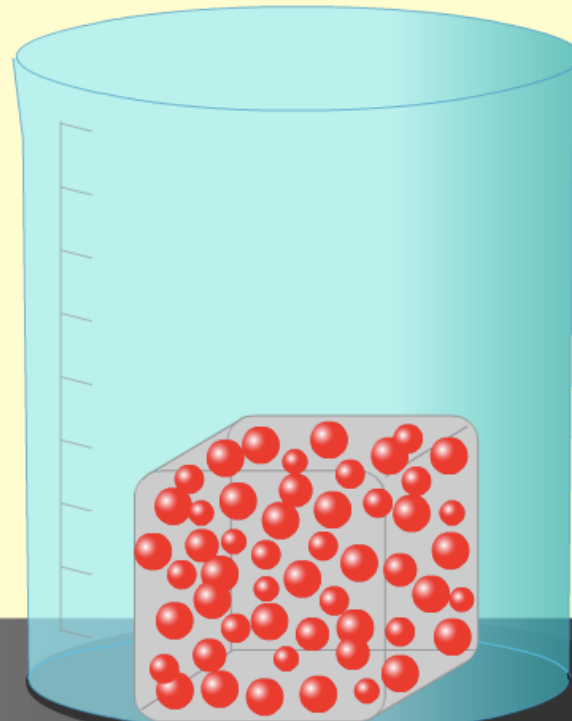
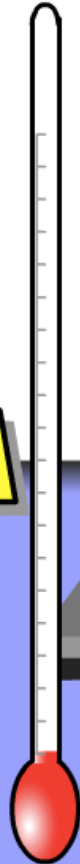
Imagine a **block of ice** in a **beaker** with the temperature at **-30 degrees Celsius**.

Supposing the particles could be seen then they would be **gently vibrating**.

Increase Heat

Temperature

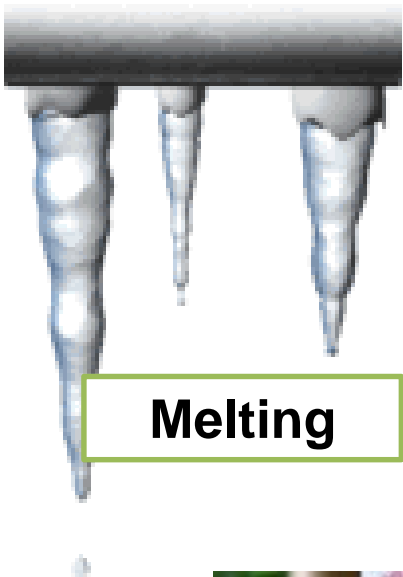
Time



Lesson Focus: Develop curiosity

Main Activity – Modelling

Which change of state is shown in each of the pictures?



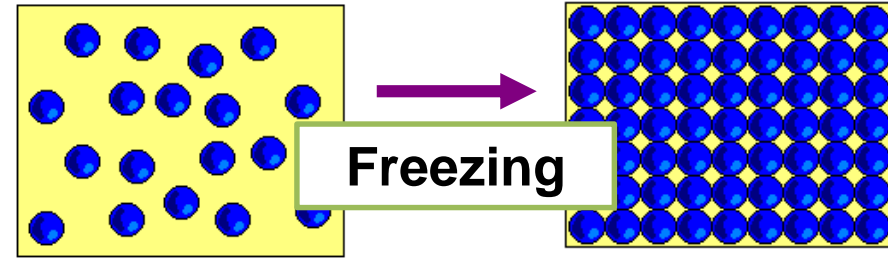
Melting



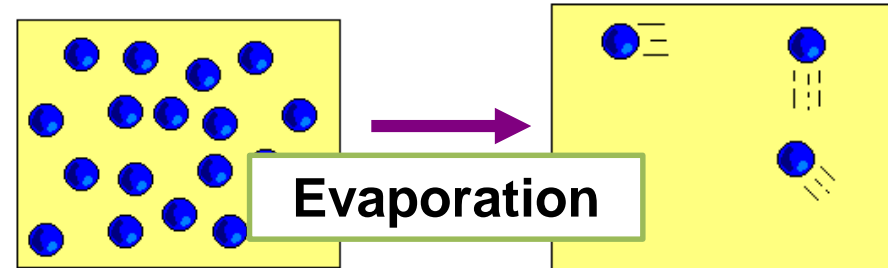
Boiling



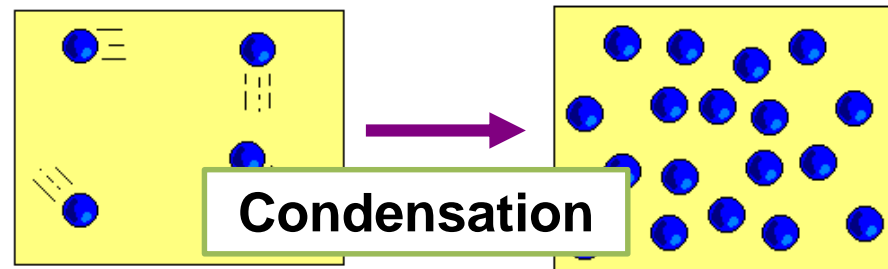
Condensation



Freezing

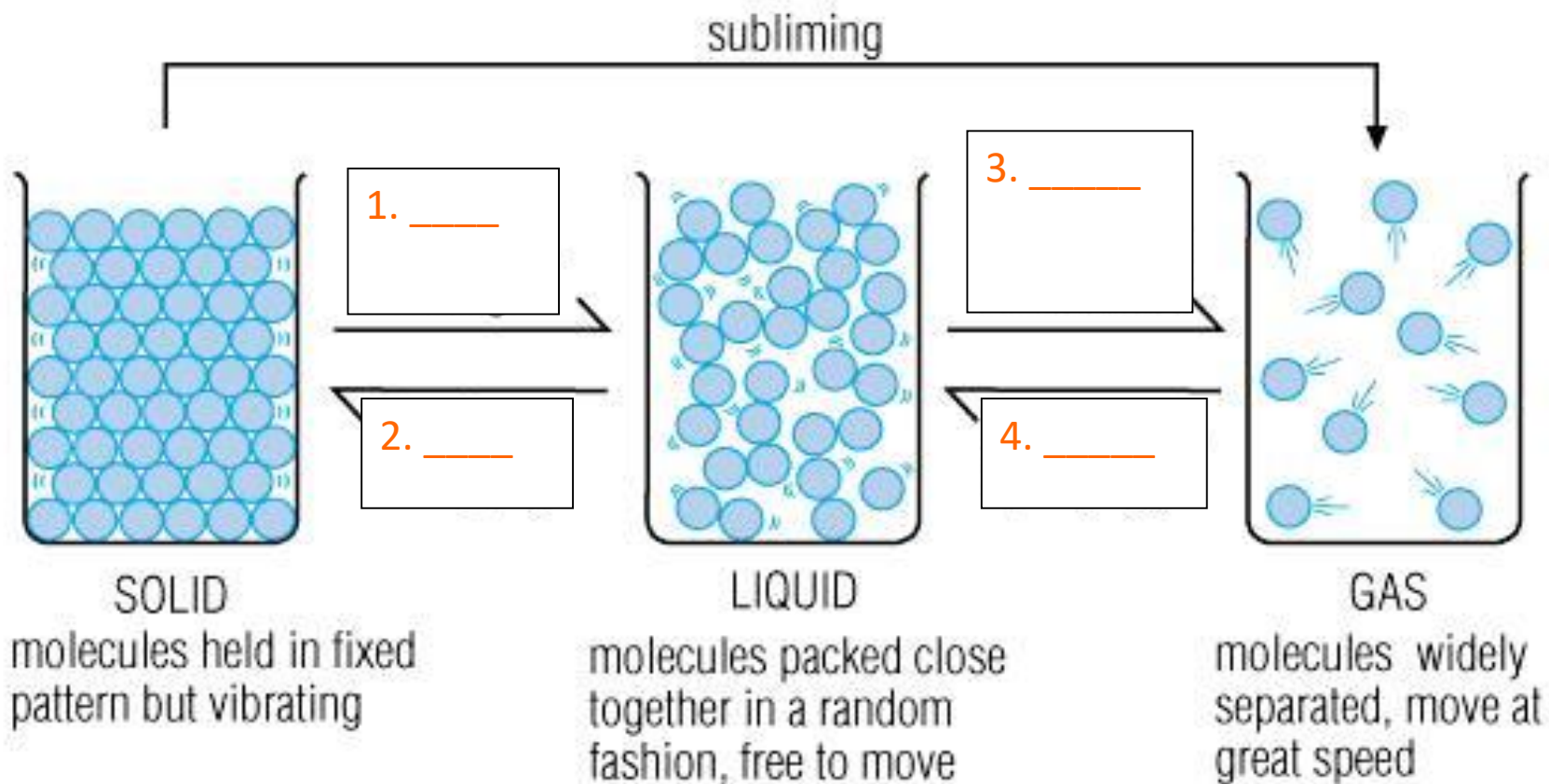


Evaporation



Condensation

Main Activity – Task



All

Correctly **identify** the changes of states.



Most

Describe what is needed for 1. and 4 to happen.



Some

Explain in terms of energy of particles why 1. and 4. happens.

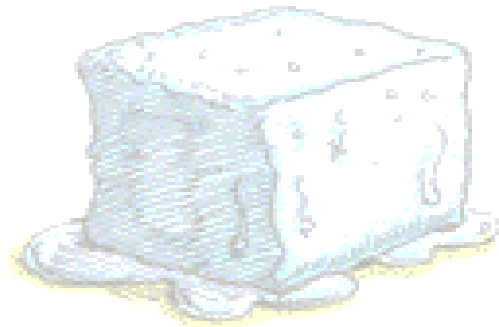
Scales 1-10

Think	Think about what we have discussed so far/the question.
Share	Hold up the number of fingers that relates to how confident you are in your understanding. 1 being unconfident and 10 being totally confident.



Assessment Phase

- Create a cartoon that describes the change of state using the particle interactions.



SOLID



LIQUID



GAS



Most

Describe how to change from one state to another.



Some

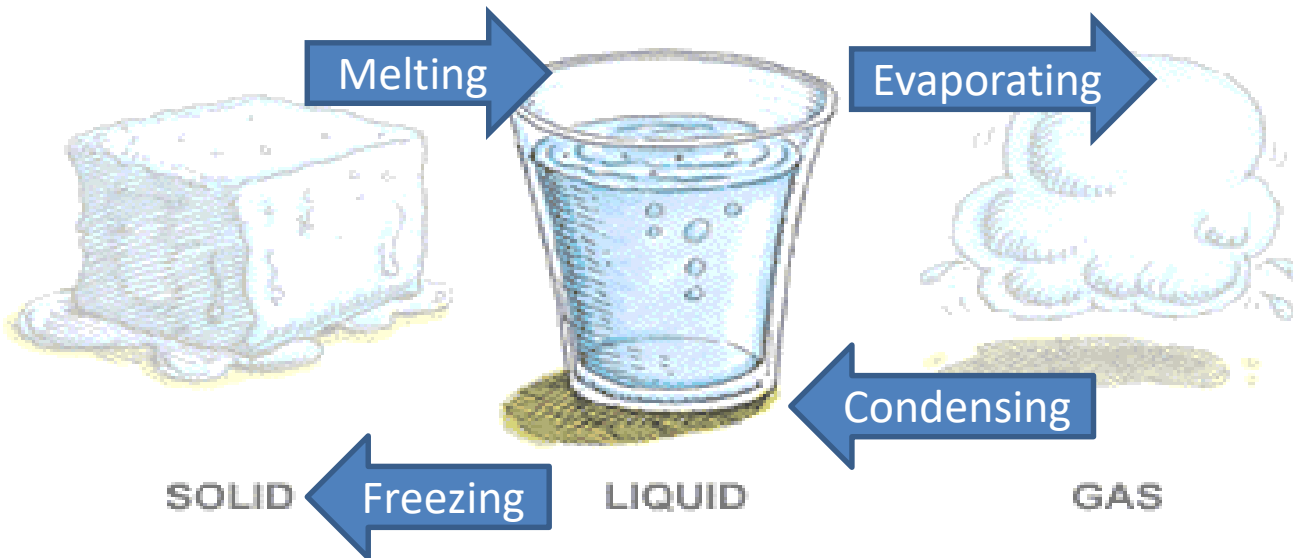
Explain how the changes happen in terms of energy.

All

Correctly **identify** the changes of states.

Peer Assessment

Level	Assessment Task	Expectations
All	Correctly identify the changes of states.	Correctly identify the changes of states in the cartoon strip.
Most	Describe how to change from one state to another.	For example: When is it hot, solid ice changes to liquid water by melting.
Some	Explain how the changes happen in terms of energy.	For example: The hot surroundings transfer heat energy to the ice causing it to melt to a liquid.



Plenary

Match the Words with the Descriptions

