Retrieval Task - Fill in the missing liquid particles and labels on the diagram
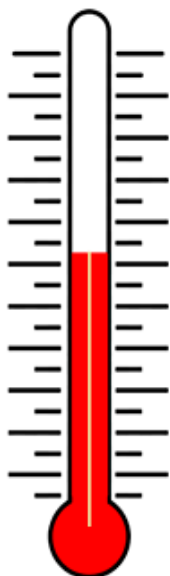
Solid

Melting

(Heating - energy is being _____)

Liquid

(_____ - energy is being lost)

Condensing

Gas
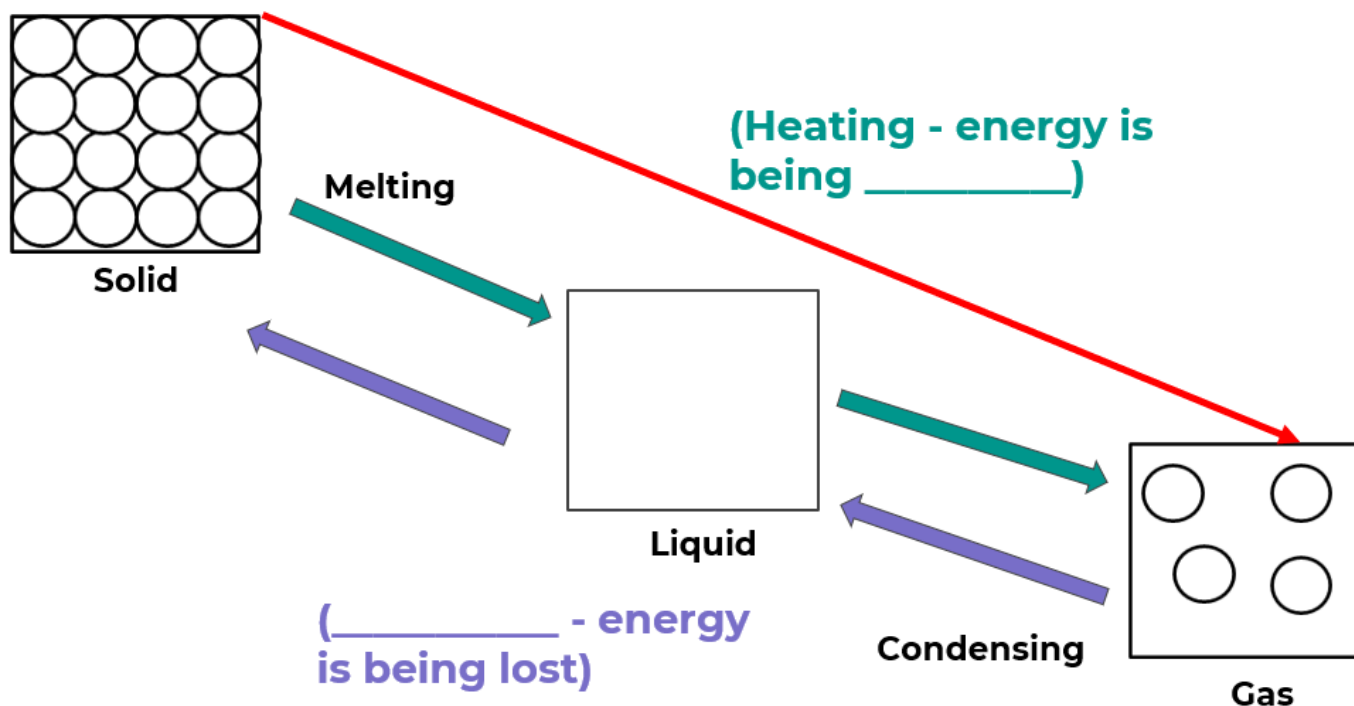
Arrangement and Movement of Particles in the Three States of Matter

Solid	Liquid	Gas

Predicting States

We will be looking at melting and boiling points to determine the physical state of some substances.

> Annotate the diagram to help you.

Substance	Melting Point	Boiling Point
Aluminium	660	2460
Copper	812	1186
Gold	1062	2659
Hydrogen	-259	-252
Lead	330	1750
Nitrogen	-209	-195
Water	0	100

Use the table to complete the questions below

Questions:

1. State of aluminium at 500°C

2. State of copper at 980°C

3. State of gold at 1050°C

4. State of lead at 1010°C

5. State of hydrogen a 1°C

6. State of Copper at 712°C

7. State of water at -1°C

8. ***State of hydrogen at -265°C***

9. ***State of Nitrogen at -273°C***

10. ***State of nitrogen at -210 °C***

Linking Properties to Particles

Solids, liquids and gases have different properties, for example, gases are easily compressed whereas solids cannot be compressed at all.

➢ Copy and complete the table identifying the correct properties:

Property	Solid	Liquid	Gas
Fixed shape			
Can be compressed			
Can flow			
Takes the shape of its container			
No fixed volume			

Plenary Knowledge Check–

1. **What are the three states of matter?**

2. **In which state are the particles arranged regularly?**

3. **In which state do particles move quickly in all directions?**

4. **What state change happens when a substance melts?**

5. **What state change happens when a substance condenses?**