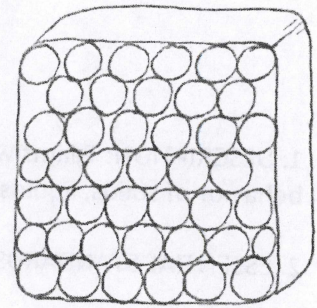


States of Matter Notes

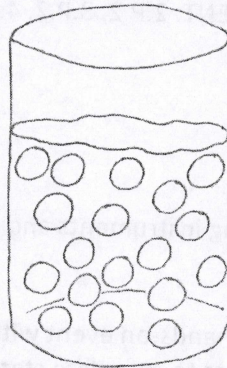
Solid

- Atoms & molecules are closely locked in place
- Form a pattern (reduces energy)
- Vibrate only



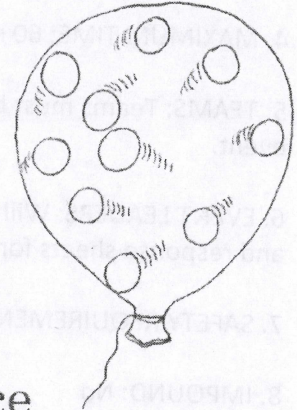
Liquid

- A & M can collide & move past each other



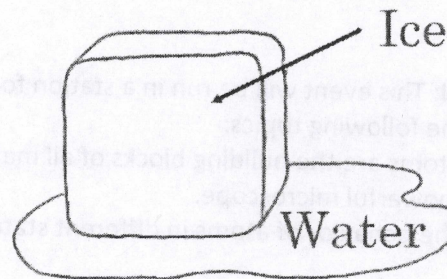
Gas

- A & M move independently
- Collide frequently & randomly
- With each other & objects
- Distance between A & M is greater



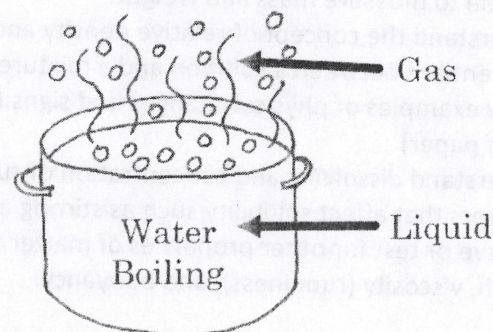
Melting Point

- Temperature solid becomes liquid
- Heat absorbed
- A & M gain enough energy
- Start sliding past each other (flow)



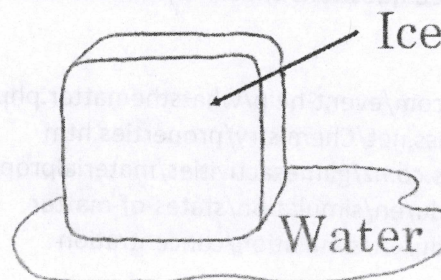
Boiling Point

- Temp liquid becomes gas
- Heat absorbed
- A & M gain enough energy
- Escape as a gas



Freezing Point

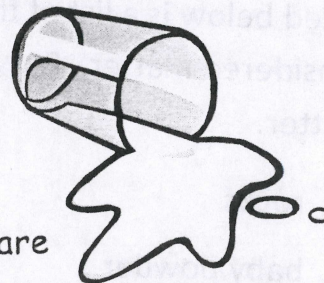
- Temp liquid becomes solid
- Heat released
- A & M lose energy
- Become locked in place



Solids, liquids and gases

Use the words in the box below to complete these sentences

Every material is made up of lots of _____ particles. All materials are either solid, liquid or a _____. In a _____ all the particles are packed tightly together and can hardly move. A solid _____ stays in its own _____ unless we cut it or shape it ourselves. Anything you can take hold of is a _____.

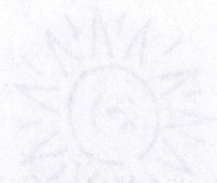


The _____ in a liquid are not so tightly packed. They can _____ a little. Liquids are _____ and flow downwards. They take the shape of the _____ they are in. The surface of a liquid stays _____.

The particles in _____ have lots of room and move around all over the place all the time. Gases are all _____ us, spreading into any empty spaces they can. Most gases are _____.

gases	particles	move	shape
solid	runny	tiny	gas
invisible	around	level	solid
			container





1. What happens to a substance when it reaches its freezing point?

- e. It changes from liquid to solid; heat is absorbed.
- f. It changes from liquid to solid; heat is released.
- g. It changes from solid to liquid; heat is absorbed.
- h. It changes from solid to liquid; heat is released.

2. What occurs when a substance melts?

- i. It changes from solid to liquid; heat is absorbed.
- j. It changes from solid to liquid; heat is released.
- k. It changes from liquid to solid; heat is absorbed.
- l. It changes from liquid to solid; heat is released.

5. When a substance is made up of constantly vibrating particles arranged in a regular geometric pattern, the substance is classified as what?

- a. Solid
- b. Liquid
- c. Gas
- d. Plasma

