States of Matter



Solids

- have <u>definite shape</u> and <u>volume</u>
- particles closely locked in position and can only vibrate.

- Crystalline Solids particles form a <u>regular</u>, repeating pattern.
 - OEX table salt, snowflakes (No two snowflakes are EVER the same).



AMORPHOUS Solids



that <u>are not</u> <u>I in a regular</u>

MPLE

Glass, on the other hand, is an amorphous material, that is, it lacks a regular 3-D arrangement of atoms

Glass

Liquids

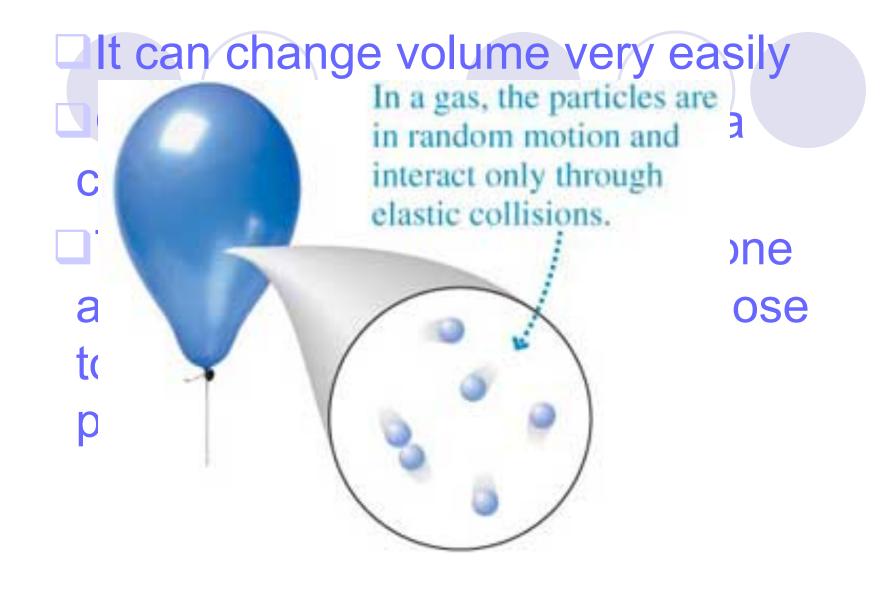
- Have <u>definite</u> volume but <u>NO</u> definite shape
- Particles are more <u>loosely</u> <u>connected</u> and <u>can collide with</u> <u>and move past one another</u>
- not held together as tightly as the solid
- ☐ takes the shape of the container.

CUDEACE TENSION.



Gas

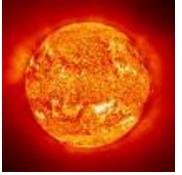
- Change volume easily
 - NO definite shape or volume.
- Atoms and molecules are <u>free</u> to move independently, colliding frequently
- ☐ It can change volume very easily
- ☐ Gas particles fill the space in a container,
- ☐ They tend to spread far from one another, they can be pushed close together, squeezing creates pressure.



- Plasma highest energy state more than gas
 - rare on Earth.
 - Most common phase of matter in the universe.

Extremely high in energy.









The End

