

States of Matter



Solids have definite shape and volume

particles <u>closely</u> locked in position and can only <u>vibrate.</u>

Crystalline Solids – particles form a regular, repeating pattern. ○EX – table salt, snowflakes (No two snowflakes are EVER the same).





PHOUS Solids es that are not d in a regular Glass L/WPLE

Glass, on the other hand, is an amorphous material, that is, it lacks a

regular 3-D arrangement of atoms

plastics



Have <u>definite</u> volume but <u>NO</u> definite shape

Particles are more <u>loosely</u> <u>connected</u> and can collide with and <u>move past</u> one another

not held together as tightly as the solid

takes the shape of the container.



VVGLGI. IUVV V



Change volume easily NO definite shape or volume. Atoms and molecules are free 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.

Ga In a gas, the particles are in random motion and interact only through NO defi elastic collisions. Atoms a indepen □lt car Gas contai another, they can be pushed close together, squeezing creates pressure.

<u>Plasma</u> – highest energy state more than gas
arare on Earth.
Most common phase of matter in the universe.

Extremely high in energy.











