

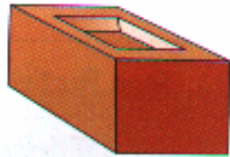
Solid, liquid or gas?

11th May 2007

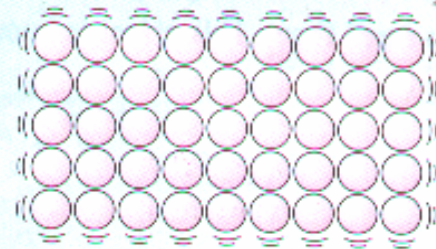
Year 7_0



SOLIDS



PARTICLES IN A SOLID LOOK LIKE ...

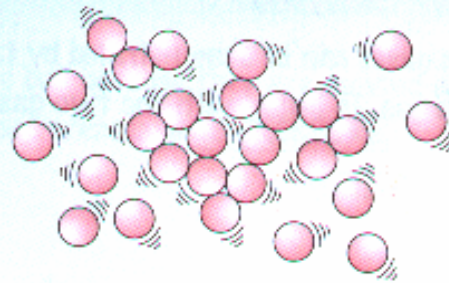


- The particles are **VERY CLOSE TOGETHER** and each particle exerts a **LARGE PULL FORCE** on every other particle.
- The particles can **ONLY VIBRATE** (move to and fro) about their **FIXED POSITION** which doesn't change.

LIQUIDS



PARTICLES IN A LIQUID LOOK LIKE ...

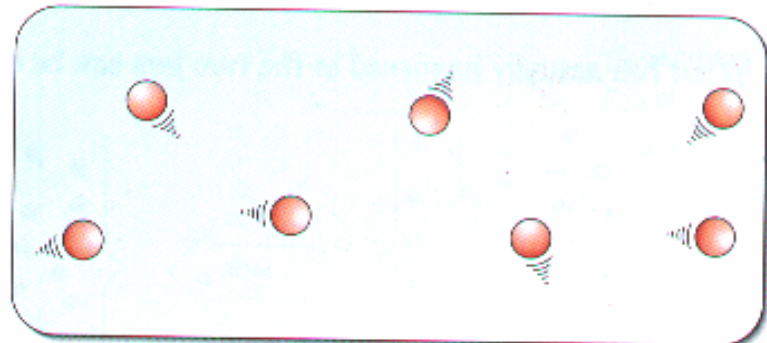


- The particles are **CLOSE TOGETHER** and each particle exerts a **SMALLER PULL FORCE** on every other particle.
- The particles **MOVE AROUND** in **ANY DIRECTION** within the liquid.

GASES



PARTICLES IN A GAS LOOK LIKE ...



CAN THEY BE COMPRESSED (SQUASHED)?



Solids cannot be compressed



Liquids cannot be compressed



Gases can be compressed easily

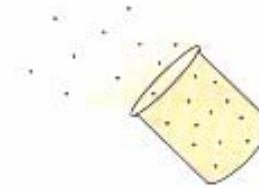
DO THEY FLOW?



Solids do not flow



Liquids do flow



Gases do flow

DO THEY KEEP THEIR SHAPE?



The shape of a solid stays the same



A liquid takes the shape of the bottom of the container



A gas takes the shape of the entire container

DO THEY KEEP THEIR VOLUME?



The volume of a solid stays the same

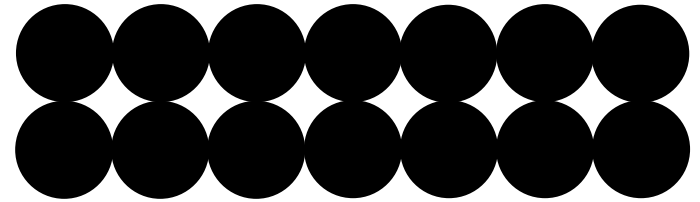
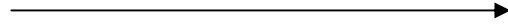


The volume of a liquid stays the same

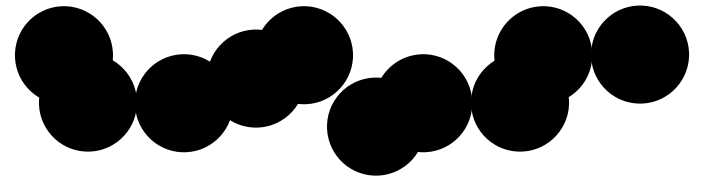
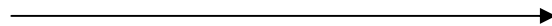


A gas has no definite volume

Solid



Liquid



Gas

