

Section 5.1 The Particle Model of Matter

What are the three states of matter?

solid

liquid

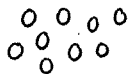
gas

What makes water change from one state to another?

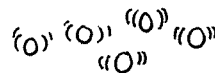
- adding or removing heat (energy).

Four Main Ideas in the Particle Model of Matter

All matter is made of
tiny particles

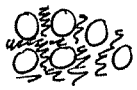


Particles of matter are
always moving.

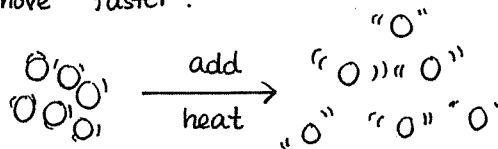


The Particle
Model of Matter

The particles have
space between them.



Adding heat makes particles
move faster.



- ★ The spaces are not filled
with air! There is nothing
in the spaces.

1) Sublimation occurs when a solid changes directly to a gas without becoming a liquid. Two examples of this are solid room deodorizer and a block of dry ice.

2) When matter changes state, it does not gain or lose mass.

3) The particle model can be used to explain the behavior of matter, the properties of solids, liquids, and gases, and what happens in changes of state.