

### Investigating Matter

What is matter?

Mass

- a measure of the \_\_\_\_\_ of matter in an object
- units – \_\_\_\_\_

Volume

- a measure of how much \_\_\_\_\_ - a substance takes up
- units – \_\_\_\_\_

### The Particle Theory of Matter

The particle theory is a way to describe the structure of matter and it's behaviour.

1. All matter is composed of very tiny objects called \_\_\_\_\_
  - These particles are too small to be seen
2. All particles have \_\_\_\_\_ between them
  - The distances between the particles change for different states of matter
3. Particles in matter are always in \_\_\_\_\_
  - They can vibrate back and forth, or move in all directions
4. The particles in a substance \_\_\_\_\_ each other
  - The amount of attraction is different for different kinds of particles

Changes of State

Solids, liquids, and gases are called \_\_\_\_\_ of matter

melting point

- temperature at which a \_\_\_\_\_ turns into a \_\_\_\_\_

freezing point

- temperature at which a \_\_\_\_\_ turns into a \_\_\_\_\_

\* melting point and freezing point are always the \_\_\_\_\_ temperature for a substance

boiling point

- temperature at which a liquid turns into a gas and the temperature at which a gas turns into a liquid

Particles and Heat

	<b>ice</b>	<b>water</b>	<b>gas</b>
speed of particles			
force of attraction between particles			
spaces between particles			

heat is added 