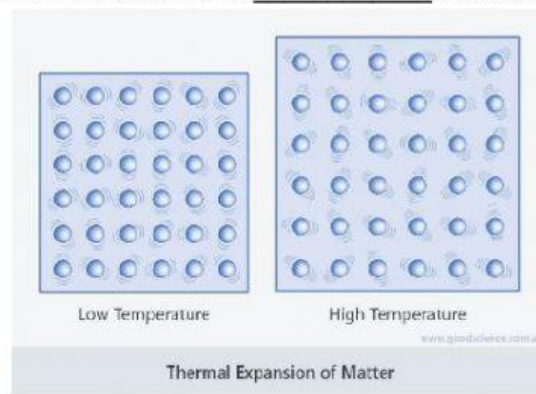


NAME : _____ CLASS : _____

9.3 Principle of Expansion and Contraction of Matter

1. *Expansion of solid*

- The particles in a solid **vibrate at a fixed position**.
- When the solid is heated, the **particles vibrate** _____ **and move further apart** from one another
- This causes the **volume of the solid to** _____ **because the solid expands**



2. *Contraction of solid*

- When solid is cooled, the **particles vibrate** _____ **and move closer to one another**
- This causes the **volume of solid to** _____ **because the solid contracts**

3. *Expansion of liquid and gas*

- Particles in liquid and gas move freely.
- When the liquid and gas are _____, the particles move faster and randomly.
- The distance between particles also _____.
- This causes the **volume of the liquid and gas** _____ **because liquid and gas expand**

4. *Contraction of liquid and gas*

- When the liquid and gas are _____, the particles move slower and closer to one another
- This causes the volume of the liquid and the gas to _____ **because the liquid and the gas contract.**