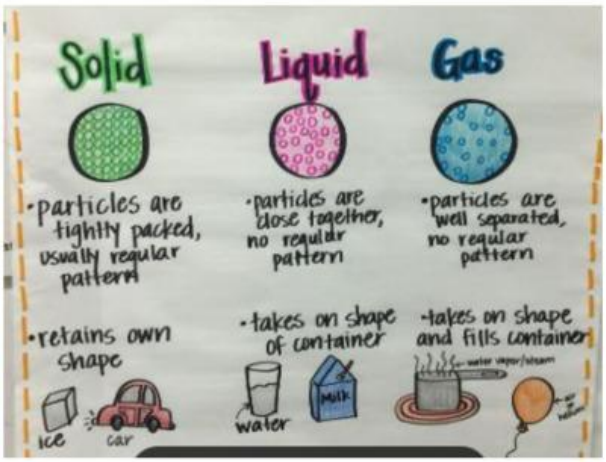
States of matter and their changes

The three basic states of matter are:



1. **Solid** – Has a definite s___ and volume. The particles are tightly packed and only vibrate in place.
2. **Liquid** – Has a definite v_____ but takes the shape of its container. The particles are less tightly packed and can move around each other.
3. **Gas** – Has neither a definite shape nor a definite volume. The p_____ are far apart and move freely.

There are also other states of matter, like plasma and Bose-Einstein condensates, but these three are the most common.

Changes of matter:

1. Liquid to _____ – **Solidification (Freezing)**
2. Solid to Liquid – **Liquefaction (Melting)**
3. Liquid to _____ – **Evaporation (or Boiling)**
4. Gas to Liquid – **Condensation**
5. _____ to Gas – **Sublimation** (e.g., dry ice turning into CO_2 gas)
6. Gas to Solid – **Deposition** (e.g., frost forming on a cold surface)

These processes describe how matter transitions between different states based on temperature and pressure changes.

Here are the **verbs** for the phase changes:

- Liquid to Solid → _____ (or **Freeze**)
- Solid to Liquid → **Liquefy** (or _____)
- Liquid to Gas → **Evaporate** (or _____)
- Gas to Liquid → _____
- Solid to Gas → _____
- Gas to Solid → _____

These verbs describe the process of matter changing from one state to another.