



## Vocabulary: Freezing Point of Salt Water



### Vocabulary

- Freeze – change from a liquid to a solid.
- Freezing point – the temperature at which freezing occurs.
  - At sea level, the freezing point of pure water is 0 °C (32 °F).
- Liquid – a phase in which matter has definite volume but no definite shape.
  - A liquid will take the shape of a container but cannot expand or be compressed.
  - Molecules in a liquid move randomly but stay close to one another.
- Melt – change from a solid to a liquid.
- Melting point – the temperature at which melting occurs.
  - At sea level, the melting point of pure water is 0 °C (32 °F).
- Solid – a phase in which matter has a definite shape and a definite volume.
  - A solid will retain the same shape and volume in any container.
  - Atoms in a solid are held in a rigid structure and cannot move freely.
  - Water in the solid phase is called *ice*.
- Transformation rate – the speed at which molecules transition from one phase to another, such as from liquid to solid or solid to liquid.
  - If the liquid to solid transformation rate is greater than the solid to liquid rate, the substance will freeze.
  - If the solid to liquid transformation rate is greater than the liquid to solid rate, the substance will melt.

