

## CHAPTER OVERVIEW

### 9: Solids, Liquids, and Gases

Most of us are familiar with the three phases of matter: solid, liquid, and gas. Indeed, we addressed the energy changes involved in phase changes. The substance we are probably most familiar with has those three phases: water. In everyday life, we commonly come in contact with water as a solid (ice), as a liquid, and as a gas (steam). All we have to do is change the conditions of the substance—typically temperature—and we can change the phase from solid to liquid to gas and back again. Under the proper conditions of temperature and pressure, many substances—not only water—can experience the three different phases. An understanding of the phases of matter is important for our understanding of all matter. In this chapter, we will explore the three phases of matter.

[9.1: Prelude to Solids, Liquids, and Gases](#)

[9.2: Intermolecular Interactions](#)

[9.3: Solids and Liquids](#)

[9.4: Gases and Pressure](#)

[9.5: Gas Laws](#)

[9.E: Solids, Liquids, and Gases \(Exercises\)](#)

[9.S: Solids, Liquids, and Gases \(Summary\)](#)

[Template:HideTOC](#)

---

This page titled [9: Solids, Liquids, and Gases](#) is shared under a [CC BY-NC-SA 3.0](#) license and was authored, remixed, and/or curated by [Anonymous](#) via [source content](#) that was edited to the style and standards of the LibreTexts platform.