

## CHAPTER OVERVIEW

### 1: The Basics

#### *Physical Chemistry: Thermodynamics*

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Physical chemistry is concerned with the gray area that lies between physics (the study of energy) and chemistry (the study of matter). As such, physical chemistry is all about how energy can be stored through, extracted from, and used to drive chemical reactions and chemical systems. A major topic that focuses on how energy and matter interact and affect one another is thermodynamics. But before diving into thermodynamics, it is important to set down a few definitions that make it possible to begin slicing up the topic.

[1.1: The System and the Surroundings](#)

[1.2: Pressure and Molar Volume](#)

[1.3: Temperature](#)

[1.4: The Zeroth Law of Thermodynamics](#)

[1.5: Work and Energy](#)

[1.E: The Basics \(Exercises\)](#)

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*Thumbnail: Frying an egg is an example of a chemical change induced by the addition of thermal energy (via heat). Image used with permission (CC BY-SA 3.0; Managementboy).*

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