

**Background:** Welcome, students, to Introductory Chemistry. For one reason or another, you made a decision to take a chemistry class here at St. Petersburg College. You made this decision because you needed to prepare for Chemistry 2045, want to be a nurse, want to be an engineer, had 3 credit hours available in your schedule, or lost a bet. Whatever your motivation for taking this course, you will not regret it.

So you are about to learn the basics of chemistry, the study of matter and its changes. You have to admit that matter comes in some pretty beautiful varieties and goes through some very interesting changes. The primary task of a chemist is to be able to describe and document those things. A whole vocabulary has evolved that allows chemists to talk about their field. Writers on the Big Bang Theory use it for comic effect, but chemists actually use this language because it is descriptive and unambiguous. When non-chemists eavesdrop, it sounds like nerdy gibberish. In this first week, you will learn to speak some nerdy gibberish.

Our goals for the first week will be to describe how scientists do their work, and how they make various measurements. Before long, you will be making some of these measurements yourself, and not long after that you will be talking to your friends about chemistry. You should prepare them for that.

Get ready to have some fun. You are going to enjoy this.

**Objectives:**

1. Describe the work of a chemist.
2. Recognize steps in scientific exploration (ie the Scientific Method).
3. Express numbers in scientific notation.
4. Recognize units of measurement.
5. Address uncertainty in measurement (accuracy and precision).
6. Use significant figures in measurement and math.
7. Convert between metric units.
8. Convert between temperature units.

**Reading:** Zumdahl Chapters 1-2