

13 Writing in Chemistry

The Pressure's On

The term pressure is one example of a term that is used in both chemistry and everyday language. As it is used in your chemistry textbook, pressure has a different meaning than the one you are familiar with from your everyday vocabulary. In Chapter 13, for example, pressure is discussed in relation to gas behaviors, not in relation to human actions or feelings.

But chemical pressure and everyday pressure do share some common characteristics: both exert a shaping force, both change under different conditions, and both can have either positive or negative effects. In this exercise, you will explore the connection between chemical and common words by viewing an everyday pressure from both a scientific and a personal perspective.

Pre-Writing Activity

1. Identify a pressure that you are experiencing now or have experienced in the past. It may be the pressure to do well on an exam or the pressure to sink a foul shot in a basketball game.
2. List two or three variables that affect the pressure you identified in question 1. Think about the factors that influence the intensity of the pressure, for example, the amount of sleep you had or the cheering of the crowd.
3. Write equations that describe the relationship between the pressure and each variable you identified. Make sure your equations identify whether each variable varies directly or indirectly with the pressure.
4. Using graph paper, construct graphs for two of your equations in question 3—one for a direct relationship and one for an indirect relationship. Be sure to label your axes and choose appropriate units and scales. Where do the lines intercept the axes and why?

Write About It

5. Based on the equations and graphs you constructed, write a brief essay describing the everyday pressure you identified. You can begin by first defining *pressure* and then describing your pressure in some detail. You may then want to analyze the variables that influence the pressure and how they affect your behavior. Finally, draw some conclusions about your everyday pressure and how it compares to a “chemical” pressure.

On Your Own

6. There are many other terms that are used in both everyday language and in discussions of chemical concepts. Make a list of other chemical terms used in this chapter that have meaning for you in your everyday vocabulary. Then choose one term and write an essay comparing the chemical and common use of the term.