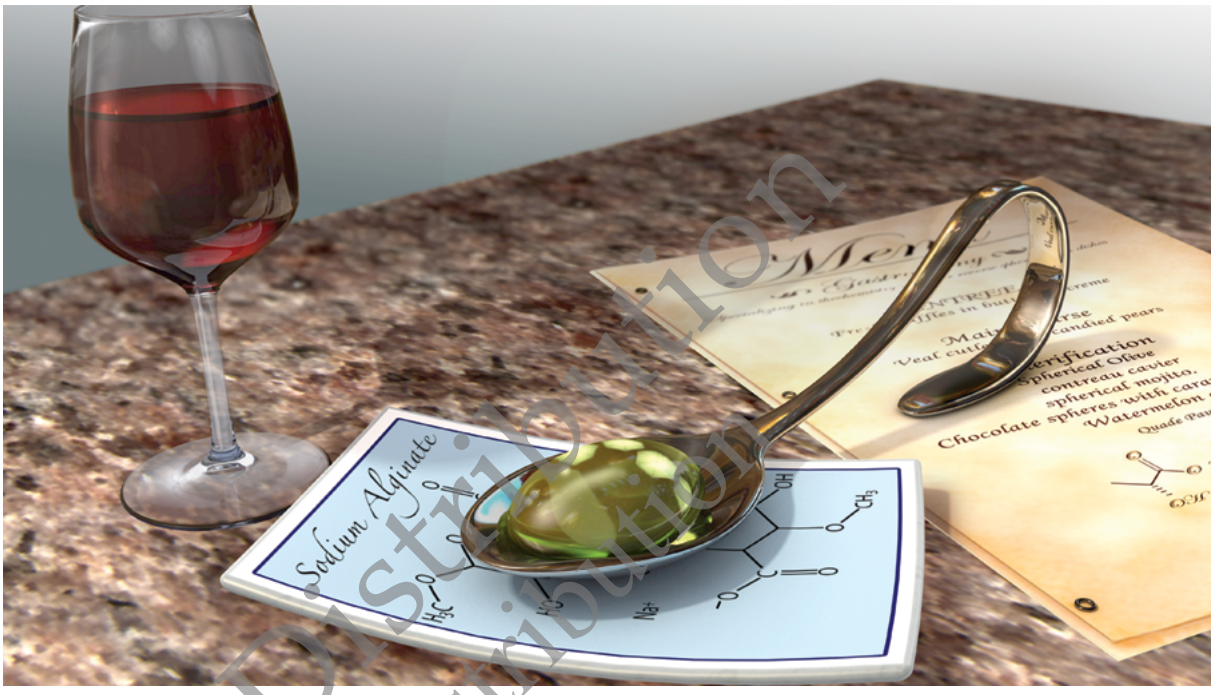
Pearson

Chapter 8
Introduction to Solutions and Aqueous Reactions



The spherical olive is a creation of the style of cuisine known as molecular gastronomy.

> "Science may be described as the art of systematic oversimplification—the art of discerning what we may with advantage omit."
>
> *—Karl Popper (1902–1994)*

Learning Outcomes

YOU HAVE NOW LEARNED

YOU HAVE NOW LEARNED how to represent a chemical reaction, the process by which substances transform to other substances. In this chapter, we turn our attention to chemical reactions that occur in water. You have probably witnessed many of these types of reactions in your daily life because they are so common. Have you ever mixed baking soda with vinegar and observed the subsequent bubbling, or noticed the hard-water deposits that form on plumbing fixtures? These reactions—and many others, including those that occur within the watery environment of living cells—are aqueous chemical reactions, the subject of this chapter.