

## **Chapter 10 The Shapes of Molecules**

In this chapter, commonly used examples of each molecular shape are described in addition to an explanation of how to draw their proper Lewis Structures. Models include incomplete octets and expanded octets as well as molecules following the octet rule. The chapter details how to: use the valence-shell electron-pair repulsion model (VSEPR) and determine formal charge, draw multiple bonded structures such as carbon dioxide and benzene, draw resonance structures and explain the concept of resonance, explain molecule polarity through symmetry and dipoles, and determine hybrid orbitals. All of these skills are part of the AP Chemistry curriculum and are tested yearly on the AP Exam.