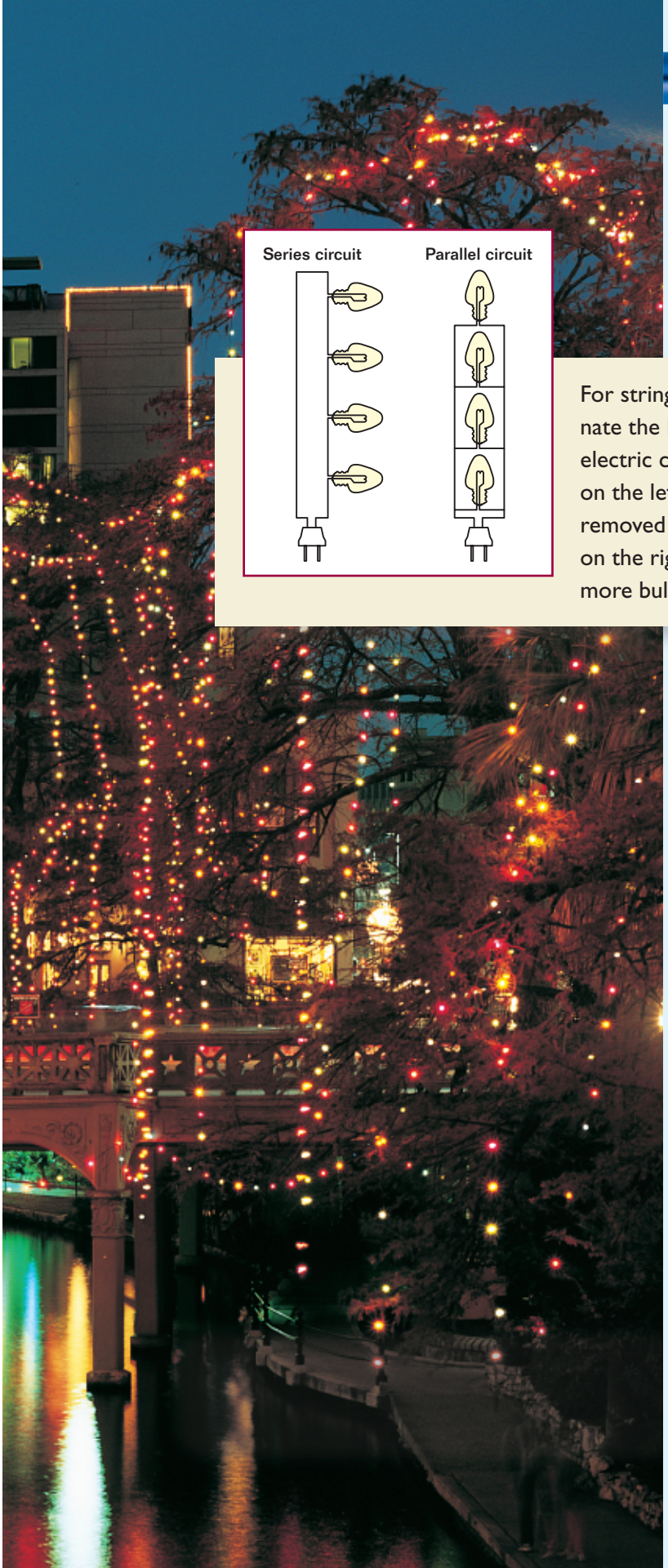

CHAPTER 18

Circuits and Circuit Elements

For strings of decorative lights—such as these that illuminate the Riverwalk in San Antonio, Texas—two types of electric circuits can be used. In a series circuit, illustrated on the left, the entire set goes dark when one bulb is removed from the circuit. In a parallel circuit, illustrated on the right, other bulbs remain lighted even when one or more bulbs are removed.

WHAT TO EXPECT

In this chapter, you will explore the basic properties of series and parallel circuits.

Why it Matters

All electric circuits are wired in series, parallel, or a combination. The type of circuit affects the current and potential difference of elements connected to the circuit, such as decorative light bulbs on strands or appliances in your home.

CHAPTER PREVIEW