

SECTION
30.3

THE HEART AND CIRCULATION
Study Guide

KEY CONCEPT

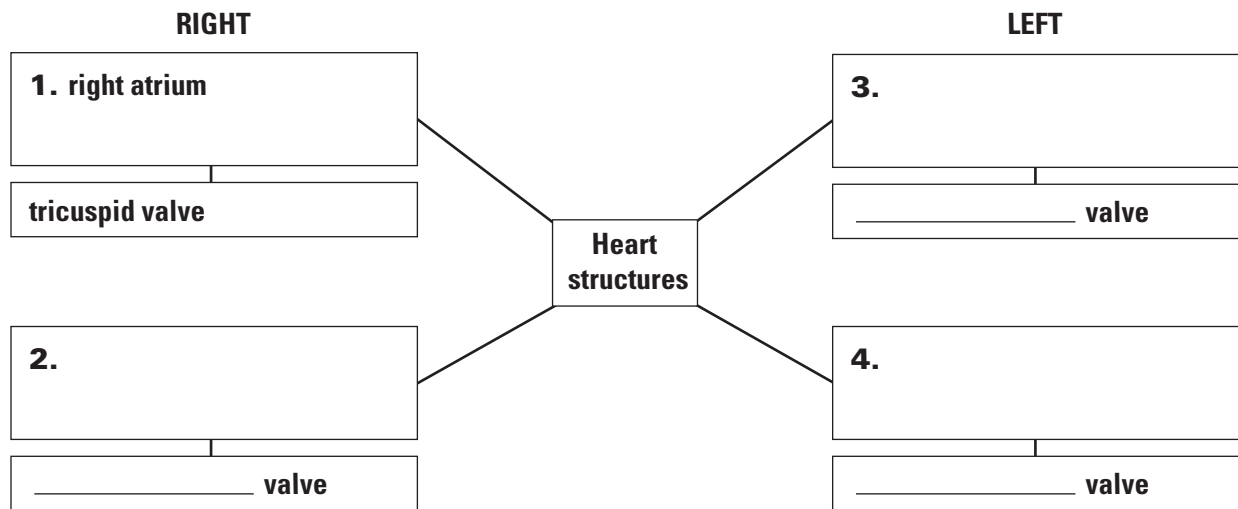
The heart is a muscular pump that moves the blood through two pathways.

VOCABULARY

atrium	pacemaker
ventricle	pulmonary circulation
valve	systemic circulation

MAIN IDEA: The tissues and structures of the heart make it an efficient pump.

Fill in the pattern notes with the main chambers and valves of the heart. Use Figure 30.7 to help you.

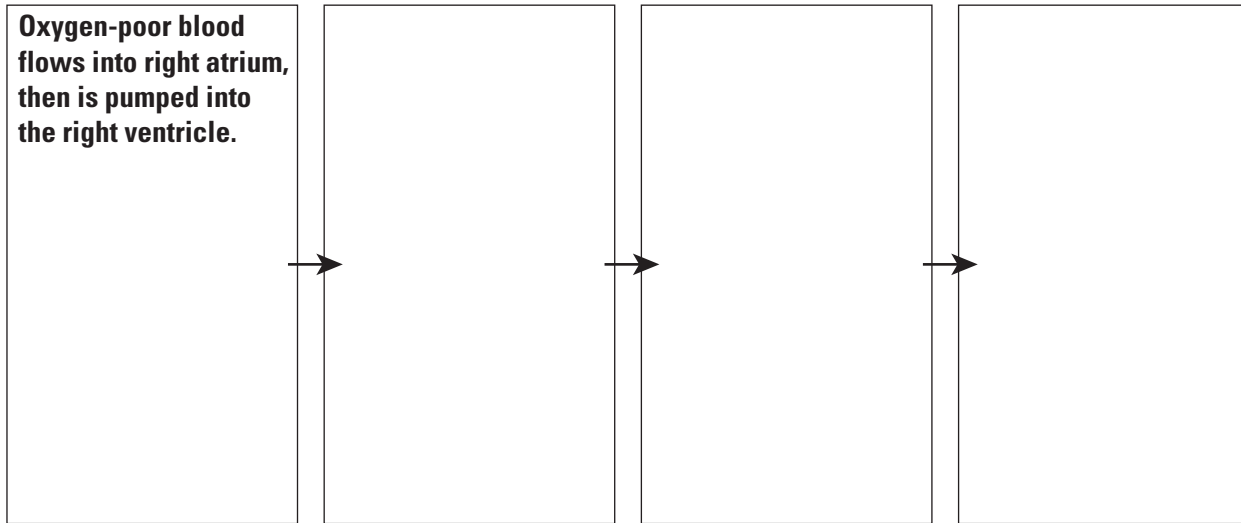


- 5.** Explain what makes the heart such an efficient, self-regulating pump.

- 6.** After the SA node stimulates the atria to contract, what happens next in the heartbeat cycle?

Section 30.3 STUDY GUIDE CONTINUED

Fill in the process diagram below to summarize the blood flow in the heart.



MAIN IDEA: The heart pumps blood through two main pathways.

7. What are the main functions of the pulmonary circulation and the systemic circulation?

Vocabulary Check

8. An *atrium* in a building is the first room or area that people enter before going into the rest of the building. How does this meaning relate to the location and function of an atrium in the heart?

9. *Systemic* means “related to a an entire system,” while *pulmonary* is based on the Latin *pulmo*, which means “lung.” Make up a table or draw a diagram using these clues to help you remember the difference between *pulmonary* and *systemic* circulations.