

Anatomy and Physiology

FOR ENGLISH LANGUAGE LEARNERS

Chapter 9: The Cardiovascular System

Throughout the chapter, refer back to the building blocks of the body by asking students questions such as *What's a molecule? What's a cell? What's an organ? What's a tissue?*

The anatomy of the heart

Draw a picture of the heart on the board complete with the following structures: heart walls, chambers, major vessels leading to and from the heart, chordae tendineae and valves. Do not label the structures. Have two or three different students take turns naming the structures in front of the class.

Tracing the path of blood through the heart

On page 184-185 there are pictures of the heart. Have students use their pencil or another small instrument and trace the path of blood through the heart as you explain the path. Then have the students practice explaining the path to the partner. They should mention the vessels leading to and from the heart, the chambers, valves and chordae tendineae. For example, *Blood enters the heart through the superior and inferior vena cava and enters the right atrium. Then it drops through the tricuspid valve to enter the right ventricle. The chordae tendineae pull to make this valve close.*

Divide a piece of paper into two. Label one side "oxygen rich" and the other side "oxygen poor." Have students put the structures in the appropriate column. For example, oxygen rich blood passes through the aorta, so the aorta should be in the oxygen rich column.

Oxygen rich blood	Oxygen poor blood
Aorta	Right atrium
Left atrium	Superior vena cava
Left ventricle	Inferior vena cava
Pulmonary vein	Pulmonary artery

Blood pressure

Write the three basic causes of blood pressure change (page 192) on the board. Have students compile lists of the daily activities that can cause blood pressure to go up or go down in relation to the three causes of change. For example, under "Changes in Blood Volume" students could write as causes for decrease "Exercising and not drinking enough water." As causes for increase they could write "Eating too much salt".

Put students into pairs. Have them look at figure 9.10 on page 194. One student describes what happens when blood pressure is too high. The other student describes what happens when blood pressure is too low.

Anatomy and Physiology

FOR ENGLISH LANGUAGE LEARNERS

Blood and Lymphatic Vessels

Have students read about the lymphatic vessels on page 201 and look at figure 9.14 on page 202. They should be able to summarize the information they learn. Then have them return to page 173 where the lymphatic system was explained earlier. Have students write a report about the lymphatic system. Have them include information from an outside source.