

CHAPTER 41

Circulatory and Excretory Systems
Section 41-1

SKILL ACTIVITY
Labeling a diagram

Analyzing the Human Heart

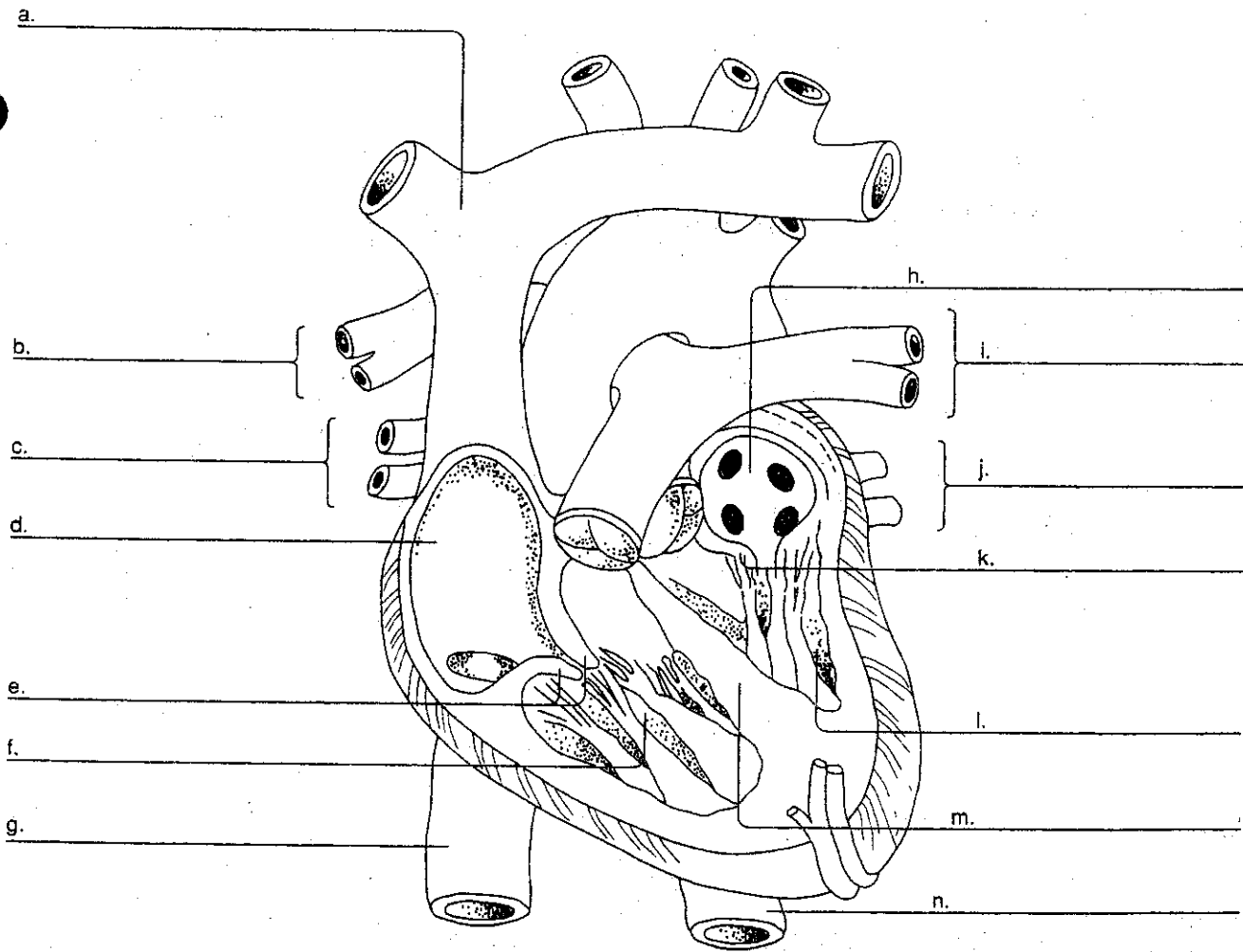
Your heart is only slightly larger than your fist, yet it is more powerful, durable, and hard-working. Its job is to pump blood to the lungs and to all of the body tissues. In this activity you will use a diagram of the heart to analyze the way in which the heart works.

1. Using the following word list, label the various parts of the heart on the diagram.

Right ventricle
Left ventricle
Upper vena cava
Lower vena cava
Aorta

Left atrium
Right atrium
Tricuspid valve
Bicuspid valve
Septum

Right pulmonary arteries
Left pulmonary arteries
Right pulmonary veins
Left pulmonary veins



2. Color red the structures in the diagram that carry only oxygen-rich blood. Color blue the structures that carry only oxygen-poor blood.
3. Use arrows to show the direction of blood flow.

Answer the following questions.

4. Through which parts of the heart does oxygen-rich blood flow?

5. Through which parts of the heart does oxygen-poor blood flow?

6. What is the difference between veins and arteries?

Rheumatic fever is a serious disease in which the joints of the body, the pericardium, and the valves of the heart become inflamed. It can do damage to all parts of the body, especially the heart valves. The valve between the left atrium and left ventricle usually receives the most damage in the form of scar tissue. Masses of scar tissue prevent the valve from closing properly. This also causes the heart to make a gurgling sound that is called a heart murmur.

7. Describe the damage that would occur from rheumatic fever.

8. What long-term effects on the heart would result from a damaged valve?
