

The worksheet below is adapted from

- A. Fundamentals of Anatomy and Physiology (9th Ed) by Martinin at al
- B. Human Anatomy and Physiology Lab Manual (9th Ed) by Marieb and Mitchell

1. What is the major function of the cardiovascular system?

2. What is the role of the heart?

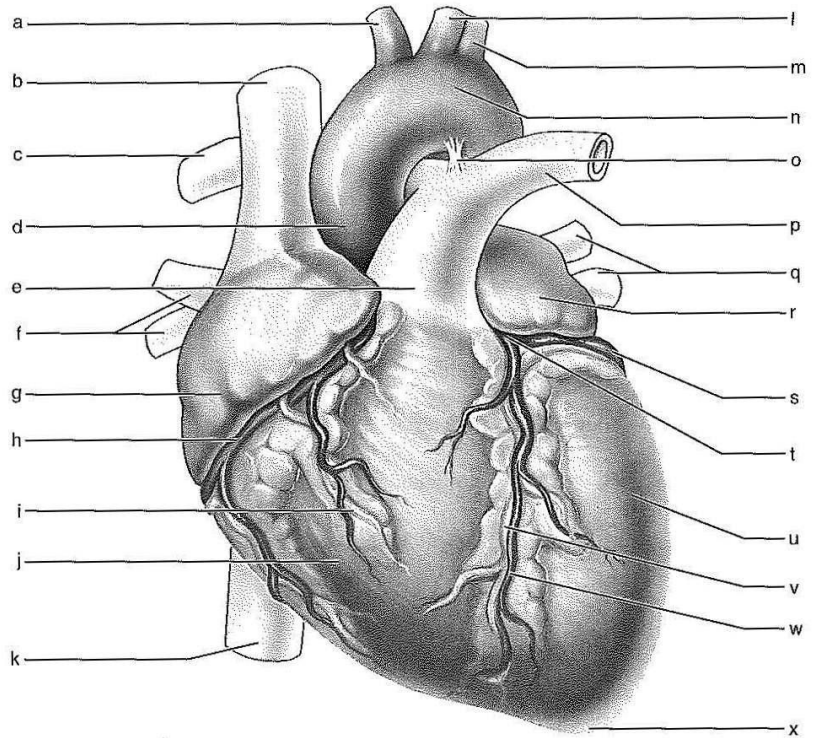
3. Describe the location of the heart.

4. Describe the shape and size of the heart.

5. External anatomy of the heart

1. An anterior view of the heart is shown here. Match each structure listed on the left with the correct letter in the figure.

- _____ 1. right atrium
- _____ 2. right ventricle
- _____ 3. left atrium
- _____ 4. left ventricle
- _____ 5. superior vena cava
- _____ 6. inferior vena cava
- _____ 7. ascending aorta
- _____ 8. aortic arch
- _____ 9. brachiocephalic artery
- _____ 10. left common carotid artery
- _____ 11. left subclavian artery
- _____ 12. pulmonary trunk
- _____ 13. right pulmonary artery
- _____ 14. left pulmonary artery
- _____ 15. ligamentum arteriosum
- _____ 16. right pulmonary veins
- _____ 17. left pulmonary veins
- _____ 18. right coronary artery
- _____ 19. anterior cardiac vein



- _____ 20. left coronary artery
- _____ 21. circumflex artery
- _____ 22. anterior interventricular artery
- _____ 23. apex of heart
- _____ 24. great cardiac vein

6. Label the structures in the diagram below:

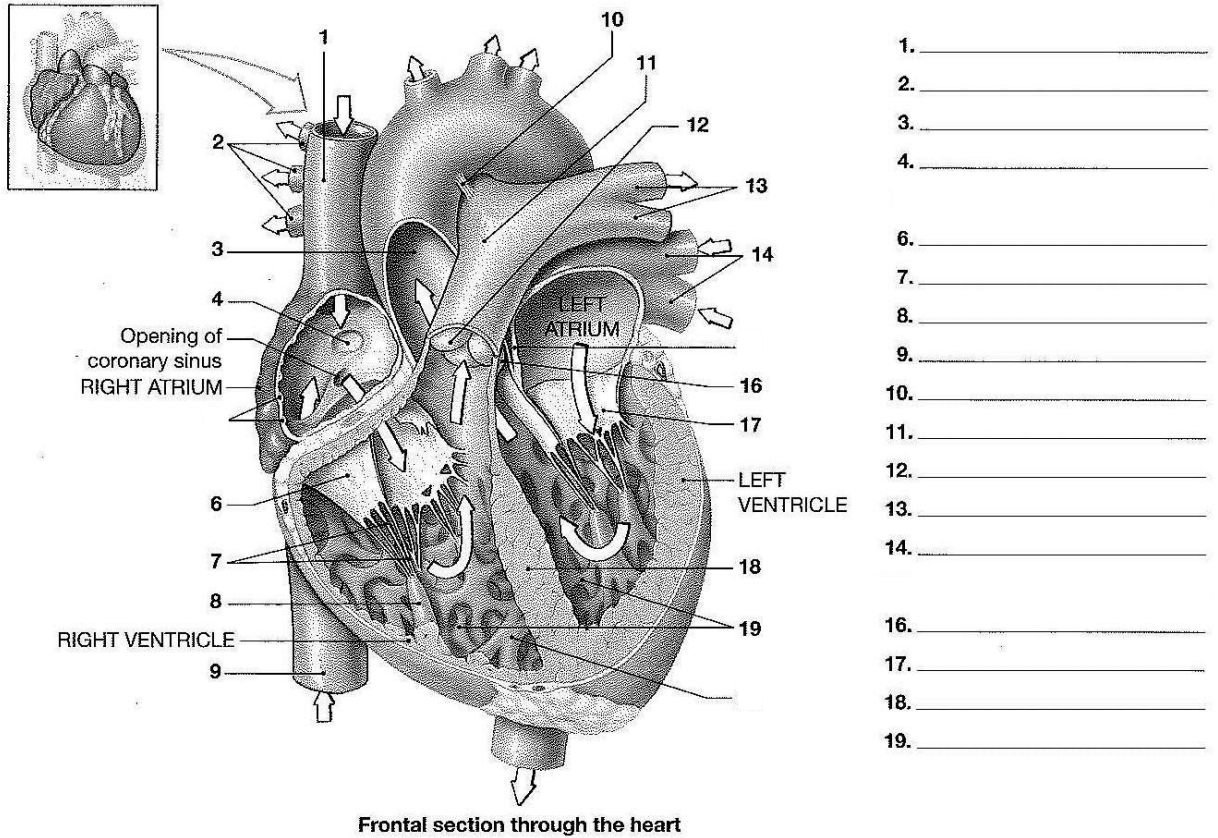


Figure 22.9 Internal Anatomy of the Heart

Diagrammatic frontal section of the heart with arrows that indicate direction of blood flow.

- | | |
|----------------------------|-------------------------------|
| a. Right pulmonary artery | j. Left pulmonary veins |
| b. Chordae tendineae | k. Pulmonary semi-lunar valve |
| c. Aortic semi-lunar valve | l. Pulmonary trunk |
| d. Trabecular carneae | m. Left pulmonary artery |
| e. Fossa ovalis | n. Ligament arteriosum |
| f. Ascending Aorta | o. Bicuspid valve |
| g. Inferior vena cava | p. Interventricular septum |
| h. Superior Vena Cava | q. Papillary muscle |
| i. Tricuspid valve | |

7. What is the role of the 4 heart valves?

8. In the diagram below, indicate the flow of blood through the heart, systemic and pulmonary circuits.

