

REVIEW SHEET

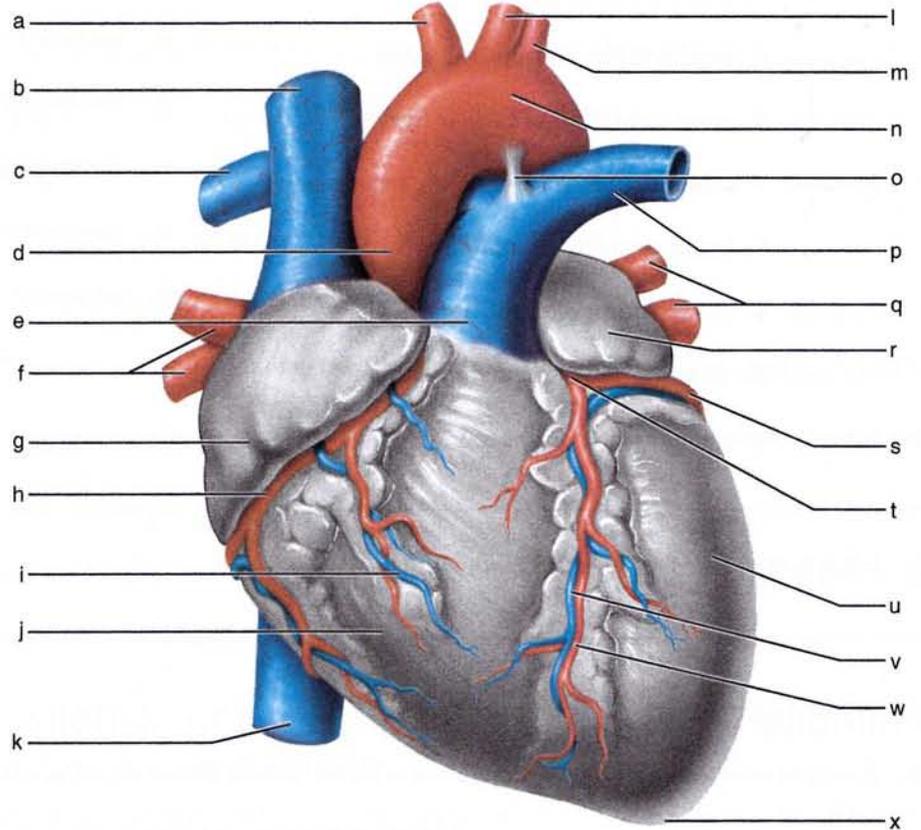
Anatomy of the Heart

Name _____ LabTime/Date _____

Gross Anatomy of the Human 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 trunk
- _____ 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

2. What is the function of the fluid that fills the pericardial sac? _____

3. Match the terms in the key to the descriptions provided below. Some terms are used more than once.

- _____ 1. location of the heart in the thorax
- _____ 2. superior heart chambers
- _____ 3. inferior heart chambers
- _____ 4. visceral pericardium
- _____ 5. receiving chambers of the heart
- _____ 6. layer composed of cardiac muscle
- _____ 7. provide nutrient blood to the heart muscle
- _____ 8. lining of the heart chambers
- _____ 9. actual "pumps" of the heart
- _____ 10. drains blood into the right atrium

Key:

- a. atria
- b. coronary arteries
- c. coronary sinus
- d. endocardium
- e. epicardium
- f. mediastinum
- g. myocardium
- h. ventricles

4. What is the function of the valves found in the heart? _____

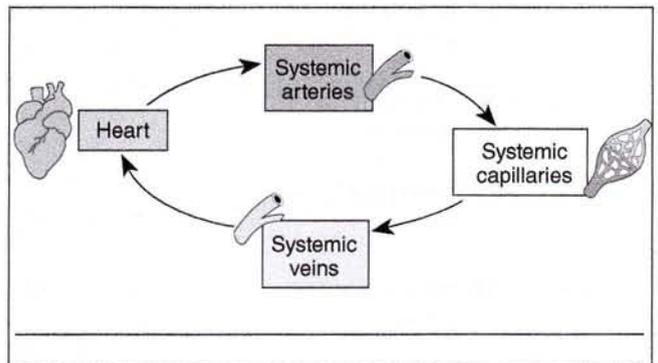
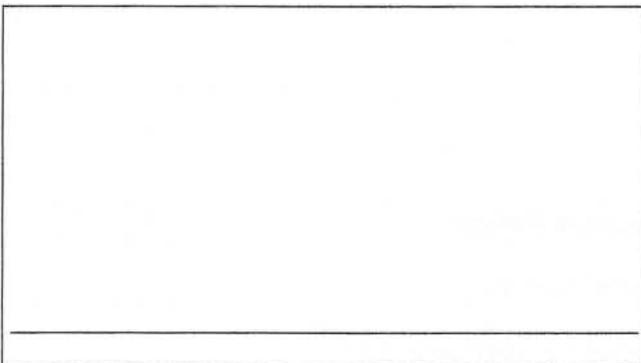
5. What is the role of the chordae tendineae? _____

Pulmonary, Systemic, and Coronary Circulations

6. A simple schematic of general circulation is shown below. Which circuit is missing from this diagram?

_____ Add to the diagram as best you can to make it depict the two circuits.

Label the two circuits.



7. Differentiate clearly between the roles of the pulmonary and systemic circuits. _____

8. Complete the following scheme of circulation of a red blood cell in the human body.

Right atrium through the tricuspid valve to the _____, through the _____
 valve to the pulmonary trunk, to the _____, to the capillary beds of the lungs,
 to the _____, to the _____
 of the heart, through the _____ valve to the _____, through the _____
 _____ valve to the _____, to the systemic arteries, to the _____
 of the tissues, to the systemic veins, to the _____,
 _____, and _____ entering the right atrium of the heart.

9. If the mitral valve does not close properly, which circuit is affected? _____

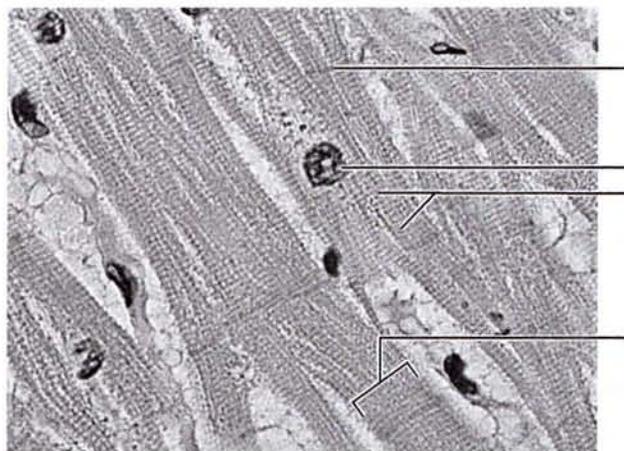
10. Why might a thrombus (blood clot) in the anterior descending branch of the left coronary artery cause sudden death? _____

Microscopic Anatomy of Cardiac Muscle

11. How would you distinguish the structure of cardiac muscle from that of skeletal muscle? _____

12. Add the following terms to the photograph of cardiac muscle below.

- a. intercalated disc b. nucleus of cardiac fiber c. striations d. cardiac muscle fiber



Describe the unique anatomical features of cardiac muscle. What role does the unique structure of cardiac muscle play in its function?
