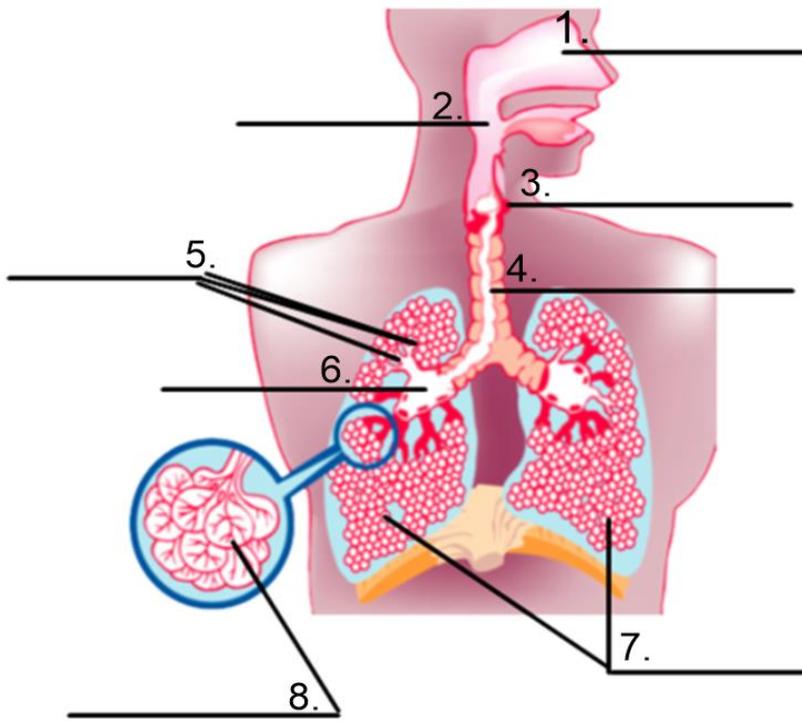
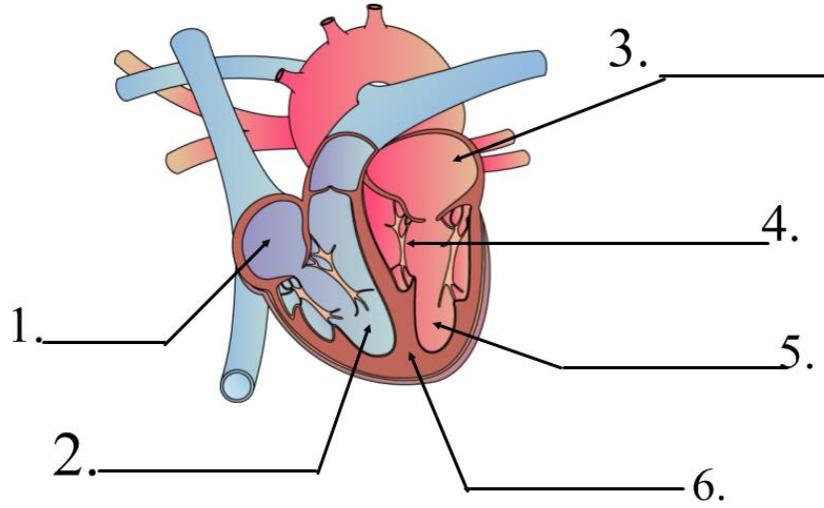


## Human Physiology 110: Exam Review Unit 3: Circulation & Respiration

### Part A: Label the following Diagrams

- |                |                 |                 |                |            |
|----------------|-----------------|-----------------|----------------|------------|
| right atrium   | left atrium     | right ventricle | left ventricle | septum     |
| bicuspid valve | tricuspid valve | nasal cavity    | bronchi        | pharynx    |
| lungs          | larynx          | alveoli         | bronchioles    | epiglottis |
| trachea        |                 |                 |                |            |



### Part B: Ordering

Part 1. Place the following words in the correct order as pulmonary and systemic circulation occur. Start with blood entering the right atrium then going to the lungs to pick up oxygen and then moving out to the body.

Part 2. On the right side of each of the following place a NO for those that do not contain oxygen and an O for those that do contain oxygen.

Part 1: Numbered	Part 2: O/NO
_____ Right Ventricle	_____
_____ Left Ventricle	_____
_____ Aorta	_____
_____ Pulmonary Artery	_____
_____ Tricuspid Valve	_____
_____ Various Arteries	_____
_____ Right Atrium	_____
_____ Left Atrium	_____
_____ Bicuspid Valve	_____
_____ Various Veins	_____
_____ Pulmonary Veins	_____
_____ Body	_____
_____ Lungs	_____

**Part C: Matching: Match each of the following with their description:**

- |                            |   |
|----------------------------|---|
| 1. Platelets _____         | a. allows for vocal sounds                                |
| 2. White blood cells _____ | b. the main muscle involved in breathing                  |
| 3. Artherosclerosis _____  | c. a disease that occurs when you have too few RBC        |
| 4. Leukemia _____          | d. a disease caused by bacteria and viruses               |
| 5. Plasma _____            | e. where gas exchange in the lungs takes place            |
| 6. Red blood cells _____   | f. protects against disease                               |
| 7. Anemia _____            | g. disease caused by cholesterol blocking your arteries   |
| 8. Heart attack _____      | h. cancer of the blood                                    |
| 9. Alveoli _____           | i. part of blood that promotes clotting                   |
| 10. Diaphragm _____        | j. occurs when part of your heart does not receive oxygen |
| 11. Larynx _____           | k. carries oxygen to your cells and carbon dioxide away.  |
| 12. Pneumonia _____        | l. the liquid part of blood                               |

**Part D: State whether each statement is describing a vein (V), artery (A) or capillary (C).**

- Blood travels through it at high pressure
- Carries oxygenated blood away from the heart
- Thick muscular elastic walls
- Blood travels through at low pressure
- Connects arteries and veins
- Red blood cells can only fit through one at a time

**Part E: Fill in the blanks**

1. This blood type is the universal donor \_\_\_\_\_
2. If you have blood type B your blood contains the antibody anti \_\_\_\_\_
3. Your circulatory system is a(an) \_\_\_\_\_ system because blood cannot enter or be removed from it.
4. The \_\_\_\_\_ ship/pump blood out of the heart into the lungs and the rest of the body.
5. If blood was not flowing properly to your lungs it would be a problem with your \_\_\_\_\_ circulatory system.
6. The \_\_\_\_\_ side of your heart pumps blood to your body.
7. Cancer of the white blood cells is called \_\_\_\_\_.
8. During the first part of respiration \_\_\_\_\_ in the air is drawn into the body and \_\_\_\_\_ is released from the body.
9. If you suffer from \_\_\_\_\_ the air passages in your lungs periodically become too narrow.
10. During an inhalation the \_\_\_\_\_ of the chest \_\_\_\_\_.
11. Air that has passed through the nasal cavity enter the \_\_\_\_\_.

**Part F: Short answer questions**

1. List the three main functions of blood. What is the average volume of circulating blood in the body?
2. Name the four blood types in the ABO system. What antigens and antibodies if any are found in people with each type?
3. What are some symptoms of atherosclerosis, and how are these produced?
4. What causes the "lub dub" sound heard at the chest wall?
5. Some babies are born with a hole between the right and left ventricles? Why does this happen and why is this a problem?
6. What would be more life threatening a cut in an artery or a cut in a vein? Why? Explain.
7. What would happen if blood entered a vein with the same pressure as it entered an artery? Explain.