

Name \_\_\_\_\_

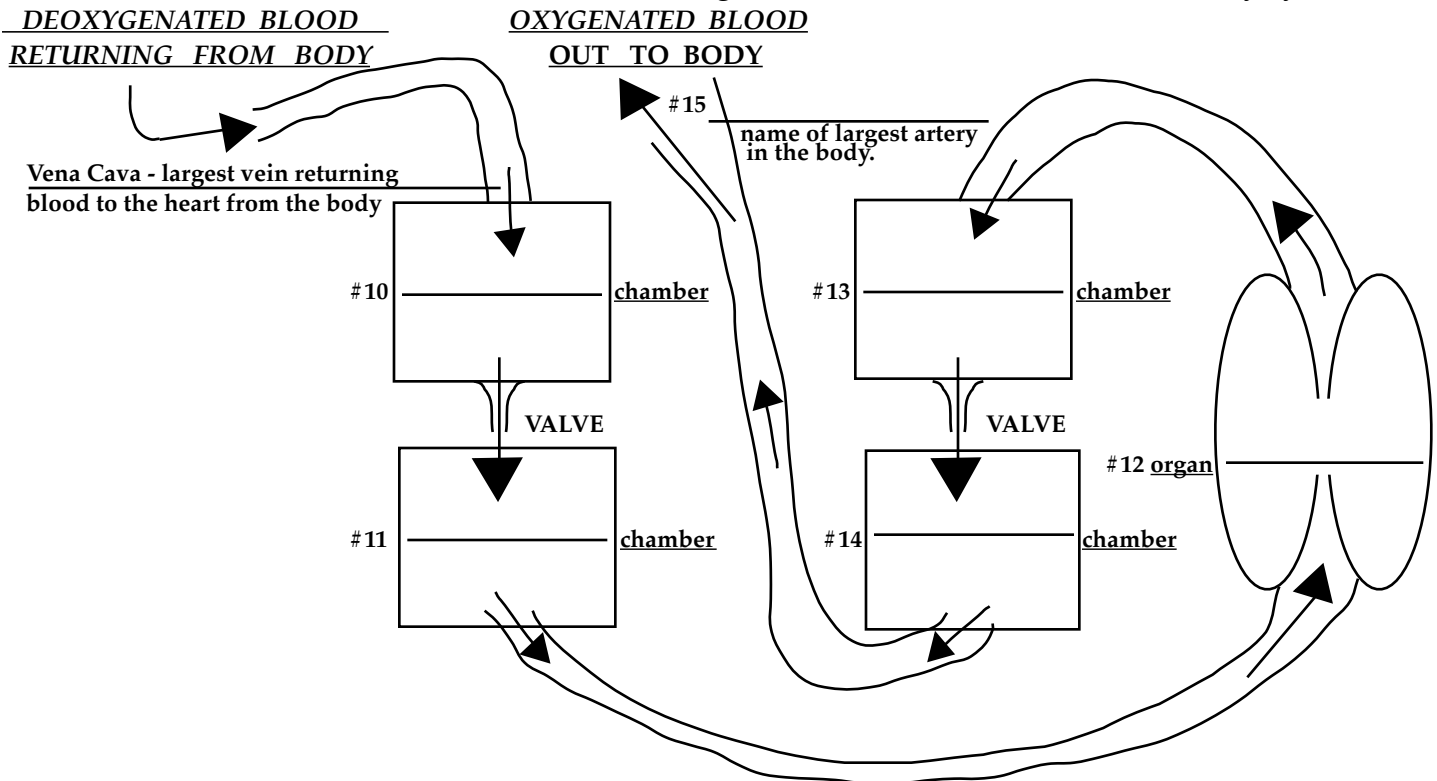
**Human Biology - Cardiovascular System**

1. The primary **function** of the **cardiovascular system** (in one word) is: \_\_\_\_\_
2. The **liquid** portion of **blood** is called \_\_\_\_\_ and is **mostly** composed of \_\_\_\_\_.
3. **Hemoglobin** is an \_\_\_\_\_-**containing protein** found only on \_\_\_\_\_ **cells**. It is responsible for binding to and carrying \_\_\_\_\_ **molecules** in the blood.
4. \_\_\_\_\_ are **blood particles** responsible for **clotting**, and **contain the chemical** \_\_\_\_\_ which creates a sticky web that traps blood cells causing them to stick together.
5. At all times, **blood is always** \_\_\_\_\_ **in color**.
6. **Gas exchange** occurs in the \_\_\_\_\_ after blood is **pumped from the** \_\_\_\_\_.  
The **two gasses being exchanged** are \_\_\_\_\_ & \_\_\_\_\_.
7. \_\_\_\_\_ **cells'** primary function is to **protect the body from foreign invaders** (germs).
8. **List 5 specific things** which may be transported through the body by the circulatory system:  
• \_\_\_\_\_, • \_\_\_\_\_, • \_\_\_\_\_, • \_\_\_\_\_, • \_\_\_\_\_
9. \_\_\_\_\_ are the **most numerous type of blood cells**.

10 - 15. LABEL THE FOLLOWING CHART (6 answers = 6 points)

LABEL THE FOLLOWING FLOW CHART (6 answers on the numbered lines provided)

Arrow show the direction of blood flow through the **TWO LOOPS** of the circulatory system:



16. \_\_\_\_\_ **Blood vessels** which transport blood **away** from the heart.
17. \_\_\_\_\_ **Blood vessels** which that transport blood **toward** the heart.
18. \_\_\_\_\_ The heart's **strongest chamber** because it must pump to the body.
19. \_\_\_\_\_ is **movement** of substances from **areas of high to low concentrations**.
20. \_\_\_\_\_ The  **tiniest blood vessels** (1 cell thick) - reach every cell in the body.
21. \_\_\_\_\_ **The cardiovascular disease** where the **lining of coronary arteries becomes thicker** with **plaque** buildup, constricting blood flow.
22. \_\_\_\_\_ **Instrument** used to measure blood pressure (**blood pressure cuff**).
23. \_\_\_\_\_ Medical condition - **high blood pressure**, increased by stress & sodium.
24. \_\_\_\_\_ The **two top heart chambers** that collect blood returning to the heart.
25. \_\_\_\_\_ Vascular tissue that **contains tiny one way valves** to prevent blood from moving backwards
26. \_\_\_\_\_ Name of the **two arteries on either side of the neck** that carry blood to the brain.
27. \_\_\_\_\_ measurement of the number of times your heart **beats per minute**.
28. \_\_\_\_\_ The term for blood that is **carrying mostly carbon dioxide**.
29. \_\_\_\_\_ Specialized group of cells in the right atrium of the heart that **produce electrical signals which make the heart muscle contract**.
30. \_\_\_\_\_ Special tissue that **constantly produces new blood cells**.

**EXTRA CREDIT (3 possible points total)**

Describe in detail **3 behaviors & habits** which are proven to negatively affect cardiovascular health:

1. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_