

Sheep Heart Dissection

Make Up Lab: Use the internet, your book to learn the structures of the heart, answer the following questions and label the diagram

These hearts have already been cut, you will be locating the various heart structures, **pinning** them and answering questions. For the first part of the lab we will be identifying the external structures of the heart. Keep the two pieces of your heart together. For the second part you will be identifying the internal structures of the heart and will need to separate the two parts.

There are 4 chambers, 4 valves and 4 vessels (leading into and out of the heart).

In order to correctly identify the external anatomy of the heart you will first need to orient your heart correctly. (Ventral side up) **You need to pin each bold term listed below.**

1. Start by placing your heart (2 parts together) with the ventral side facing you. You will know that you have the ventral side when the apex is facing down, base facing up and the anterior longitudinal fissure is at a diagonal facing you. Locate **the Right atrium, Left atrium, right ventricle and left ventricle, and anterior longitudinal fissure**. Pin these structures.
 - a. How can you tell which side of the heart is the ventral surface (surface closer to your chest)?

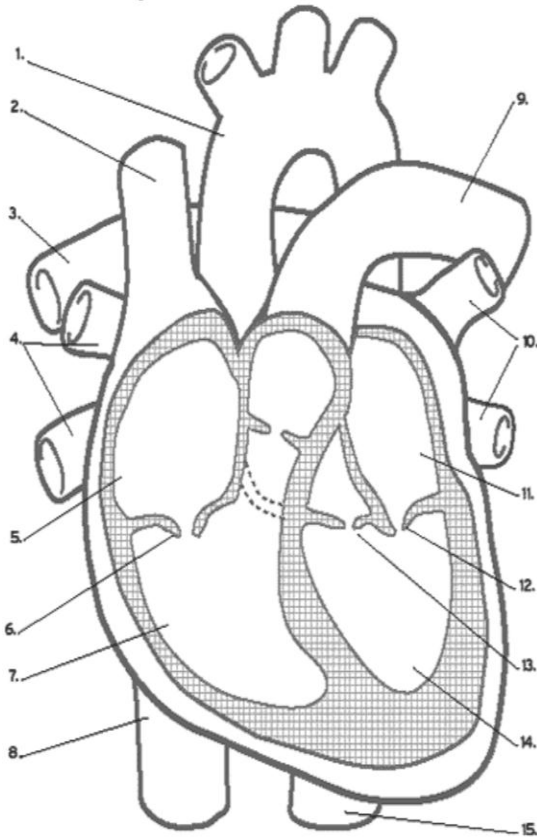
 - b. How many chambers are found in the mammalian heart? List these chambers.

2. Look down on your heart base to locate the 4 main vessels. **Pin the Aorta, pulmonary vein, pulmonary artery and vena cava**. The pulmonary vein comes out of the right ventricle (called the pulmonary trunk). Behind the pulmonary trunk, behind and to the left of the right atria is the aorta. The vena cava should be behind the aorta and the pulmonary vein should be the vessel leading into the left atrium, on the left side of the heart.
 - a. List the 2 blood vessels of the heart which contain low oxygenated blood

 - b. List the 2 blood vessels of the heart which contain high oxygenated blood

- c. Where are the pulmonary arteries going?
3. Again place the heart with the ventral side facing you on your dissecting tray. Separate the two pieces of your heart and place them with their inside facing you. Locate the 4 chambers of the heart. **Pin the Right atrium, right ventricle, left atrium and left ventricle.** Locate the 4 valves, two that separate the atria and ventricle and two that are in the vessels leading out of the heart. **Pin the tricuspid valve, the pulmonary valve, the mitral valve and the aortic valve.** Please note and pin the strings that attach to the tricuspid and mitral valves. These are called **Chordae Tendinae (pin)**. Pin the walls of the ventricles this is called **myocardium**. Notice how the left myocardium is larger than the right myocardium.
- Compare the structure of the tricuspid valve with that of the pulmonary valve.
 - Why are the myocardium different sizes? Which side has larger myocardium?

Label the diagram of the human heart below.



1.	_____
2.	_____
3.	_____
4.	_____
5.	_____
6.	_____
7.	_____
8.	_____
9.	_____
10.	_____
11.	_____
12.	_____
13.	_____
14.	_____
15.	_____