**Sheep Heart Dissection**

**Introduction**

Sheep have a four-chambered heart, just like humans. By studying the anatomy of the sheep’s heart, you can learn about how your own heart pumps blood through your body.

**Pre-Lab Questions**

On the heart diagram below, label the following structures:

1. Superior Vena Cava 6. Left Ventricle 11. Aorta
2. Inferior Vena Cava 7. Right Pulmonary Artery 12. Tricuspid Valve
3. Right Atrium 8. Left Pulmonary Artery 13. Bicuspid Valve
4. Left Atrium 9. Right Pulmonary Veins 14. Pulmonary Valve
5. Right Ventricle 10. Left Pulmonary Veins 15. Aortic Valve



**Sheep Heart Dissection**

**Procedure**

1. Obtain a dissecting tray and a set of dissecting instruments.
2. Place the preserved sheep heart on your dissecting tray.
3. Locate the superior and inferior sides of the heart.
	1. The superior side will have several blood vessels coming off of it.
	2. The inferior side will have the apex.
4. Position the heart on your dissecting tray so that the coronary artery (diagonal line on the front of the heart) is face up and the apex of the heart is pointing toward the bottom.

**External Anatomy**

*Use only probes/fingers for this part of the lab! Do NOT cut anything!*

1. Locate the following external structures.

***Check off each structure when you have located it.***

* + Superior Vena Cava
	+ Pulmonary Vein
	+ Pulmonary Artery
	+ Aorta
1. Put your finger about 1 inch into the Superior Vena Cava.

***What chamber of the heart did your finger enter?***

1. Carefully put your finger about 1 inch into the Pulmonary Vein.

***What chamber of the heart did your finger enter?***

**Internal Anatomy**

1. Using a scalpel or scissors, make a lateral cut through the right ventricle and right atrium. Start at the apex and cut along the side of the heart up to the base and blood vessels (like you are cutting the heart in half – you are making a *cross section*)
2. When you reach the base, stop cutting. The top border of the heart should still be intact.
3. Carefully peel the top half of the heart upwards.
4. Identify the following structures:

***Check off each structure when you have located it.***

* Right Atrium
* Right Ventricle
* Left Atrium
* Left Ventricle
* Tricuspid Valve
* Bicuspid Valve

***What does the Tricuspid Valve do?

What does the Bicuspid Valve do?***

1. Using the piece of string provided, thread the string through each structure of the heart in the order in which blood travels. List the order below.

	* Superior/Inferior Vena Cava
	*
	*
	*
	*
	*
	* Lungs
	*
	*
	*
	*
	* Aorta