

Name: \_\_\_\_\_

SBI3U

SHEEP HEART DISSECTION

Checklist: Check off all structures you identify

- |                                             |                                                       |                                                    |
|---------------------------------------------|-------------------------------------------------------|----------------------------------------------------|
| <input type="checkbox"/> left side of heart | <input type="checkbox"/> right atrium/auricle         | <input type="checkbox"/> bicuspid valve            |
| <input type="checkbox"/> right side         | <input type="checkbox"/> left atrium/auricle          | <input type="checkbox"/> chordae tendinae          |
| <input type="checkbox"/> dorsal side        | <input type="checkbox"/> aorta                        | <input type="checkbox"/> aortic semilunar valve    |
| <input type="checkbox"/> ventral side       | <input type="checkbox"/> pulmonary trunk (arteries)   | <input type="checkbox"/> pulmonary semilunar valve |
| <input type="checkbox"/> superior side      | <input type="checkbox"/> pulmonary veins              | <input type="checkbox"/> septum                    |
| <input type="checkbox"/> inferior side      | <input type="checkbox"/> anterior/superior vena cava  |                                                    |
| <input type="checkbox"/> apex               | <input type="checkbox"/> posterior/inferior vena cava |                                                    |
| <input type="checkbox"/> right ventricle    | <input type="checkbox"/> coronary vessels             |                                                    |
| <input type="checkbox"/> left ventricle     | <input type="checkbox"/> tricuspid valve              |                                                    |

Dissection Postlab: Complete this form and submit

QUESTIONS	WRITE COMMENTS BELOW
Did the smell bother you a lot?	
Was it an interesting and useful dissection?	
If you could dissect the heart of another organism, what would you choose?	
How would an amphibian heart differ from the sheep heart?	
How successful were you at cutting the heart down the middle?	
Which dissection instrument (or fingers) did you use most frequently?	
List any structures from the sheep heart that you were unable to locate	
Were you able to tell the right side from the left side?	
Were you able to tell the dorsal side from the ventral side?	
Which chamber of the heart is the largest?	
What structure separates the left and right sides of the heart?	
Has performing this dissection better prepared you for the fetal pig dissection?	

Student Requirements

- Perform a careful dissection to the best of their abilities. Do NOT cut any more than necessary.
- Demonstrate appropriate lab work including proper use and cleanup of all equipment and specimen and a mature attitude.
- Identify and state the function (if appropriate) of all external and internal structures from the sheep heart diagram and any others the teacher indicates.
- Submit the internet form.

Dissection Instructions

1. Assemble the following at your lab station:
  - sheep heart in dissecting pan
  - dissection equipment (gloves, scalpel, forceps, scissors, blunt probe)
  - sheep heart handout
  - class diagram of the human heart
2. Using the sheep heart handout as a guide, identify the right and left sides of the heart. Then find the dorsal, ventral, superior, and inferior sides of the heart. Continue your external examination by identifying all other external structures shown in Figure 1 of the sheep heart handout.
3. Gently insert your finger or a blunt probe into each open blood vessel to explore it.
4. To open the heart up you will need to make a longitudinal cut with the scalpel separating the heart into a dorsal and ventral (back and front) half.

Hold the heart in the dissecting tray so that the apex (pointed end) faces up. Beginning at the apex, cut downwards with the scalpel to cut the heart in half as if you were cutting an apple. Be very careful of your fingers! Try to make your cut as smooth and continuous as possible so as not to shear the internal structures.

5. When you have completely cut the heart in half separate the two pieces and lay them in the dissecting tray with the internal structures facing up.
6. Identify all internal structures shown on the sheep heart handout. Also refer to your class diagram of the human heart and look for all those structures. In particular, note how much thicker the left ventricle is compared to the right ventricle.
7. When you have identified all external and internal structures on your sheep heart, trade hearts with another lab group and practice on the new heart.
8. When you're done, put the hearts back in the bins and wash the dissection equipment with soap and water and dry them. Then wash your lab bench and finally throw out your gloves and wash your hands. Then complete the internet form.