

Dissection of a sheep heart

You will need:

- A sheep heart
- Scalpel
- Dissection needles and forceps
- Latex gloves
- Coloured pencils

External anatomy:

Identify the:

1. Left and right sides of the heart
2. Coronary artery and vein
3. Superior vena cava
4. Inferior vena cava
5. Aorta
6. Pulmonary arteries
7. Pulmonary veins
8. Left and right ventricles
9. Left and right atria

2	
1	
1	
1	
1	
1	
1	
1	
1	

Indicate which vessels connect to which chambers:

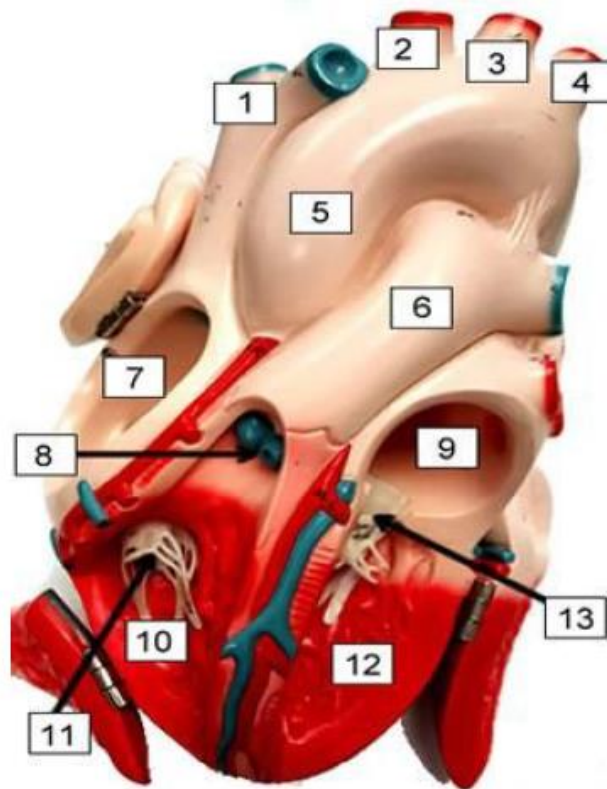
10. Pulmonary artery connects to the _____
11. Pulmonary vein connects to the _____
12. Aorta connects to the _____
13. Superior vena cava connects to the _____

1	
1	
1	
1	
14	

Dissection: internal anatomy

1. Use a scalpel to make an incision at the superior vena cava. The incision should follow the line of the right side of the heart so that you can open just the right side of the heart to see the **right atrium, right ventricle** and **tricuspid valve**.
2. The **chordae tendinae** are attached to the thin flaps of the tricuspid valves and to papillary muscles in the walls of the heart.
3. Make a similar incision on the left side of the heart to expose the **left atrium, left ventricle** and **bicuspid (mitral) valve**.
4. Carefully insert a pencil into the aorta from the ventricle and note where it exits the heart. Identify the **semilunar valve** connecting the aorta to the ventricle. This valve may be damaged, but the flaps or leaflets should still be visible.

Label the heart



- 1. _____ (1)
- 2. _____ (1)
- 3. _____ (1)
- 4. _____ (1)
- 5. _____ (1)
- 6. _____ (1)
- 7. _____ (1)
- 8. _____ (1)
- 9. _____ (1)
- 10. _____ (1)
- 11. _____ (1)
- 12. _____ (1)
- 13. _____ (1)

14. Which muscles connect to the chordae tendinae to hold the valves in place?
_____ (1)

15. If you insert a pencil into the aorta, in which chamber will it exit?
_____ (1)

16. Which chamber do the superior and inferior vena cava enter?
_____ (1)
[16]

TOTAL: 30