

Cat Dissection

Complete the Lab Write Ups by filling in blanks within the procedure.

Title: The Cardiovascular System Lab

Materials: shirt, gloves, paper towels, scalpel, forceps, scissors, probes, cat, colored pencils, rubber bands, drawing paper, lab manuals

Opening the Thoracic Cage

Procedure:

1. Use the illustration manual to aid in identifying the structures of the cat cardiovascular system.
2. Find the **sternum** of the cat and locate the _____ **process** by tracing the bottom of the rib cage.
3. Using scissors, penetrate the chest cavity below the _____ process and cut through the sternum to just below the chin. When cutting through the sternum, make sure you _____ and cut to avoid cutting too deep and damaging internal organs.
4. Carefully spread apart the walls of the thoracic cage, insert your finger into the chest cavity and break the _____ from the inner lining of the thoracic cavity.
5. Locate the top of the _____, a dome shaped muscle, at the inferior end of the initial cut through the sternum.
6. Make a cut through the ribs, just superior to the diaphragm, laterally and dorsally toward the _____ on both sides. As you are cutting, look inside the thoracic cavity and make sure you are not cutting the _____.
7. Using a tool called _____, cut the ribs as close to the vertebral column as possible. This will allow you to spread apart the walls of the thoracic cavity.
8. Identify the heart.
9. Carefully remove the _____ gland by pinching and pulling it off.
(Be careful not to remove major blood vessels coming off of the heart)

Identification of Structures of the Heart

Procedure:

1. Identify the **pericardial sac**.
2. Using your forceps and scissors, make a cut through the pericardial sac from the apex to the base.
3. Peel the pericardial sac dorsally and cut the pericardial sac off of the heart using small _____.
4. Carefully remove connective tissue surrounding the heart and blood vessels using your forceps, seeker probe or your finger.
5. Identify, pin & label the following structures externally:
 - **right and left atria***
 - **right and left ventricle***
 - **superior and inferior vena cava***
 - **pulmonary arteries and veins ***
 - **ascending aorta, descending aorta, and aortic arch***
 - **pulmonary trunk***
 - **brachiocephalic artery***
 - **left subclavian artery***
 - **common carotid artery***
 - **internal and external jugular vein***

(**Note-** arteries and veins have been color coded for you)