

Sheep Heart Dissection Worksheet



SHEEP HEART DISSECTION



Purpose

To review the structural characteristics of the human heart and to examine the major features of a mammalian heart.

Materials

- Preserved sheep heart
- Dropper
- Red food color
- Blue food color
- Dissecting pan
- Scalpel
- Probe
- Scissors
- Tweezers
- Gloves (if desired)

Procedure A—The Human Heart

1. Using your notes and wonderful memory, label the diagram of the human heart on your lab report sheet.
2. Read through the analysis questions on your lab report as you should be answering them as a groups as you dissect the sheep heart.

Procedure B—Dissection of a Sheep Heart

1. Obtain a preserved sheep heart. Rinse it thoroughly in water to remove as much of the preservative as possible. Also run water into the larger blood vessels to force any blood clots out of the heart chambers. ☐
2. Locate the aorta on the superior surface of the heart. Fill your dropper half way with **RED** food coloring. Insert your dropper into the aorta and inject the food coloring. ☐
3. Locate the pulmonary artery on the superior surface of the heart. Fill your dropper half way with **BLUE** food coloring. Insert your dropper into the pulmonary artery and inject the food coloring. ☐
4. Place the heart in a dissecting tray with its anterior surface up (See Figure 1 below). Locate the interventricular sulcus and label it with a solid black line. Have Mrs. Chevalier check to make sure you have labeled this correct. ☐
 - a. Locate the *visceral pericardium*, which appears as a thin, transparent layer on the surface of the heart. Use a scalpel to remove a portion of this layer and expose the *myocardium* beneath. Also note the abundance of fat along the paths of various blood vessels. This adipose tissue occurs in the loose connective tissue that underlies the visceral pericardium. ☐
 - b. Identify the following:
 - right atrium ☐
 - right auricle ☐
 - right ventricle ☐
 - left atrium ☐
 - left auricle ☐
 - left ventricle ☐
5. Examine the posterior surface of the heart (Figure 2 below). Locate the coronary sulcus and label it with a solid black line. Have Mrs. Chevalier check to make sure you have labeled this correctly before proceeding. ☐

FIGURE 1



Sheep heart dissection worksheet is an essential educational resource for students studying anatomy and physiology. Dissecting a sheep's heart provides a hands-on experience that enhances understanding of the mammalian circulatory system and the heart's structure and function. This article will explore the purpose of the dissection, the anatomy of the sheep heart, the dissection process, safety considerations, and the significance of the findings.

Purpose of Sheep Heart Dissection

Dissecting a sheep heart serves multiple educational purposes:

1. **Understanding Anatomy:** By examining a sheep heart, students gain insights into the complex structure of the heart, including its chambers, valves, and major blood vessels.
2. **Learning Functionality:** The dissection allows students to relate the anatomical features to their functions, such as how blood flows through the heart and circulates throughout the body.
3. **Developing Dissection Skills:** Students learn essential laboratory skills, including how to handle dissection tools, make incisions, and identify anatomical structures.
4. **Encouraging Teamwork and Collaboration:** Dissection is often conducted in pairs or small groups, fostering communication and teamwork among students.
5. **Applying Theoretical Knowledge:** This hands-on experience reinforces concepts learned in the classroom, such as the cardiac cycle, blood flow, and the differences between various types of circulatory systems.

Anatomy of the Sheep Heart

Understanding the anatomy of the sheep heart is crucial before conducting a dissection. Here are the main components:

External Structures

1. **Apex:** The pointed tip of the heart that faces downward and slightly to the left.
2. **Base:** The broader top part of the heart where the major blood vessels are attached.
3. **Coronary Arteries:** Located on the surface of the heart, these arteries supply blood to the heart muscle itself.
4. **Pulmonary Trunk:** The large vessel that carries deoxygenated blood from the right ventricle to the lungs.
5. **Aorta:** The largest artery in the body, responsible for carrying oxygenated blood from the left ventricle to the rest of the body.

Internal Structures

1. **Chambers:**
 - **Right Atrium:** Receives deoxygenated blood from the body via the superior and inferior vena cavae.
 - **Right Ventricle:** Pumps deoxygenated blood to the lungs through the pulmonary arteries.
 - **Left Atrium:** Receives oxygenated blood from the lungs via the pulmonary

veins.

- Left Ventricle: Pumps oxygenated blood to the body through the aorta.

2. Valves:

- Tricuspid Valve: Located between the right atrium and right ventricle, preventing backflow of blood.

- Pulmonary Valve: Controls blood flow from the right ventricle to the pulmonary trunk.

- Mitral Valve: Located between the left atrium and left ventricle, preventing backflow into the atrium.

- Aortic Valve: Regulates blood flow from the left ventricle into the aorta.

3. Septum: The muscular wall separating the left and right sides of the heart, preventing the mixing of oxygenated and deoxygenated blood.

Dissection Process

Conducting a sheep heart dissection requires careful preparation and methodical execution. Here is a step-by-step guide:

Preparation

1. Gather Materials:

- Sheep heart specimen (frozen or preserved)
- Dissection tray
- Dissection tools (scalpel, scissors, forceps, probe)
- Safety goggles and

Frequently Asked Questions

What is the purpose of a sheep heart dissection worksheet?

The purpose of a sheep heart dissection worksheet is to guide students through the process of dissecting a sheep heart, helping them to identify and understand the anatomy and physiology of the heart, including its chambers, valves, and major blood vessels.

What key structures should be identified during a sheep heart dissection?

During a sheep heart dissection, key structures to identify include the right and left atria, right and left ventricles, aorta, pulmonary arteries, pulmonary veins, and the heart valves such as the tricuspid and mitral

valves.

How does a sheep heart compare to a human heart in terms of anatomy?

A sheep heart is anatomically similar to a human heart, as both have four chambers (two atria and two ventricles) and similar valve structures. However, there are size differences, and the sheep heart generally has a more rounded shape compared to the more conical shape of a human heart.

What safety precautions should be taken during a sheep heart dissection?

Safety precautions during a sheep heart dissection include wearing gloves, goggles, and a lab coat to protect against biological materials, using dissection tools carefully to avoid injury, and properly disposing of biological waste according to lab safety guidelines.

What are the educational benefits of conducting a sheep heart dissection?

Conducting a sheep heart dissection provides hands-on learning opportunities, enhances understanding of cardiovascular anatomy and function, fosters critical thinking and observation skills, and encourages engagement with biological concepts in a real-world context.

Find other PDF article:

<https://soc.up.edu.ph/20-pitch/pdf?trackid=dhd07-7923&title=envision-math-grade-5-volume-2-answer-key.pdf>

Sheep Heart Dissection Worksheet

Download Citrix Products - Citrix

Download Citrix Workspace App, NetScaler and all other Citrix workspace and networking products. Receive version updates, utilities and detailed tech information.

Citrix Login

Citrix Consolidated Login© 1999-2025 Citrix Systems, Inc. All rights reserved.

Citrix Workspace App - Download and install on Windows

The Citrix Workspace app allows for secure, unified access to all of your SaaS apps, web apps, virtual apps, files, and desktops. If your company uses Citrix, simply login with your company ...

secureportal.citrix.com

Securely log in to Citrix portal to access and manage your applications, desktops, and data.

Install and uninstall | Citrix Workspace app for Windows

Jun 2, 2025 · Know more about the various methods for installation and uninstallation of Citrix Workspace app for Windows.

Citrix Workspace app 2503.10 for Windows

Jul 7, 2025 · Citrix Workspace app can be used on domain and non-domain joined PCs, tablets, and thin clients. Provides high performance use of virtualized Skype for Business, line of business ...

What Is Citrix and How Does It Work? - TechTarget.com

Jan 19, 2023 · Learn about Citrix Systems and the cloud-based tools it offers for virtual desktop infrastructure, application delivery and security.

Citrix Workspace app

Nov 29, 2024 · Citrix Workspace app provides instant, secure, and seamless access to all the resources that your end users need to stay productive. Citrix Workspace app includes access to ...

Download Workspace app for Windows - Current Release - Citrix

May 22, 2025 · Downloads / Citrix Workspace app / Workspace app for Windows - Current Release
Find Downloads or

Citrix Workspace Overview

Aug 9, 2024 · Citrix Workspace is a service that provides secure access to your virtual apps, desktops, web and SaaS apps from a web browser or Citrix Workspace app.

Luxury Amenities at Paramount Residences | Stylish Living Style

Experience upscale living at its finest with world-class amenities at Paramount Residences. Discover the best luxury amenities that can make any event, gathering, or stay unforgettable ...

Paramount Residences - Luxury Living Fort Lauderdale

Located on two acres of land between the Intracoastal Waterway and Atlantic Ocean, Paramount Residences offers a relaxed luxurious atmosphere. The property stands in good company on ...

Paramount Residences | Luxury Boutique Tower | Meza Group

Paramount Residences in Fort Lauderdale offers unobstructed views of the Atlantic Ocean and Intracoastal Waterway. Find the perfect luxury home!

Paramount Residences Condos For Sale | 10+ Paramount ...

Remarks: Experience unparalleled luxury and sophistication at this exquisite paramount residence offering 3,202 sq. ft. of living space, wa...

Paramount Residences 804 | Active Listing | Dotoli Group

Enjoy an impressive array of amenities, including a gym, full spa with massage services, yoga studio, picnic area, business center, club room, and community room. Notably, short-term ...

Why Paramount Residences Are Worth the Premium

The city offers countless opportunities for home buyers to invest in exclusive properties, but none quite like the Paramount Residences. These luxurious condos boast impressive design, high ...

Paramount Residences

The 18-story tower has 95 oceanfront residences on a site composed of two acres adjoining Bonnet House's tropical gardens, open-air spaces and contemporary amenities, you will ...

Paramount Residence Doha, The Pearl

The Residences being sold by Al Asmakh Real Estate Development are not owned, developed or sold by PHR FZ-LLC (trading under the name Paramount Hotels & Resorts) or Paramount ...

Paramount Fort Lauderdale | Luxury Oceanfront Condos For Sale

Experience oceanfront luxury like never before at Paramount Residence 605 on Fort Lauderdale Beach. This sophisticated 3-bed (all ensuite), 3.5-bath retreat offers breathtaking beach, ...

High-End Features of Paramount Residences Condos - Guide

In this blog post, we will explore some of the high-end features of Paramount Residences condos that make them the ideal choice for home buyers in Fort Lauderdale.

Explore our comprehensive sheep heart dissection worksheet

[Back to Home](#)