

EXPERIMENT 12: MAMMAL ORGAN SYSTEM

Course Learning Outcome:

Solve problems related to transport system processes, mechanisms for adaptations in living things, ecological and environmental issues in biology.

(C4, PLO 2, MQF LOC ii)

Learning Outcomes:

At the end of this lesson, students should be able to:

- i. Analyse the organ system in mammals.
- ii. Identify the dissecting tools and its function.
- iii. Identify the anatomical orientation terms of the mice.

Student Learning Time:

Face-to-face	Non face-to-face
1 hour	1 hour

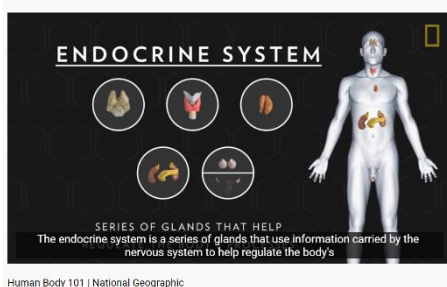
Direction: Read over the lab manual and then answer the following questions.



Check this out:

All mammals contain 11 major organ systems. The 22 internal organs of the human body are a part of these organ systems. Some organs are a part of more than one organ system. Even though the major organ systems are present in all mammals, the organs associated with each system may vary among different species.

Scan the QR code or click the link below for further details:



Human Body 101 | National Geographic



[Human Body 101 | National Geographic - YouTube](#)

Introduction:

1. Name the organs involved in the following systems.

System	Organs	
Digestive system		
Circulatory system		
Respiratory system		
Urogenital system (Reproduction system and urinary excretion)	Reproduction system	Urinary excretion
	Male:	Male:
	Female:	Female:
Nervous system		

2. What is a transport system in mammals?

3. What is the importance of rib cage in the thoracic area?

Experiment:

1. **FIGURE 1** shows the tools that can be found in the dissecting kit. Name the labelled dissecting tools and state its function.

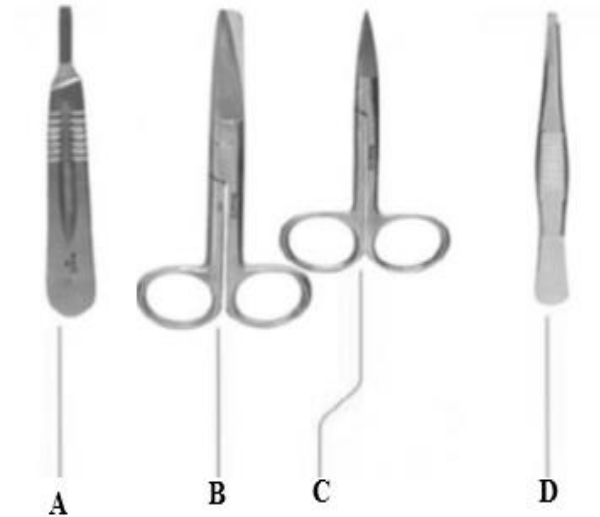


FIGURE 1

Label	Tools	Function
A		
B		
C		
D		

2. Define the anatomical orientation terms of the mice in **TABLE 1**.

Terms	Definition
Anterior	
Posterior	
Ventral	
Dorsal	

TABLE 1

3. Label **FIGURE 2** with the correct anatomical orientation terms as given in **TABLE 1**.

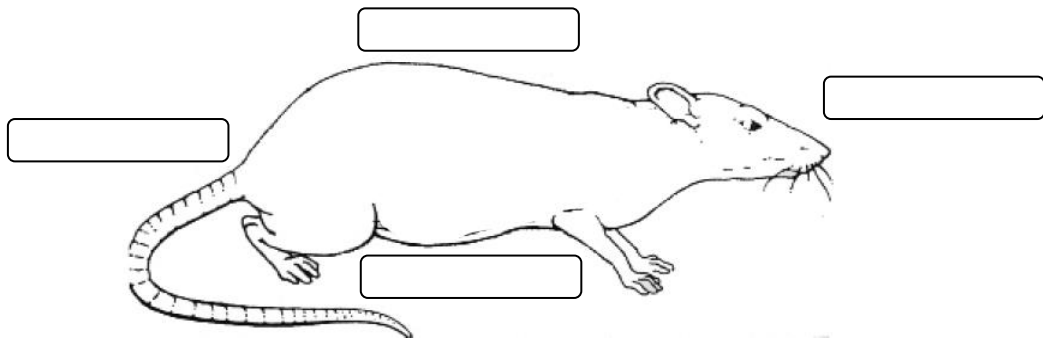


FIGURE 2

4. Identify the labelled organs in **FIGURE 3**.

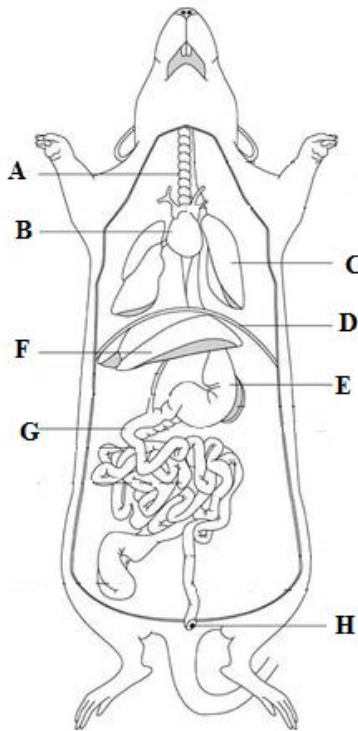


FIGURE 3

Label	Organ
A	
B	
C	
D	
E	
F	
G	
H	

5. Labelled the following structures in **FIGURE 3**.

- i. thoracic cavity
- ii. abdominal cavity
- iii. axillary region
- iv. mesentery

6. Structure D plays role during inhalation and exhalation. Briefly explain.

a. Inhalation

b. Exhalation
