

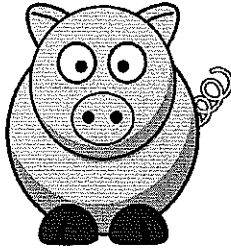
Pig Guide 1

Safety Rules (obey at all times or loose lab privilege, these are in addition to normal lab rules)

1. Wear gloves, aprons, and eye protection at all times when handling the pig.
2. Always ask questions if you are confused.
3. Wait for instructions before beginning any new step in the dissection.
4. Many dissection tools are sharp and can cut/poke you – be cautious using dissection tools and inform the teacher immediately if you get cut (even small cuts).
5. Keep long hair “up” and out of your way.
6. Maintain good ventilation at your work area – especially when first cutting into abdominal cavity.
7. Properly mount dissection specimens to the dissecting pan or tray. Do not dissect a specimen while holding it.
8. Cut away from the body and away from other students.
9. Do not use excessive force when working with sharp instruments. Use scissors instead of scalpels wherever possible.
10. Do not ingest specimen parts.
11. Do not remove any specimen or specimen part from the classroom.
12. All dissection parts remain within the dissection pan.

Procedural Rules (obey at all times or loose lab privilege)

1. Maintain a safe and clean work area at all times.
2. Do not dissect or talk when the teacher is giving instructions – all instruments should out of your hand and your attention on the teacher.
3. Do not put pig parts down the sink – they will get clogged.
4. Do not use your pig in a disrespectful manner, harass other students with your pig, or tease anyone who may be more or less sensitive during the dissection.
5. When it is time to clean up; begin immediately and follow all instructions. Nobody leaves until the entire room is clean.
6. Keep all four feet of your chair on the floor at all times.
7. Don't ask the teacher unless you have already asked the students around you first.
8. You will double bag your pig at the end of each day – use the clip and keep the bags facing upward to avoid spills.
9. FOLLOW INSTRUCTIONS!!!!



Pig Guide 2

Getting to know your pig . . . External Examination

Words to know:

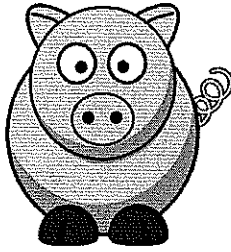
Head	Neck	Thorax
Abdomen	Thoracic Cavity	Abdominal Cavity
Mouth	Nostrils	Ears
Eyes	Nictitating Membrane	Umbilical Cord
Umbilical Arteries	Umbilical Vein	Fetus
Placenta	Urogenital Opening	Mammary Papilla
Anus	Tongue	

Anatomy to be able to identify:

Head	Neck	Thorax
Abdomen	Thoracic Cavity	Abdominal Cavity
Mouth	Nostrils	Ears
Eyes	Nictitating Membrane	Umbilical Cord
Umbilical Arteries	Umbilical Vein	Urogenital Opening
Mammary Papilla	Anus	Tongue

You should be able to:

1. Identify each of the anatomical structures listed above.
2. Know what the umbilical vein and arteries do. What system would they belong to?
3. Determine the sex of a pig (male or female) by location of the Urogenital opening.



Pig Guide 3

Getting to know your pig . . .

External Examination / Beginning Abdominal Cavity Dissection

Words to know:

Soft Palette
Esophagus
Umbilical Cord
Pharynx
Diaphragm

Hard Palette
Taste buds
Umbilical Vein
Abdominal Cavity
Closed Circulatory
System

Epiglottis
Glottis
Umbilical Arteries
Thoracic Cavity

Anatomy to be able to identify:

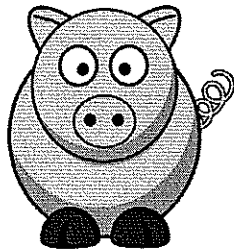
Soft Palette
Esophagus
Umbilical Cord
Pharynx
Diaphragm

Hard Palette
Taste buds
Umbilical Vein
Abdominal Cavity

Epiglottis
Glottis
Umbilical Arteries
Thoracic Cavity

You should be able to:

1. Identify each of the anatomical structures listed above.
2. Know what the purpose of the epiglottis is.
3. Both the Urogenital Opening and the Pharynx (back of throat) are utilized by two separate systems (Urogenital = reproductive and excretory; Pharynx = respiratory and digestive). Why is it useful for the body to limit the number of openings it has to the "outside world"?
4. What separates the Abdominal Cavity from the Thoracic Cavity?
5. When a doctor cuts into the abdominal or thoracic cavity to perform surgery, why does the patient lose very little blood?



Pig Guide 4

Getting to know your pig . . . Abdominal Cavity

Words to know:

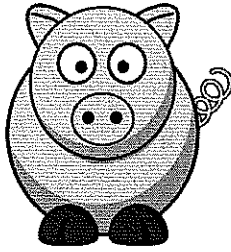
Liver	Stomach	Small Intestine
Colon (Large Intestine)	Spleen	Pancreas
Gallbladder	Greater Curvature of the Stomach	Pyloric Sphincter
Cardiac Sphincter	Urinary Bladder	Kidney
Diaphragm	Mesentery	Cecum
Abdominal Cavity	Rectum	

Anatomy to be able to identify:

Liver	Stomach	Small Intestine
Colon (Large Intestine)	Spleen	Pancreas
Gallbladder	Greater Curvature of the Stomach	Pyloric Sphincter
Cardiac Sphincter	Urinary Bladder	Kidney
Diaphragm	Mesentery	Cecum
Abdominal Cavity	Rectum	

You should be able to:

1. Identify each of the anatomical structures listed above.
2. Know the function of each of the structures listed above.
3. What advantage is there to having such a long digestive system?
4. Why does the Mesentery have so many veins and arteries? Think about its function.
5. The stomach has two sphincters (cardiac and pyloric). Why are they necessary?
6. Why might the fetal pig have such a large liver?



Pig Guide 5

Getting to know your pig . . .

Excretory & Reproductive Systems

Words to know:

Kidney

Ureter

Urinary Bladder

Ovary

Testes

urine

Anatomy to be able to identify:

Kidney

Ureter

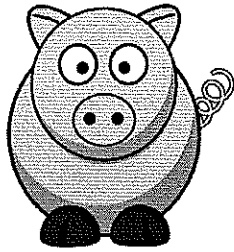
Urinary Bladder

Ovary

Testes

You should be able to:

1. Identify each of the anatomical structures listed above.
2. Know the function of each of the anatomical structures listed above.
3. What two systems do the kidneys connect?
4. Why does urine become dark yellow and have a strong odor during times when the body is dehydrated? Why doesn't the body stop producing urine when it is dehydrated?



Pig Guide 6

Getting to know your pig . . . Thoracic Cavity

Words to know:

Lungs

Esophagus

Left and Right Atrium

Systemic Circulation

Heart

Trachea

Left and Right

Ventricular

Pulmonary Circulation

Pericardial Sac

Larynx

Closed circulatory
system

Anatomy to be able to identify:

Lungs

Esophagus

Left and Right Atrium

Heart

Trachea

Left and Right

Ventricular

Pericardial Sac

Larynx

Closed circulatory
system

You should be able to:

1. Identify each of the anatomical structures listed above.
2. Know what the purpose of the epiglottis is.
3. Why do you think the trachea has cartilaginous rings (like a vacuum cleaner hose)?
4. What does it mean that the human circulatory system has two circuits?
5. Where does blood travel to in the Pulmonary Circuit? Where does blood travel to in the Systemic Circuit?
6. How do the circulatory and respiratory systems work together to keep our cells oxygenated?