Review sheet for labs 1-3

Lab 1: Digestion:

1. Describe the chemical process of starch digestion.
2. Explain how iodine and Benedict's reagent indicate whether starch digestion has occurred.
3. State how the digestion of starch is affected by the following:
a. presence of amylase
b. temperature
c. time

Key Terms You Should Know:

- ✓ Digestion
- ✓ Hydrolysis
- ✓ Starch
- ✓ Maltose

amylase
IKI (iodine) test
Benedict's reagent test

. Name three conditions that must be met for starch digestion to occur.

1. State characteristics shared by all mammals.
2. Determine whether a pig is male or female.
3. Identify the following structures and state their function(s):
Umbilical chord
Nipples/mammary glands
Urogenital openings (on both male and female)
Oral cavity structures:
Teeth
Tongue
Hard palate
Soft palate
Pharynx structures:
Epiglottis
Glottis
Esophagus
trachea

Lab 2: Digestion and Respiration

Know the body structures/what they do and where they are located on the fetal pig.

Neck Region:
thymus gland
thyroid gland
larynx
trachea
esophagus
thoracic Cavity:
right and left pleural cavities
right and left lungs
pericardial cavity
heart
Thoracic/Abdominal Division:
diaphragm

Abdominal Cavity:
umbilical chord
peritoneum
mesenteries
liver
stomach
spleen
small intestine (locate duodenum)
pancreas
large intestines
cecum
colon

Know how to trace a morsel of food from the mouth to the anus and know how to trace the inhalation of air from the nasal passages to the lungs.

Lab 3: The Heart

- ✓ Trace the flow of blood through the human heart
- ✓ Identify all the chambers, major vessels, and valves of a calf heart
- ✓ Identify the differences and similarities between a fetal heart and an adult heart

❖ **Key Terms**

- ♥ **Aorta**
- ♥ **Right and left ventricles**
- ♥ **Right and left atria**
- ♥ **Superior and inferior vena cava**
- ♥ **Pulmonary trunk**
- ♥ **Pulmonary veins and arteries**
- ♥ **Semilunar valves**
- ♥ **Right and left atrioventricular valves**
- ♥ **Cardiac veins and coronary arteries**
- ♥ **Arterial duct**
- ♥ **Umbilical vein/umbilical arteries/placenta**

Key Terms:

- ♥ **Systole (systolic)**
- ♥ **Diastole (diastolic)**

- ♥ Trace the path of electrical signals that causes the contractions of the heart.
- ♥ Describe what causes the "P", "QRS", and "T" waves in an electrocardiogram.
- ♥ Draw a "normal" ECG and label all of its components.

Key Terms:

- ♥ **Electrocardiogram**
- ♥ **P wave, QRS wave and T wave**
- ♥ **Depolarization and repolarization**
- ♥ **SA (pacemaker) and AV node**

Understand the different terms associated with heart rate/blood pressure/ECG. Make sure you visit the BIO111 website to view the different heart pictures and go to the website I have included on the BIO111 website as a link.