

Anatomy & Physiology 2 Lab, Final Quiz

Questions are short answer or identification; some may require calculations

Please submit your answers, showing calculations, in an e-mail to

c.moxey@neu.edu

Be sure to include your full name and last four digits of your id-number

[Blood Pressure](#) | [Electrocardiogram](#) | [Thoracic Anatomy](#) | [Endocrine Gland Identification](#) | [Sheep Heart Anatomy](#) | [Respiratory System Physiology](#)

Blood Pressure

1. Define pulse pressure.
2. Given a blood pressure of 115/73, what is the mean arterial pressure?
3. Assuming a stroke volume output of 65 ml at rest that increases by 22% after exercise, and a heart rate of 72 at rest and 140 following exercise, calculate the cardiac output standing at rest *and* immediately after exercise.
4. The specific gravity of mercury 13.6 times that of water. If your blood pressure were 115/75 mm Hg, what would that be in cm H₂O?

[Go to top](#)

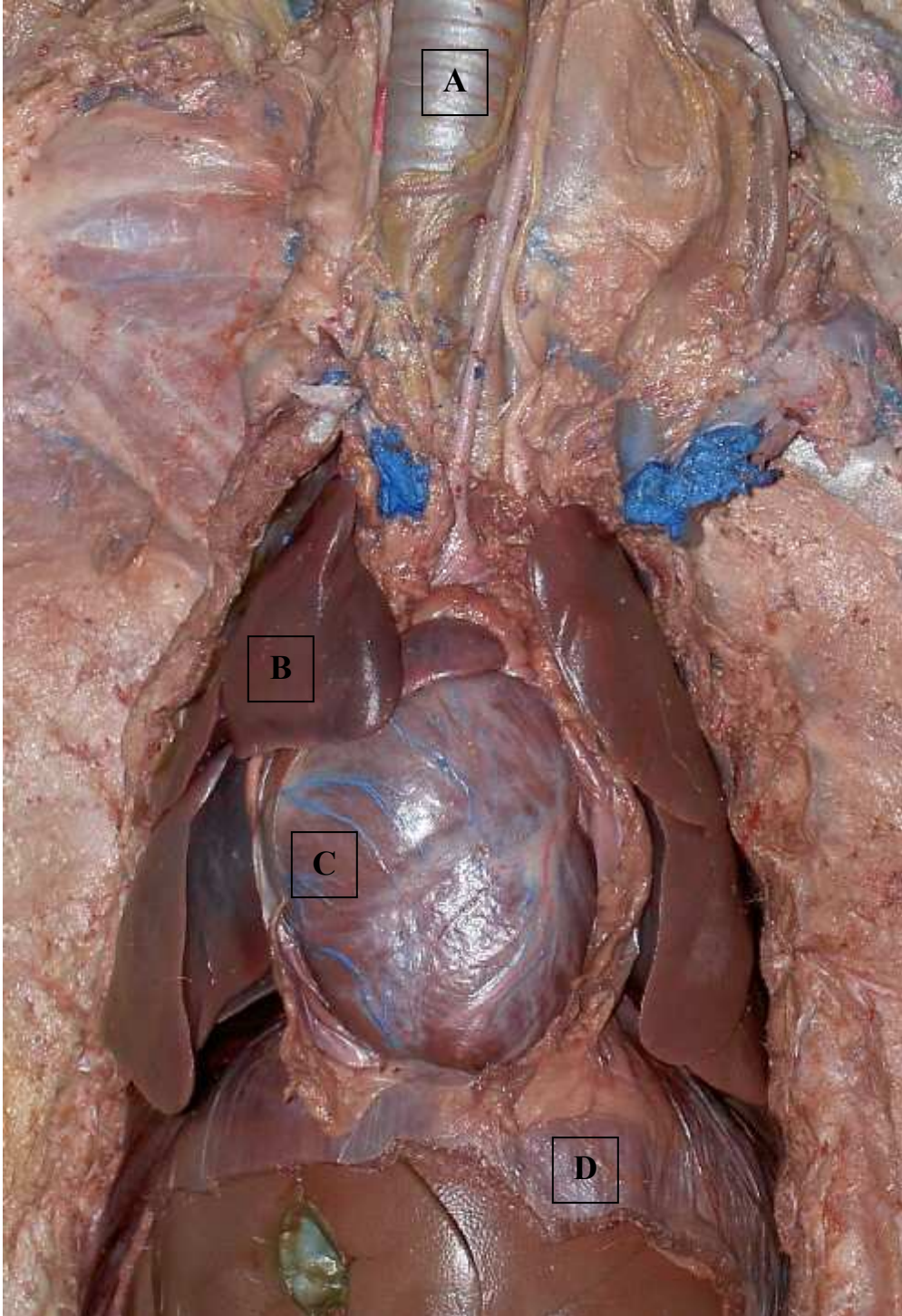
Electrocardiogram

5. When the electrode leads are placed on the subject, where is the ground electrode supposed to be placed?
6. You can calculate your heart rate in two ways. First, you could simply count the number of pulses for a given time period and adjust that to the number of pulses per minute. Or, you could measure the cycle time of the cardiac cycle. What is the cycle time if the heart rate is 84 beats/min?
7. What does the P-wave of the ECG represent?

[Go to top](#)

Thoracic Anatomy

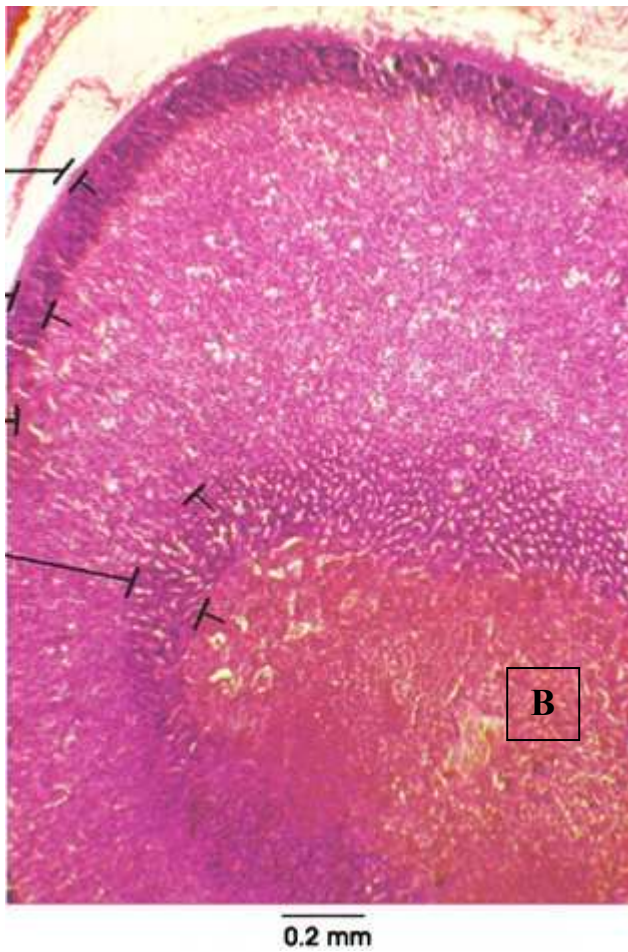
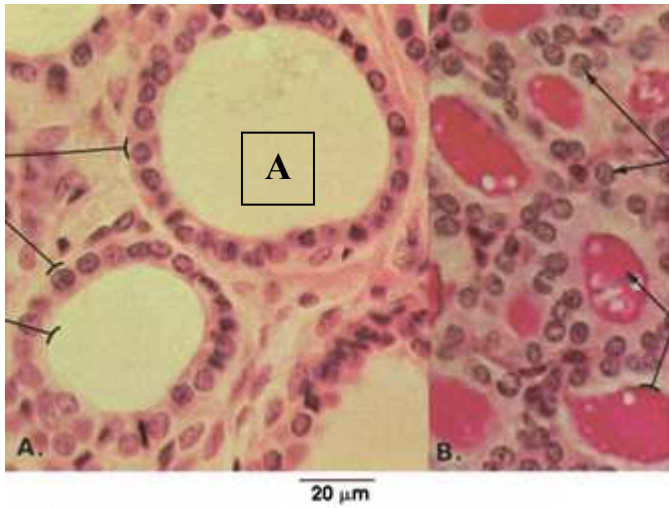
8. Identify the following structures in this dissection of the canine thorax: diaphragm, heart, lung, trachea



[Go to top](#)

Endocrine Histology Identification

9. Using the list that follows, identify the endocrine organs: pituitary, thyroid, pancreas, adrenal

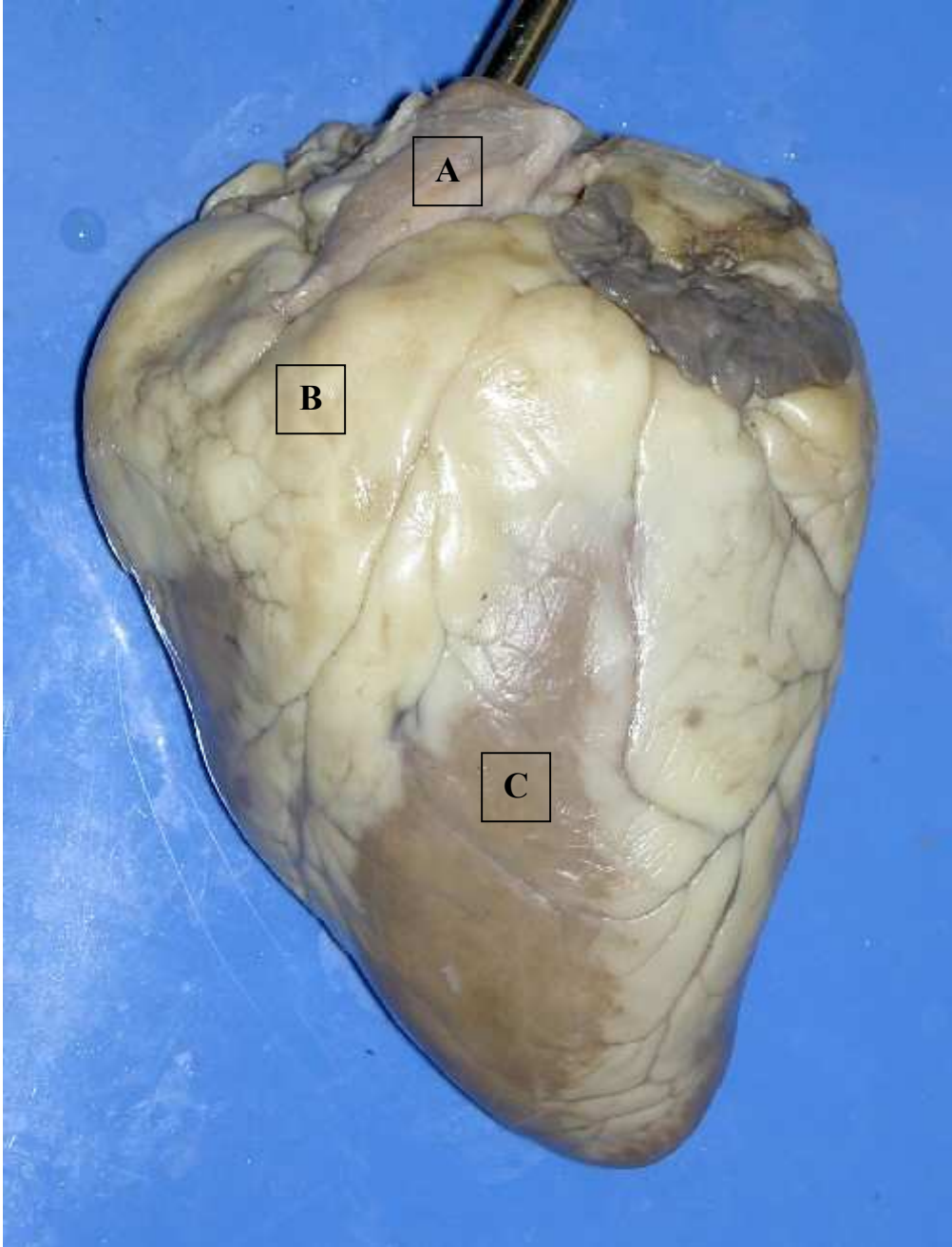


These images are borrowed from the Bergman, et al., *Atlas of Microscopic Anatomy*
[Go to top](#)

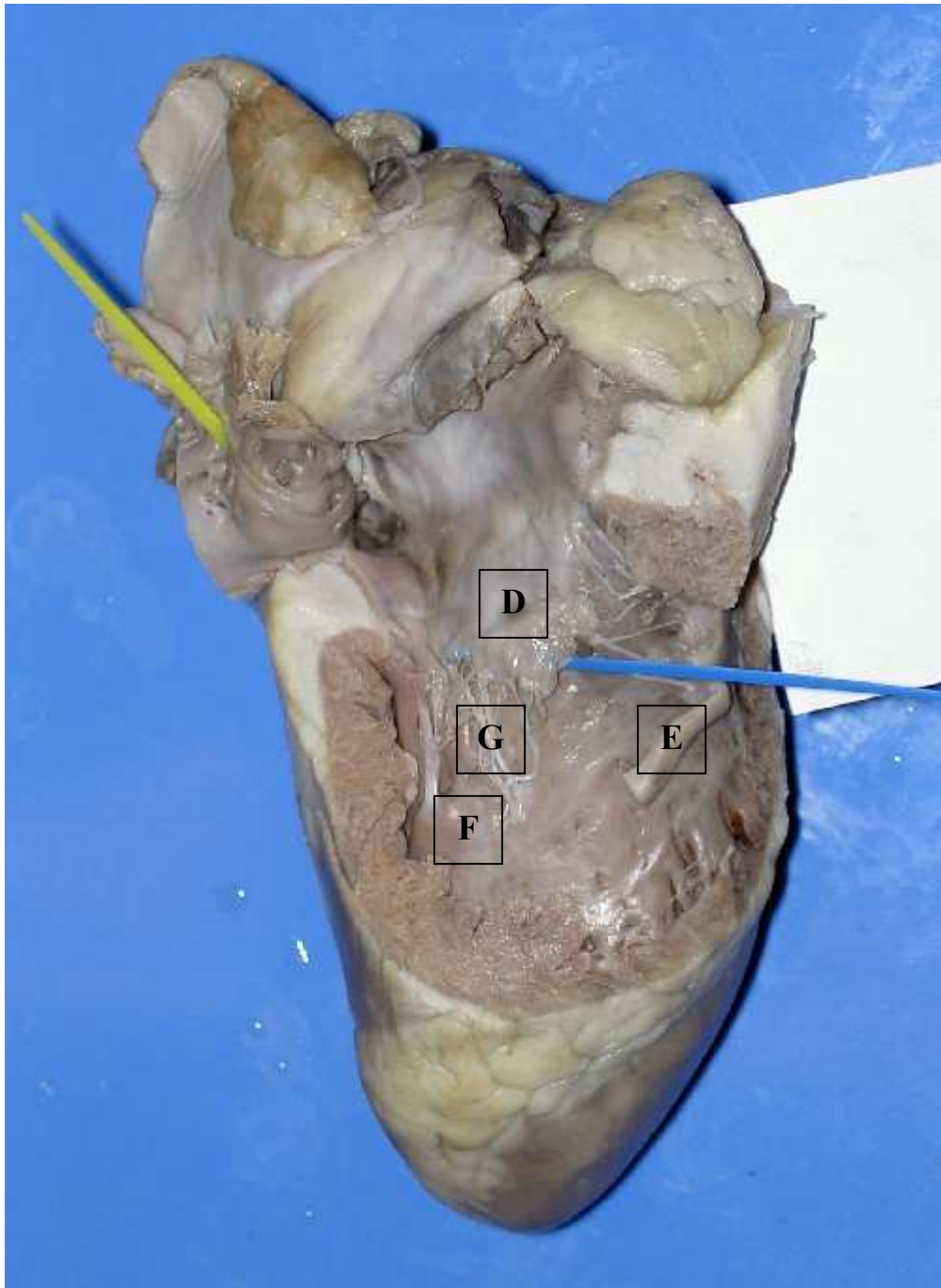
Sheep Heart Anatomy

10 Identify the labelled structures:

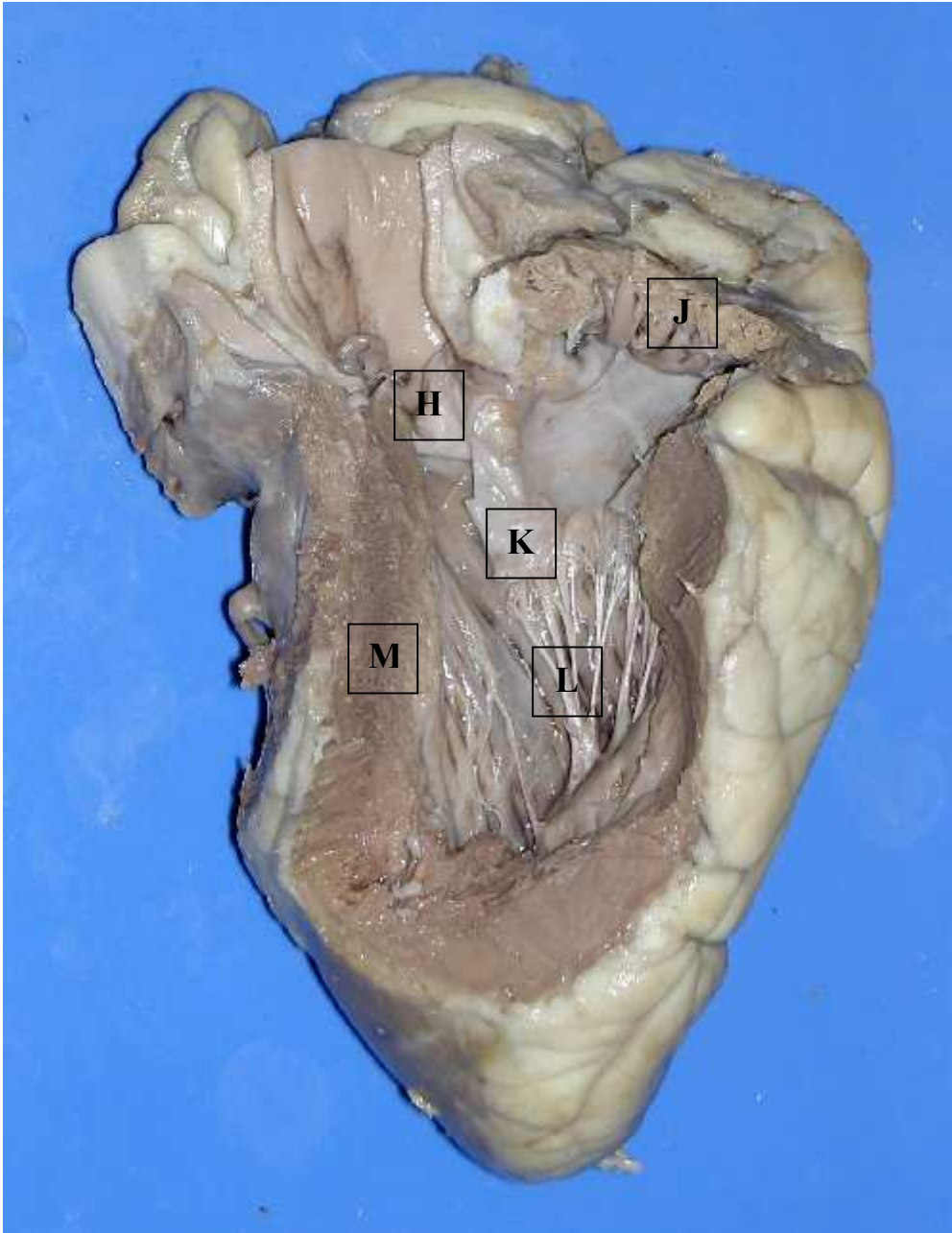
External view, front of heart: L ventricle, pulmonary trunk, R ventricle



Dissection of R atrium and ventricle: chordae tendineae, moderator band, papillary muscle, tricuspid valve



Dissection of L atrium and ventricle: aortic semilunar valves, chordae tendineae, mitral valve, pectinate muscles, ventricular myocardium



[Go to top](#)

Respiratory System Physiology

11. In the spirometry measurements, which should have been greater, inspiratory reserve volume or expiratory reserve volume? If your results did not match your expectations (the null hypothesis), explain why.
12. In the breath-holding experiment, hyperventilation should result in a prolongation of holding one's breath. Why?

[Go to top](#)

[[Anatomy & Physiology 2 laboratory syllabus](#)]

[Page created 2009-07-28]

[Questions? [E-mail me](#)]

[http://www.profelis.org/neu/ap2/bio4166_2009_sommer_quiz_2.pdf]