

Lab 12 – 5/12/14

Learning Objectives

By the end of this lab you should understand:

- The process of blood filtration and urine formation
- The physiological basis of urine analysis
- The primary reproductive organs of the male and female systems

Key facts:

- The nephron filters blood fluid into filtrate, then processes it for it to become urine which is excreted
- The gonads produce both sex hormones and gametes (sperm and eggs)

Key skills:

- Identify the parts and functions of the nephron
- Predict the flow of water and ions through osmosis during nephron action
- Identify major parts of the male and female reproductive systems by sight

Lab Procedure:

- Exercise #18: The Urinary System
 - Activity 2: Structure of the Nephron
 - Activity 3: Urine Analysis (Using fake urine)
- Exercise #19: The Reproductive System
 - Activities 2 and 3: Reproductive Anatomies

Sample lab exam questions:

- True/False: Reabsorbing glucose from filtrate requires active transport
- Which of these parts of the nephron is the loop of Henle?
- Where in the nephron does filtration occur?
- What is one possible cause of glucose in urine?
- Which of these parts of the model is the ovaries?