Overview of Nephron

To complete this worksheet, select:

Module: Balancing Fluids
Activity: Anatomy Overviews
Title: Overview of Nephron

1. What is a nephron?

2. From the main Nephron page, click on the Functional Anatomy of a Nephron.
   a. Identify each of the following:
      renal corpuscle  renal tubule and collecting duct
      afferent arteriole  efferent arteriole
      peritubular capillaries  region of tubular reabsorption
      region of tubular secretion

   b. Identify the two parts of a nephron.

   c. Where is blood “filtered?”

   d. How/where is the filtrate altered?

   e. In the diagram above, show:
      i. filtration direction
      ii. tubular reabsorption
      iii. tubular secretion
3. a. Return to the main Nephron page and click on *Types of Nephrons*. Identify each of the following:

b. What is the most common nephron type? 

c. What is the function of juxtamedullary nephrons? 

4. Return, again, to the main Nephron page. Click on *Fluid Flow Through a Nephron*.

a. Sequence the following in order of fluid flow through a juxtamedullary nephron.

i. Thick ascending limb of the loop of Henle  
ii. Descending limb of the loop of Henle  
iii. Thin ascending limb of the loop of Henle  
iv. glomerular (Bowman's) capsule  
v. Distal convoluted tubule  
vi. Proximal convoluted tubule  

b. Using arrows, show this fluid movement in the larger juxtamedullary nephron diagram above.

c. Why is fluid flow through a nephron highly regulated? 

d. Describe a *glomerulus*. 

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