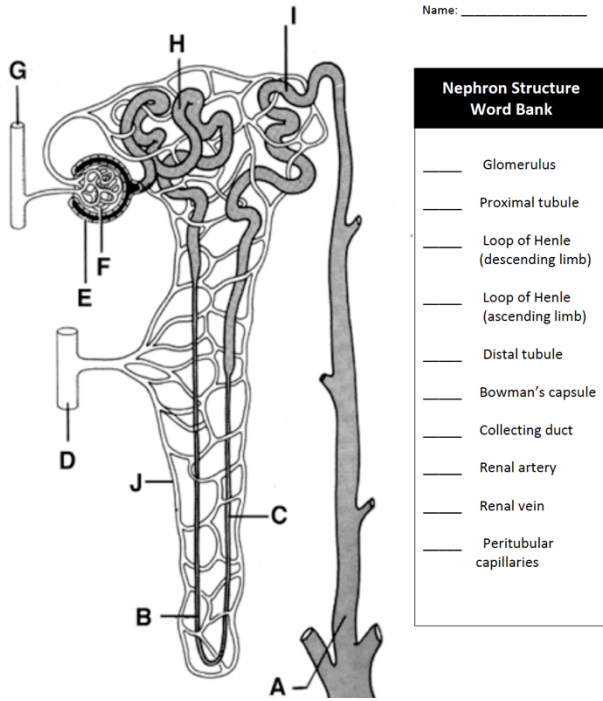


Instructions: Complete the chart using the reading on nephron function and the animation shown in class.
(<http://www.sumanasinc.com/webcontent/animations/content/kidney.html>)

Specific functions of each part of the kidney

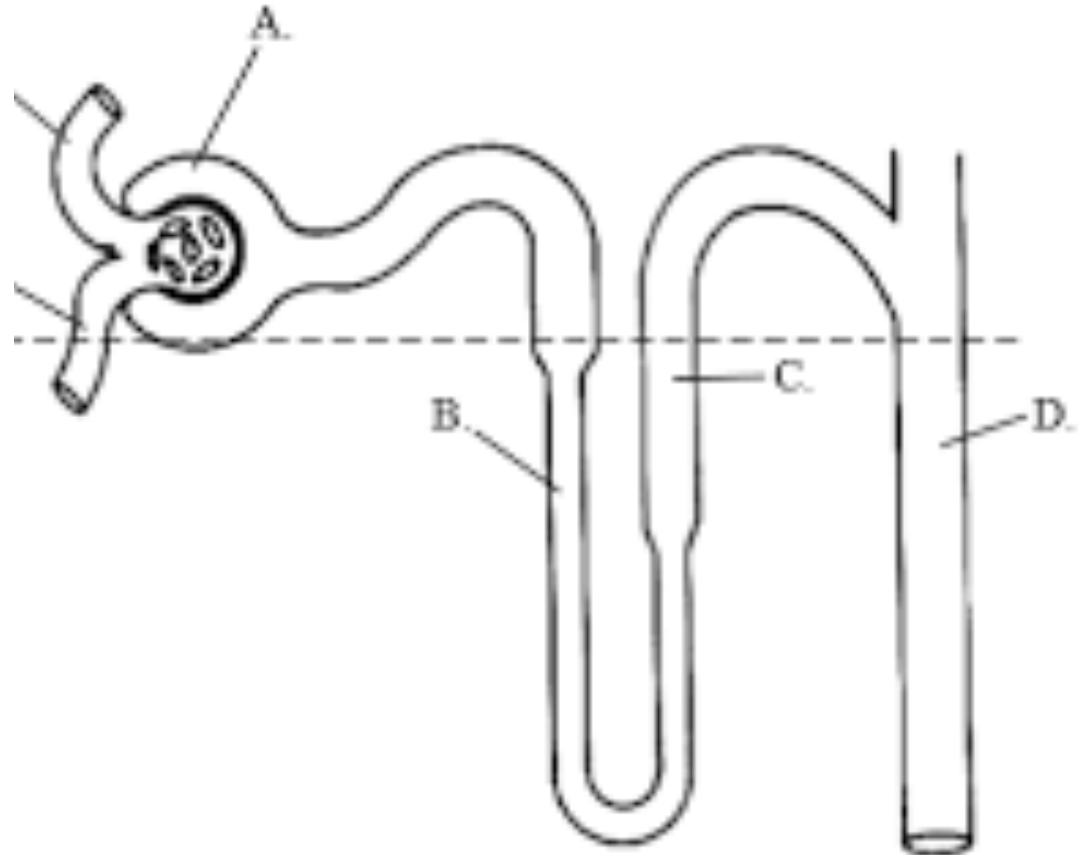
Region in nephron	What happens to the filtrate in each region of the nephron?
Bowman's capsule and glomerulus (cortex)	
Proximal tubule (cortex)	
Loop of Henle (medulla)	Primary function: Differences between ascending and descending loop:
	Ascending loop (thick): Ascending loop (thin):
	Descending loop:
Distal tubule and collecting duct (spans cortex and medulla)	

1. Label the section of the nephron.



2. Indicate what & where the following substances are moving into & out of the nephron and whether it is active or passive..

- Nutrients, wastes, water, H₂O



2. Make a T-chart to identify how the blood plasma and filtrate are alike and different (e.g., contents, location, colour)
3. How does the movement of substances in the ascending limb of the loop of Henle affect the movement of substances in each of these areas:
 - a. The descending limb
 - b. The distal tubule
 - c. The collecting duct
4. What is the difference between reabsorption and secretion? Where does each occur in the nephron?
5. What areas of kidney tissue surrounding the nephron would you expect to find an area of high concentration of mitochondria? Explain.