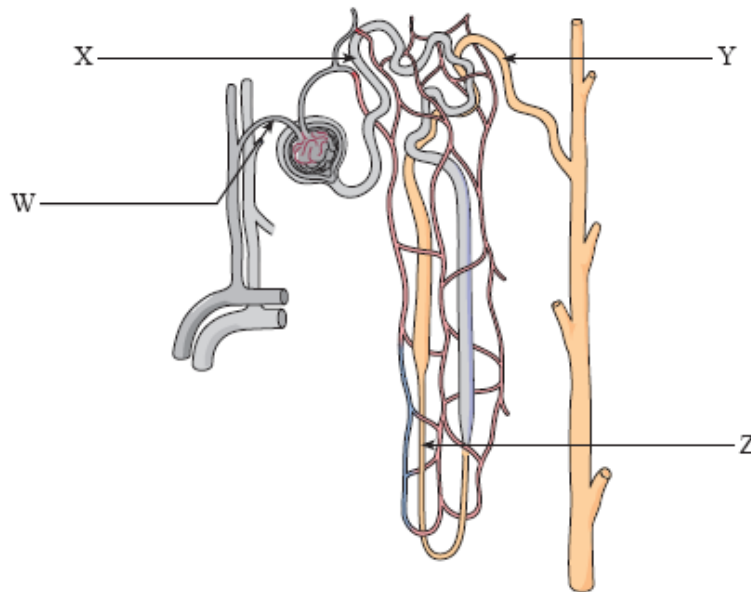


## Review Game – Urinary System

1. What is the body's response when there is an increase in the pH of the blood?  
Specifically, what is reabsorbed and excreted from the blood?
2. A patient was found to have low blood pressure. Indicate what the body does to increase blood pressure. Discuss both regulatory hormones.
3. What part of the nephron requires adequate blood pressure? Why is it so important for this part to have adequate blood pressure?
4. Explain tubular secretion. Where does it occur? What is it? What does it help form?
5. List the path of urine flow starting with Bowman's capsule.
6. Describe how each of the following will affect the composition of blood.
  - a. Aldosterone
  - b. Antidiuretic hormone

7. Use the following diagram to answer the question. Identify each structure (W, X, Y, & Z) and give a **different** function of each structure.



8. Describe the process that occurs at each of the following structures:
- Bowman's capsule
  - Collecting duct
  - Glomerulus
9. What is the function of the peritubular capillary network in the excretory system?
10. What is the function of bicarbonate ions in the excretory system?
11. List the structures, in the correct order, through which a glucose molecule passes as it travels through the tubule from the renal artery to the renal vein.
12. What is the purpose of the adrenal glands located on top of the kidneys?

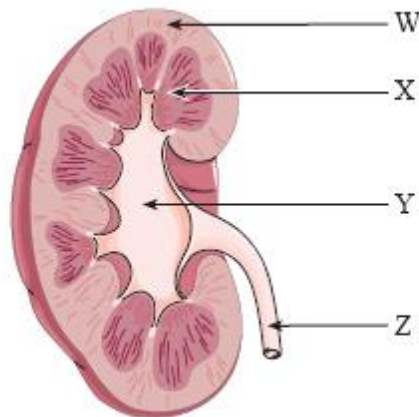
13. Plasma from a student was analyzed before and after a 10 km cross-country run. During the run, the student became dehydrated. Explain how the resulting lowered blood volume is detected by the body and describe how it is returned to normal.

14. Give two functions of each of the following urinary system structures.

- a. Kidney
- b. Proximal convoluted tubule

15. If the blood was found to have a pH of 7.2, what would be the body's response to make sure pH was brought back to the normal level?

16. Label all the parts of the following structure. What is the purpose of each structure?



17. What is selective reabsorption? Where does it occur in the nephron? Why is it important for this part to have many mitochondria in the cells and microvilli (microvilli increase surface area)? *Hints: think about what is happening in this part; mitochondria provide energy to the cell*