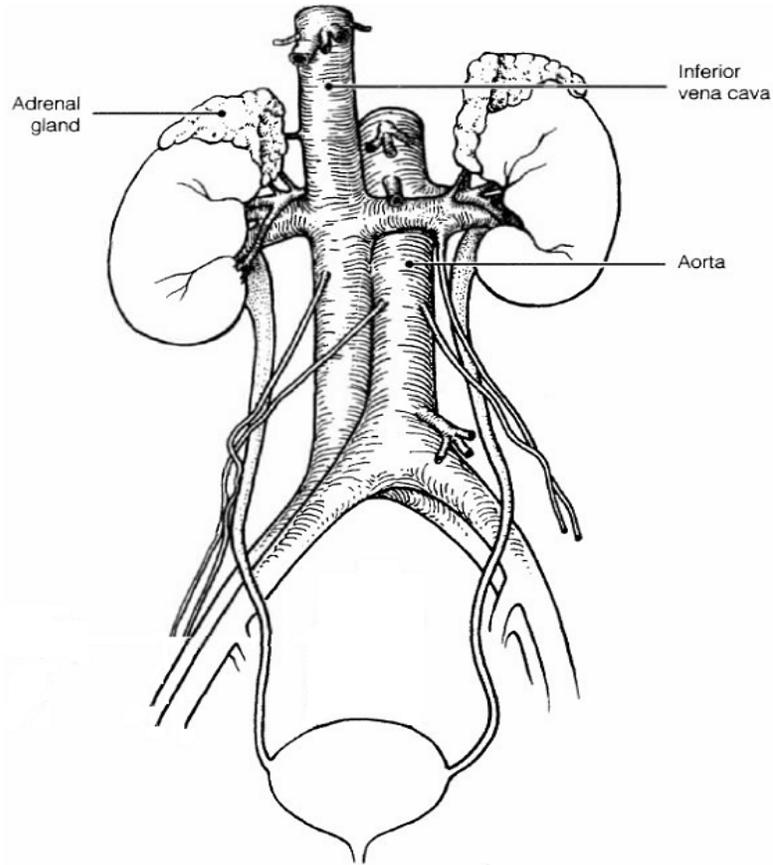


**Section 16.1 and 16.2- The Urinary System
Regular Anatomy**

Using different colors and the list below, color and label the different organs of the urinary system



- Kidney Ureter Urethra Urinary bladder

1. Color blue and label the renal vein. Color blue the inferior vena cava.
2. Color red and label the renal artery. Color red the descending aorta.
3. List the 4 functions of the urinary system.

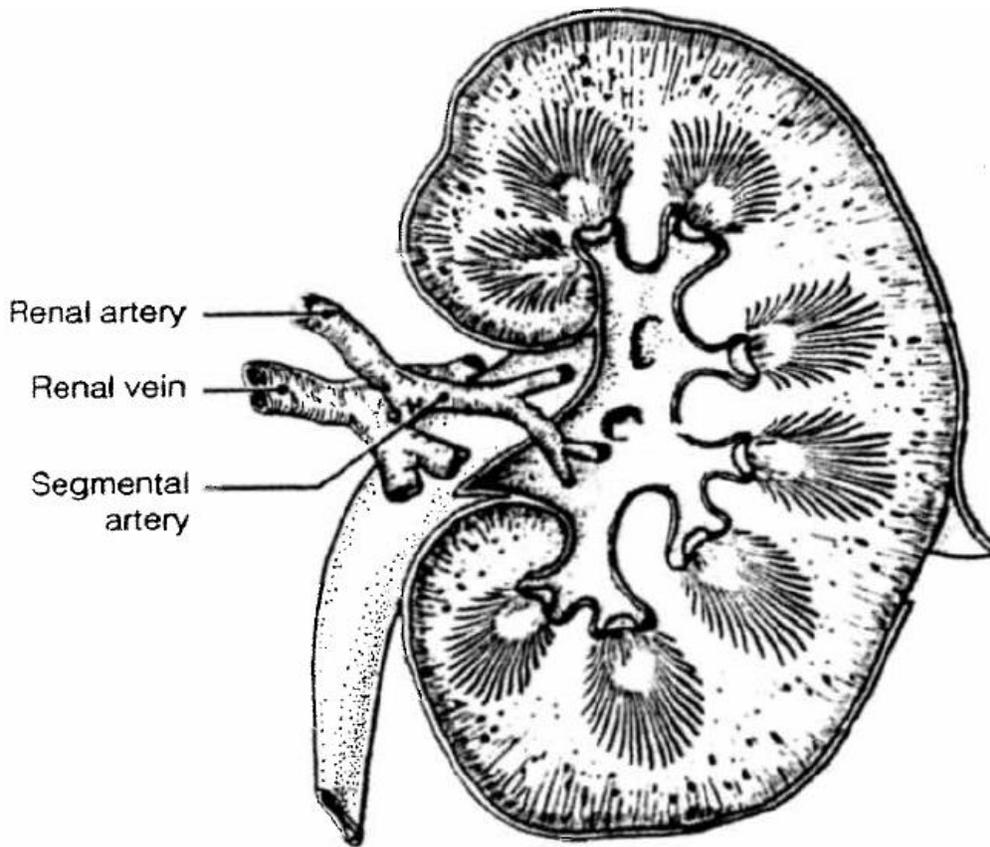
4. The primary nitrogenous waste, which is the by-product of amino acid metabolism, that is excreted by humans is called _____.
5. Because the kidneys regulate salts in the blood, which affects blood volume, the kidneys are involved with regulating _____.
6. In order to monitor the pH level of blood, the kidneys reabsorb and excrete _____, which affects acidity, and _____, which affects basicity.
7. The kidneys secrete renin and erythropoietin which are _____, which are chemical messengers that are transmitted in the blood or other body fluids.

Complete the paragraph about excretion by the urinary system.

The primary organs of the urinary system are the 1 , whose function is to produce 2 . The elimination of metabolic wastes is known as 3 . The nitrogenous waste produced by the kidneys is transported through the 4 to the 5 where it is stored. When the urinary bladder becomes full, 6 send sensory impulses to the spinal cord. The spinal cord then sends back motor impulses which cause the bladder to 7 and the 8 to relax. Urine is squeezed out of the bladder and through the 9 before being expelled externally from the body. The process of excreting metabolic waste from the body is known as 10 or urination.

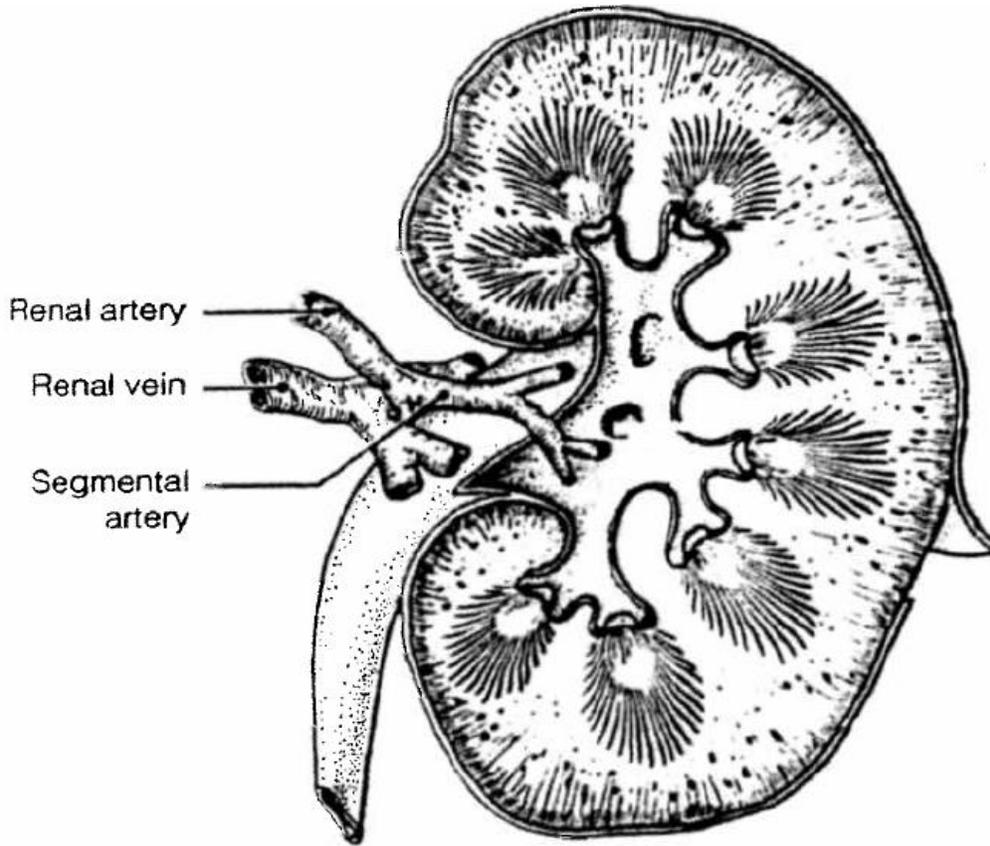
1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Using different colors and the list below, color and label the different parts of the kidney.



- | | | | |
|-------------------------------------|-------------------------------------|------------------------------------|------------------------------|
| <input type="radio"/> Hilum | <input type="radio"/> Renal cortex | <input type="radio"/> Renal artery | <input type="radio"/> Ureter |
| <input type="radio"/> Renal capsule | <input type="radio"/> Renal medulla | <input type="radio"/> Renal vein | |

Using different colors and the list below, color and label the different internal parts of the kidney.



Major calyx
 Minor calyx

Renal papilla
 Renal pelvis

Renal pyramids
 Renal columns

Ureter

1. Using the list above, create a flow map illustrating the pathway of urine through the kidney.
(You will not be using renal columns)