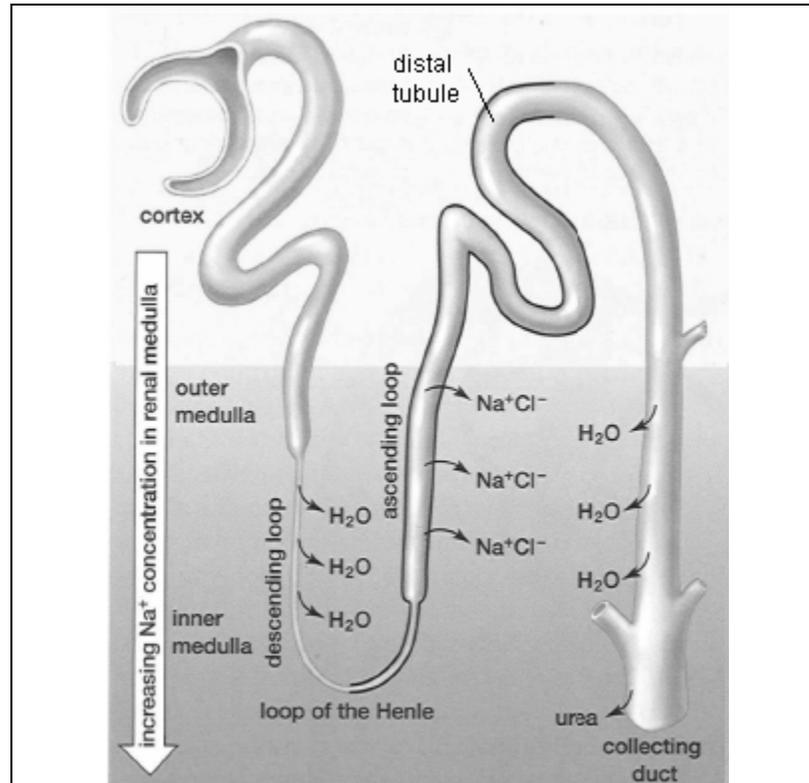


Function of the Nephron Loop and the Distal Tubule

Use the following diagram, which shows a nephron lying within the cortex and the medulla, and your textbook or other resource to answer the questions below.



1. Why are the two parts of the nephron loop called “descending” and “ascending”?

2. Explain the process of reabsorption from the descending loop.

Function of the Nephron Loop and the Distal Tubule

3. Where is the highest concentration of Na^+ found?

4. Explain the process of reabsorption from the ascending loop.

5. Explain how reabsorption of ions and water occurs from the distal tubule.

Use this additional information to answer the next question.

Excess ions and other substances are added to the filtrate from the surrounding capillaries in a process called tubular secretion. This has been called “reabsorption in reverse.”

6. List three examples of substances that are actively secreted into the filtrate. How is blood pH maintained by tubular secretion?
