

Anatomy of a human kidney answer sheet

1. The ureter connects the kidney with what body organ? Urinary bladder
2. What two important processes occur in the renal cortex and renal medulla?
Filtration of blood and formation of urine
- 3.3. List the structures of the kidney through which urea is filtered and then excreted from the body.
renal artery capillaries of the glomerulus Bowman's capsule proximal tubule loop of Henle distal tubule collecting duct renal pelvis (in ureters) bladder urethra
4. What is the significance of the capillaries surrounding the loop of Henle?
 - glucose, amino acids and sodium that were filtered from the capsule are actively transported into the capillaries.
 - Water that was filtered from the blood diffuses back into the capillaries of these capillaries
5. Explain what happens when you drink excess water. Use appropriate biological terms
 - cells of the distal tubule and collecting duct become impermeable to water, therefore not as much water moves back into the capillaries
 - water moves out of the body as a high volume of urine is produced
6. What materials move from the glomerulus into the Bowman's capsule?
 - water, ions, sugar, amino acids and small molecules