

BIO 30S Excretion and Waste Management

Name: _____

Date: _____

1. What are the 3 process of kidney filtration?
2. Describe the 3 processes of kidney filtration
3. How come red blood cells and plasma proteins cannot be filtrated in the renal medulla?
4. What is the process called when water is transported across the capillaries in the kidney?
5. Draw a flow chart of the entire kidney filtration process starting from the (afferent arterioles) to the renal pelvis (4)

6. Amino acid breakdown in the liver releases?
7. Urea is a by-product of _____ metabolism
8. What are the complications when the prostate gland in males is enlarged?
9. Why does your urine have a strong yellowish colour in the morning compared to during the day?
10. If I had a salad and James had a steak for lunch, what kind of urine (waste content, colour, waste products) would you expect in my and James' urine? Explain
11. What is a nephron? Draw a simple nephron and include the following parts: Bowman's Capsule, Glomerulus, Loop of Henle, Afferent arteriole, efferent arteriole, collecting duct.

12. Where do the reabsorption and secretion stages of kidney filtration occur in the kidney? Renal cortex, renal medulla, renal pelvis?

13. List the substances that are *completely* reabsorbed back into the blood.

14. List the substances that are almost completely reabsorbed back into the blood.

15. How does aldosterone maintain a balance in blood pressure?