Name _____ **Period** _____

Ms. Foglia **Date** _____

AP: CHAPTER 44: REGULATION THE INTERNAL ENVIRONMENT

1. Define homeostasis.

_____

_____

THERMOREGULATION

2. How do regulators moderate internal conditions?

_____

_____

3. How do conformers adapt to changing conditions?

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_____

4. List four processes that account for heat exchange.

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5. How does circulation aid in heat exchange?

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6. How does countercurrent heat exchanger conserve heat?

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7. List some examples of how an ectotherm maintains higher than expected body temperature.

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8. Draw a diagram and describe how the feedback mechanism that regulates your temperature works.

OSMOREGULATION

9. How do seagulls deal with the high salt in their diet?

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_____

10. Describe the influence of habitat on the type of nitrogen waste produced by animals.

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_____

_____

_____

11. Define each of the key functions of the excretory process.

    a. Filtration _____

    b. Reabsorption _____

    c. Secretion _____

    d. Excretion _____

12. What is the relationship between the kidney and circulatory system?

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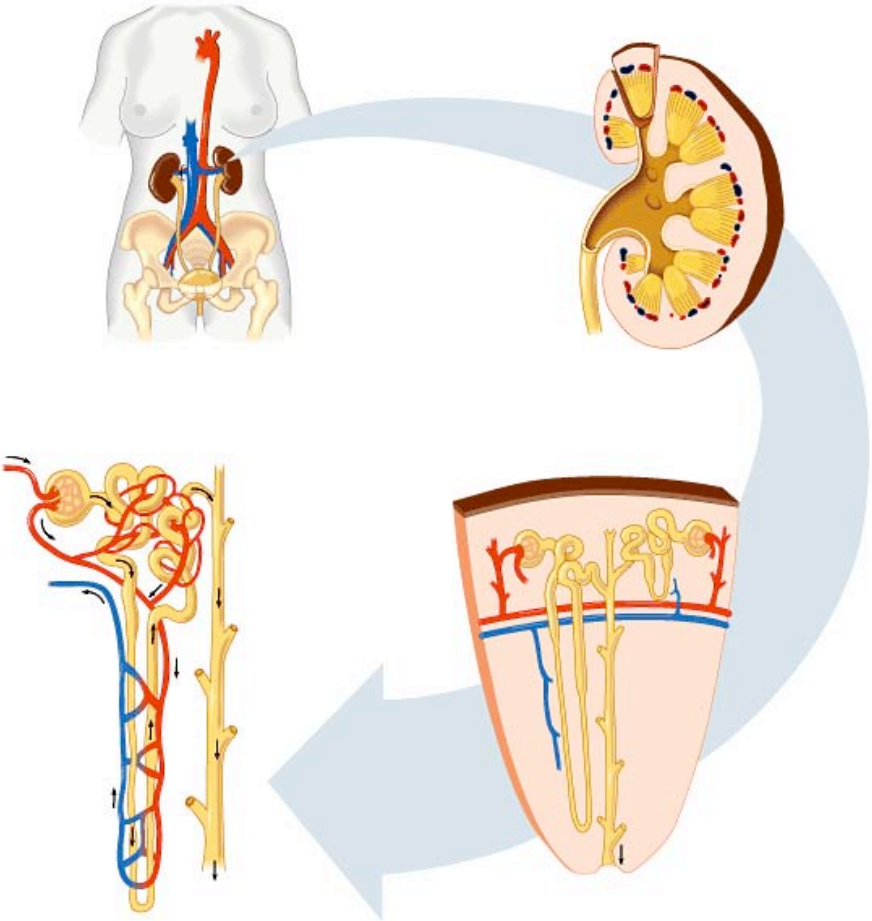
_____

_____

13. Label the diagram of the human urinary system.



14. Describe the three feedback mechanisms that regulate the kidney?

a. ADH _____

_____

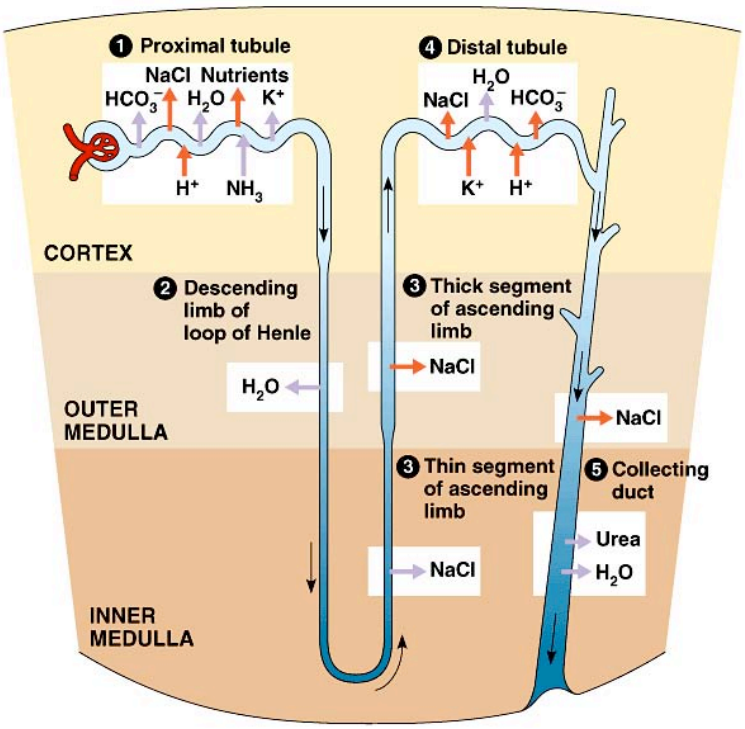
b. RAAS _____

_____

c. NAF _____

_____

15. Using the diagram of the nephron, note the major exchanges that occur along the various sections. Indicate the osmolarity (salt conditions) in each region.



16. What happens to the filtrate concentration of water as it descends the tubules?

_____

_____

17. What happens to the filtrate concentration of NaCl as it ascends the tubules?

_____

_____

18. List other organs that aid in excretion.

_____

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