1. What are ways that water is taken in or created in the body? What are ways that water is released from the body?

2. Describe the two disorders related to sodium imbalance?

3. Describe the two disorders related to potassium imbalance?
4. Explain how a buffer works to maintain pH in a body fluid. Give one example of a buffer system.

5. Compare acidosis to alkalosis. What are some of the causes and symptoms of each?

6. Draw a side-by-side picture of the male and female reproductive systems. Label the four main parts of each.
7. Draw a diagram of hormonal feedback in the male reproductive system.

8. Draw a diagram of the hormonal interactions of the female reproductive system. Be sure to include the function of the hormones and when they occur in the monthly cycle.
9. Compare events in copulation in males and females. How are they similar and different?

10. Describe some of the common methods of birth control.

11. Explain how a fertilized egg prevents other sperm from entering?
12. What are the functions of the placenta? How does it prevent blood exchange between mother and fetus?

13. Describe the events in child birth. What are the roles of hormones in the process?

**Multiple Choice**

1. Where is most of the water in our body?
   a. In blood plasma
   b. In the digestive system
   c. In extracellular fluids
   d. Inside cells
   e. On the surface of the skin

2. Low sodium concentration in the body can result in what disorder?
   a. Hypokalemia
   b. Hyperkalemia
   c. Hyponatremia
   d. Hypernatremia

3. What bodily function produces carbonic acid?
   a. Fermentation
   b. Lipid breakdown
   c. Protein breakdown
   d. Nucleic acid breakdown
   e. Respiration
4. Choking can lead to what condition?
   a. Metabolic acidosis
   b. Metabolic alkalosis
   c. Respiratory acidosis
   d. Respiratory alkalosis

5. What part of sperm contains large amounts of mitochondria?
   a. Head
   b. Flagellum
   c. Midpiece
   d. Nucleus
   e. Tail

6. Spermatogenesis from one cell produces how many sperm?
   a. 1
   b. 2
   c. 4
   d. 8
   e. 16

7. What gland produces lubrication for intercourse in males?
   a. Bulbourethral
   b. Hypothalamus
   c. Prostate
   d. Seminal vesicles
   e. Testis

8. What part of the female reproductive system does fertilization usually occur?
   a. Ovary
   b. Urethra
   c. Uterine tube
   d. Uterus
   e. Vagina

9. What hormone is only produced in pregnant females?
   a. Estrogen
   b. FSH
   c. hCG
   d. LH
   e. Progesterone

10. What is true about the cardiovascular system of a fetus?
    a. Blood goes through the pulmonary circuit
    b. Blood passes through the right atrium to the left atrium of the heart
    c. Fetal hemoglobin has low affinity for oxygen
    d. Lungs are functional
    e. The umbilical cord is attached to the fetal heart