1. Draw the complete digestive tract and label all parts and the three accessory organs.

2. What are the differences between macronutrients and micronutrients?

3. Use the Body Mass Index formula to calculate the BMI of the following people. Also state whether they are underweight, normal, overweight, or obese.

   5’6” and 145 lbs
   6’5” and 279 lbs
   6’1” and 123 lbs
   4’11” and 134 lbs
   5’3” and 210 lbs
4. Draw the respiratory tract and label the major components.

5. Explain the differences among Tidal Volume, Vital Capacity, and Total Lung Capacity.

6. Explain the differences between gas exchange of oxygen versus carbon dioxide.
7. Draw the structure of a nephron and label the five major parts.

8. Explain or draw out how urine is formed in a nephron.
9. What are the major steps in micturition?

**Multiple Choice**

1. What is the innermost part of a tooth?
   - a. Bone
   - b. Dentin
   - c. Enamel
   - d. Pulp
   - e. Saliva

2. Wavelike muscular contractions that help food move through the digestive system are called:
   - a. Diastole
   - b. Defibrillation
   - c. Peristalsis
   - d. Systole
   - e. Vasodilation

3. What organ stores and releases bile?
   - a. Gall bladder
   - b. Liver
   - c. Pancreas
   - d. Pharynx
   - e. Small intestine

4. Vocal cords are found in what part of the respiratory tract?
   - a. Bronchus
   - b. Larynx
   - c. Nasal cavity
   - d. Pharynx
   - e. Trachea
5. This structure seals the lung and allows air to enter the lung when pulled.
   a. Alveoli
   b. Diaphragm
   c. Pectoral muscles
   d. Pleural membrane
   e. Sternal muscles

6. What molecule can cause asphyxiation because it binds strongly to hemoglobin?
   a. Arsenic
   b. Bicarbonate
   c. Bleach
   d. Carbon monoxide
   e. Hydrochloric acid

7. What is the most common place in the nephron to have a kidney stone?
   a. Collecting duct
   b. Distal convoluted tubule
   c. Glomerular capsule
   d. Nephron loop
   e. Proximal convoluted tubule

8. Glomerular filtration occurs because:
   a. Blood pressure is greater in the glomerular capillaries than in the glomerular capsule
   b. Blood pressure is lower in the glomerular capillaries than in the glomerular capsule
   c. Gravity is greater in the glomerular capillaries than in the glomerular capsule
   d. Potassium pumps push fluid from the glomerular capillaries into the glomerular capsule
   e. Sodium pumps push fluid from the glomerular capillaries into the glomerular capsule

9. What hormone causes the body to retain more water?
   a. Antidiuretic hormone
   b. Follicle stimulating
   c. Insulin
   d. Luteinizing
   e. Renin

10. What part of the nephron supplies blood to the glomerulus?
    a. Afferent arteriole
    b. Distal convoluted tubule
    c. Efferent arteriole
    d. Nephron loop
    e. Peritubular capillary system