**Study Guide for Body Systems (*skeletal system, muscular system, integumentary system, nutrition and digestive system*)**

**This is only a study tool please refer to notes and the kids health videos on YouTube for additional review.**

*Skeletal system*

1. How many bones are in your body? What do bones consist of?
2. What are the 5 functions of the skeletal system?
3. What is the formula for calculating bone density?
4. Which two systems work together to allow movement of the body as a student exercise?
5. What are the 3 different types if bone tissue? Describe each.
6. What are the 4 types of bones? Describe and provide at least one example for each.
7. What is the difference between osteoblast and osteoclast?
8. How can you develop healthy bones?
9. What are the types of joints? Describe and provide at least one example for each.

*Muscular system*

1. How are muscles controlled?
2. Define involuntary and voluntary muscles.
3. What are the 3 types of muscle? Describe and provide at least one example for each.
4. How do muscles move?

*Integumentary system*

1. What does the integumentary system consist of?
2. What are the layers of the skin? Describe and provide at least one example for each.
3. What is melanin? What are the benefits of melanin?
4. How are bruises formed?
5. Why should you cover cuts?
6. Why are sweat glands important?
7. What are the muscles that tighten/ contract when you’re cold to make your hair stand?
8. Define the Pilomoter reflex.
9. What are skin grafts? How are they beneficial?

*Nutrition*

1. What are nutrients?
2. What are the 6 nutrients that are available in food? Explain.
3. What are the monomers for the following: Protein, Carbohydrate, Fat/lipid
4. What is the difference between an organic nutrient and an inorganic nutrient?
5. Proteins contain which elements?
6. Carbohydrates contain which elements?
7. Fats/lipids contain which elements?
8. How much water is found in the average human body?

*Digestive system*

1. What is digestion?
2. What are the two parts of digestion?
3. Describe the pathway of digestion.
4. What are enzymes?
5. Can you use up enzymes?
6. What is the function of sucrase, lactase, amylase, and pepsin?
7. Draw the enzyme substrate complex. Why is it considered to be a lock and key model?
8. What are some factors that affect enzyme activity? Explain.
9. Explain what happens in the following areas during digestion: mouth, esophagus, small intestine, large intestine.

***Review your notes, foldable, and graphic organizers! Make flashcards, and practice with a study-buddy or with your parents! Spend at least 30 minutes studying!***

Parent Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_