

Assignment 1

1. What are the two major types of material found in bone?
2. Very briefly describe five purposes of bone.
3. Explain one of the main reasons humans evolved to stand upright and name several things we see in our bodies that show this.

Assignment 2

1. What is momentum? How does it affect football and rugby players?
2. What is drag and how does it affect swimmers?
3. Why does a skater spin faster when he or she bring their arm in close?
4. Without going into detail briefly describe the two ways x-rays are produced
5. Very briefly, without detail, describe the four ways x-rays interact with the tissues in the body and note which ways image the body and which ways are used to kill cancer.

Assignment 3

1. Name and describe the important points of how a molecule of glucose is converted into ATP.
2. What are the three basic types of food, and what part of the intestines are they absorbed.
3. What is a carbohydrate? How does it relate to what we call 'sugar.'"

Assignment 4

1. Using the internet:
 - Calculate your BMR
 - Calculate your daily caloric needs
 - Calculate your ideal body weight
2. Keep a record of the food you eat in a one-day period and calculate the amount of calories you ate that day. Are you eating too much? Are you overweight?
3. What is the healthiest thing you ate in the last 7 days?
4. What is the unhealthiest thing you ate in the last 7 days?
5. Briefly describe the path that an oxygen molecule must take to go from your nose to muscle.
6. What role does hemoglobin play?
7. Why is iron important in the body? Where does it bind in hemoglobin?
8. Name several foods that are rich in iron.