Final Review

1st Six Weeks Review

1. What is the difference between prokaryotic and eukaryotic cells?
2. What are the 3 parts of the cell theory?
3. What part of the cell is identified with the arrow?
4. What structures is common to ALL cells?
5. Label the following cells prokaryote or eukaryote.
6. What are the 2 types of virus cycles?
7. What are the similarities between a cell and virus?
8. List the 6 Kingdoms.
9. Which kingdom contains eukaryotic heterotrophs with cell walls made of chitin?

2nd Six Weeks Review

1. What are the 4 macromolecules found in the body?
2. Carbohydrates:

 a. Function:

 b. Elements:

 c. Monomer:

 d. Polymer:

 e. Structure:

 f. Example:

1. Lipid:

 a. Function:

 b. Elements:

 c. Monomer:

 d. Polymer:

 e. Structure:

 f. Example:

1. Protein:

 a. Function:

 b. Elements:

 c. Monomer:

 d. Polymer:

 e. Structure:

 f. Example:

1. Nucleic Acid:

 a. Function:

 b. Elements:

 c. Monomer:

 d. Polymer:

 e. Structure:

 f. Example:

1. What is an enzyme?
2. What does the enzyme affect the reactions in living things by changing?
3. In what conditions does an enzyme work best?
4. Identify the following letter in the enzyme reaction.



1. What is passive transport?
2. Describe the 3 types of passive transport.
3. What is active transport?
4. Describe the 3 type of active transport.
5. What type of transport is the following diagram demonstrating?



3rd Six Weeks Review

1. What does the acronym DNA stand for?
2. What is the monomer of DNA?
3. What are the components that make up a nucleotide in DNA?
4. What the bases of DNA?
5. What is the function of DNA?
6. What is the difference between DNA and RNA
7. List the steps of DNA replication.
8. What is the final product of DNA replication?
9. What is the process illustrated in the following diagram?
10. What is produced during transcription?
11. What determines the traits of an organism in DNA?
12. What process is illustrated in the following diagram?

 

1. What organelle does this process occur in the cell?
2. Use the diagram below to tell me which sample is the same person?



1. What type of mutation is the following mutation?

 **Original: ACT**ACT**ACT**GGG**AGT**

**Mutated: ACT**ACT**ACT**GGA**AGT**

1. List and describe the 2 types of gene mutations.