**7th Grade Science Homework Menu Week #6**

Directions: You are to perform the following tasks on SEPARATE SHEETS OF PAPER and submit on Friday, October 31st. Each task is worth a specific amount of points. You NEED TO COMPLETE 20 POINTS worth of Homework to receive full credit.

1. Define the following terms: (**5 Points)**

a. DNA

b. nucleotide

c. DNA replication

d. Protein synthesis

e. RNA

f. mutation

g. insertion

h. deletion

i. substitution

2. Create a mnemonic device that will help you remember the four bases of DNA and how they can pair. Example: **A**toms are **T**iny (Adenine and Thymine) or **C**athy is **G**reat (Cytosine and Guanine)  **(5 Points)**

3. Answer the following questions: **(5 Points)**

a. What does DNA stand for?

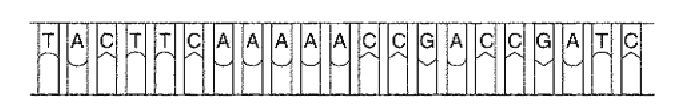
b. What two scientists established the structure of DNA?

c. DNA is sometimes described as a twisted ladder. What is the name of this shape?

4. a. Create a matching (complementary) DNA sequence for the following strand

b. Create a matching DNA sequence in which a deletion mutation happened

c. Create a matching DNA sequence in which an substitution mutation happened. **(5 Points)**



5. Create a short comic, illustrating the three steps of DNA replication **(5 Points)**