DNA Model

In class, we made our DNA out of pipe cleaners and beads. You may make yours out of paper if you don't have other supplies.

Here are the instructions:

- 1. The sides of the DNA are made out of sugars and phosphates. Decide what you'd like to use to represent these.
- 2. The rungs of the DNA ladder are the nitrogenous bases (you can just call them bases). There are four types of bases in DNA. They are

Guanine

Adenine

Cytosine

Thymine

A = Adenine

C = Cytosine

G = Guanine

T = Thymine

These four letters make up every "word" of your genes. Also, they come in pairs. The A is always matched with the T and the C with the G. Think of it this way: the two pointy letters (AT) go together and the two curvy letters (CG) go together. They fit like puzzle pieces.

You will need four colors to represent these four chemicals.

- 3. You will need six rungs on your DNA ladder. This means that in class, we used 12 beads. You will need the same number of A and T. The G should have the same number as C. For example, you could have 4A's, 4T's, 2C's and 2G's.
- 4. Build your DNA. It doesn't matter which order you put the bases in, as long as the A is always with the T and so on.
- 5. Labeling. On a separate paper, write down what you used for the sugars and phosphates, what you used for the bases, and be sure to label which colors represent A,C,T and G. This paper should be attached to the DNA model.
- 6. Turn it in!