

Name: _____

Per: _____ Date: _____

Unit 4: DNA
Build your own DNA Lab

Purpose:



Hypothesis:

Materials:

List your materials here. NO FOOD PRODUCTS

Procedures:

- A. You and your group will construct a model of DNA. Your model will include the following parts:
1. Deoxyribose sugar and Phosphate group
 2. All 4 nitrogen bases
 - a. Adenine
 - b. Cytosine
 - c. Thymine
 - d. Guanine
- B. Label all parts of your model on or provide a key with your model.

Questions:

1. Which two molecules make up the “sides” of the DNA molecule?

2. When you constructed your model of DNA, which materials were you use to represent the “sides” of the DNA molecule?

3. Which molecules make up the “rungs” of the DNA molecules? (definition of rung=horizontal support on a ladder for a person’s foot)

4. When you constructed your model of DNA, which materials were used to represent the “rungs” of the DNA molecule?

5. Which bases usually pair together to form the rungs of a DNA molecule?

6. How does the model you constructed differ from an actual DNA molecule?

7. When DNA is replicated, or copied, the ladder splits as the bases separate. New units are added to each half of the DNA molecule. How does this create two identical molecules of DNA?