**DNA Kits Winter Break Assignment:**

1. Keep each of the 3 kits (Nucleotide, DNA Replication, and Protein Synthesis) in a separate labeled envelope.
2. Cut out all the colored pieces and put them in their correct envelopes.
3. Keep the white pages – they are the directions you will need later.
4. You do NOT have to do any of the activities now. Just cut out the pieces.

**NUCLEOTIDE KIT**

***DIRECTIONS: Read ALL steps before beginning.***

1. Cut out one of each unit on page two involved in the sub-structure of different nucleotides (sugar, phosphate group, and nitrogen base) and paste or glue each one in its respective space provided on the outline on the next page.
2. Now cut out the rest of the sub-units and arrange the appropriate units together to build each of the nucleotides named under “Examples of Nucleotides” in the outline. Follow the example shown for the first one: Adenine ribonucleotide. Of course, for ribonucleotides, use ribose sugars, and for deoxyribonucleotides, use deoxyribose sugars.
3. Place each set of sub-units (each nucleotide constructed) in the appropriate space in the outline. When you are certain it is correctly done, then glue each piece in place.
4. Connect the sub-units to each other with lines to represent bonds at the proper positions (marked by short marks in the sub-units).
5. When you are done you will have used all of the cut-out pieces.
6. As an alternative, you may (to save time—and paste) simply draw in each unit carefully in its proper place on the outline.
7. As you work with each sub-unit and each nucleotide, say its name. This will help you learn the names of these nucleic acid parts.