**DNA modeling lab**

**DO NOT EAT ANY OF MY MATERIALS. If you brought your own in, clean the desks first.**

**Work with a partner, both names on the paper. Do not need complete sentences.**

1. **What does DNA stand for?**
2. **What are the three parts of a nucleotide?**
3. **What are the two parts of a nucleoside?**
4. **What are the four nitrogenous bases?**
5. **How do those bases pair together? (letters and number of bonds)**
6. **What is that rule called (who found it)? \_\_\_\_\_\_\_\_\_\_\_\_\_’s rule**
7. **What is the structure of DNA?**
8. **What partS are in the backbone of DNA?**
9. **What do the toothpicks represent?**
10. **How many toothpicks do A and T get versus C and G?**
11. **How does DNA replicate (which pattern)?**
12. **Why are the bases inside and the phosphates/sugars outside (what description)?**
13. **Draw and label a completed pair of nucleotides.**

**Make a key to explain which candy/colors represent which parts. Individually, build three nucleotides. With your partner, build a DNA model using the key you made and tooth picks, use the correct pairs and numbers. Fold the DNA into the proper shape. Using your eraser as helicase, unwind the DNA. You are the ligase to add in more nucleotides.**