Learning Target

- I will compare and contrast DNA and RNA.
Question:

How does RNA (ribonucleic acid) differ from DNA (deoxyribonucleic acid)?
You Tell Me

1. Open the bag marked DNA, place the contents on your table.

2. Construct a model of DNA. Begin by making the **Backbone** of **One** side of your DNA.

3. **Start** with a **Phosphate group** and match it to the **Star** on the **Sugar** (deoxyribose). (4 phosphates and 4 deoxyribose)

4. Add **Nitrogen bases** to the sugar matching the **Circles**.

5. You will have a total of **4 nucleotides**.

6. Replicate the other side of your molecule by complementary base pairing. **Start** with the **sugar (upside down)**. Remember the other strand is **anti-parallel (opposite direction)**. When you are finished, show the teacher.
7. Now, place the contents of your RNA baggie on the table.

8. Make a single strand of RNA with 4 nucleotides, match shapes like you did before to make your backbone and attach your nitrogen bases. (Do Not pair any of the nitrogen bases). Show your teacher when you are finished.
Think-Pair-Share

**Think:** Look at the two models and determine the similarities and differences between them.

**Pair:** Share your ideas with your group and fill out the Venn Diagram that was shared with you on Google classroom.

**Share:** Post on the Padlet what you discovered about DNA and RNA. Click on the following link:

http://padlet.com/pzipper/cdfld8es5is
Write a paragraph on your Google doc comparing and contrasting DNA and RNA.