

## Build Your Own DNA Model – In Class Project



**Mission:** You and your partner have just been commissioned by the National DNA Learning Center (NDLC) to construct your representation of the DNA molecule as a resource to educate visitors about DNA. Your job is to construct one of the following for their display:

1. A three dimensional model using common household products
2. A three dimensional painting or mural
3. A lyrical masterpiece (ie poem or song lyric)
4. A short graphic novel/flip book

There are a few requests made by the NDLC,

### 1. For the 3D Model:

Since this will be on display for years to come, in no way can a model be made out of perishable materials. This means, **NO FOOD PRODUCTS**. Secondly, the model must be constructed out of materials, of your choice, brought from home. I do have scissors, glue, markers, colored, pencils. Finally, a key must be provided labeling all parts of the model and what it represents. Your model should be an appropriate size for others to learn from. Some example materials would be:

- a) Popsicle sticks
- b) Beads
- c) Pipe cleaners
- d) Play-doh
- e) Craft supplies
- f) YOU OWN IDEAS ARE BEST!

### 2. For the 3D Art project (painting, mural, etc.)

The art project must be in 3 dimensions and extremely creative, like it were to be placed in an art gallery. Each of the part must be clearly labeled on the project. You are responsible for bringing in your art supplies that you would like to be using.

### **3. For the Lyrical Masterpiece**

Your poem or song lyric must be a representation of how the DNA structure was formed. You must include the different parts of the structure as well as key people involved in its discovery. Your poem or lyrics may not be turned in on a piece of paper only. It should be displayed as if it were in the musical hall of fame. Please bring all display supplies.

### **4. For the Graphic Novel/Flip book**

This will be the story of DNA. Tell us how the DNA structure was discovered and by whom. Also, in your story, you must include all key parts to the structure. The novel must be in color and displayed in a creative fashion. You are responsible for bringing any extra supplies you need to display this creatively.

\*No matter which option you choose, you are responsible for including and labeling/Identifying:

1. Phosphate
2. Sugar (deoxyribose)
3. Nitrogen bases
4. Adenine
5. Guanine
6. Cytosine
7. Thymine
8. Hydrogen Bond