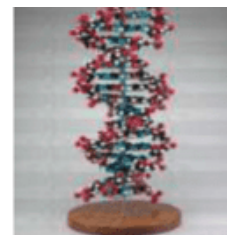


Name: \_\_\_\_\_ Class Period: \_\_\_\_\_



# DNA Model Project

Your DNA Model will be due: \_\_\_\_\_

Your assignment is to research and build a Double Helix DNA Model. It will count as one test grade (major grade). The maximum grade you can obtain is 105! You will have two weeks to work on it. So, do a great job and don't put it off until the last minute! I would suggest using wire or pipe cleaners as a framework, and using beads, candies with holes, foam balls, or some other item that you can support on the framework to represent sugars, phosphate groups, hydrogen bond, and the four nitrogenous bases. That means you need seven different colors and shapes, and a way to hold them together and support them. Also, the model must show the helical shape of DNA. Finally, a key must accompany your model. The key must include your name and a representation of each different part of your model that identifies which structural part it represents.

I do not expect this to be an expensive project, so use what you have. You can make great models using pasta (uncooked), jellybeans, gumdrops, toothpicks, pipe cleaners and a variety of beads. So be creative with this model! Do not use anything that will spoil or create a mess. Do not make it too big. Remember, you have to get it to school in one piece. It should have a minimum of ten base pairs represented. If you have an idea that doesn't fit this description, please check with me first to make sure it will work and you will get maximum points. **Have fun!!**

## GRADING RUBRIC

Expectations	Possible Points	Earned Points
<b>3-D DNA Model</b>		
<input type="checkbox"/> Deoxyribose Sugar	10	
<input type="checkbox"/> Phosphate	10	
<input type="checkbox"/> Hydrogen Bond	10	
<input type="checkbox"/> Nitrogenous Bases Paired correctly	10	
<input type="checkbox"/> Bases attached to correct backbone molecule	10	
<input type="checkbox"/> Free standing or hanging helical shape	7	
<input type="checkbox"/> Base Pairs (10 Rungs)	7	
<b>3-D Key (use your materials)</b>		
<input type="checkbox"/> Your Name	5	
<input type="checkbox"/> Deoxyribose Sugars	3	
<input type="checkbox"/> Phosphate	3	
<input type="checkbox"/> Hydrogen Bond	3	
<input type="checkbox"/> Adenine	3	
<input type="checkbox"/> Thymine	3	
<input type="checkbox"/> Cytosine	3	
<input type="checkbox"/> Guanine	3	
<b>Neatness</b>		
<input type="checkbox"/> Legible (Readable) Key	5	
<input type="checkbox"/> Sturdy	5	
<b>Bonus Points (Signature)</b>	5	
<b>GRADE:</b>		

You have been notified of this project since November 1<sup>st</sup>, 2022. This project is due November 18, 2022. Since students are only attending half a day on 11/18/2022, project will be due upon your return of Thanksgiving break (11/28/22). Please be responsible as you have been given plenty of time to do it. Any project received after 11/28/22 will be considered late and points will be deducted. For the students that turn in their project on 11/18/22 or before they will receive 10 Extra points on their next exam. THE 3D KEY IS OPTIONAL.

Thank you,  
Ms. Escobedo Guerra