**Unit 5 Review Stations**

**Station 1: Nucleic Acid Structure**

1. Complete the DNA Structure sheet
2. At the bottom of the sheet, write 2 things that are different about the RNA *molecule*, and 2 things that are different about the *nucleotides* of RNA that you didn’t list about the RNA molecule.

\*\* Staple your sheet to your loose leaf paper.

**Station 2: Enzymes in DNA Replication**

Watch the video Amoeba Sisters: DNA Replication (The Cell’s Extreme Team Sport)

 <https://www.youtube.com/watch?v=5qSrmeiWsuc>

While you view create a chart of the ENZYMES that are involved in DNA Replication and what function they contribute to the process:

|  |  |
| --- | --- |
| **ENZYME** | **FUNCTION** |
|  |  |
|  |  |

**Station 3: Protein Synthesis/ Translation:** Watch the video Teacher’s Pet: Protein Synthesis

<https://www.youtube.com/watch?v=2zAGAmTkZNY>

As you watch, list the steps of transcription and translation in your own words. Try to condense the steps to 8 or less.

**Station 4: Protein Synthesis Analogies:** Complete the **Protein Synthesis Analogy Sheet: Construction/ Candy Factory** … Staple it to your loose leaf.

**Station 5: Mutations:** Create a study sheet on the topic of DNA MUTATIONS as you watch the following video. <https://youtu.be/GieZ3pk9YVo>

**Station 6: DNA Technology:**  Fill in the chart and staple it to your loose leaf.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Biotechnology Process** | **Description/How it works** | **Example** | **Possible Uses** | **Bioethical Issues associated with it** |
| Recombinant DNA |  |  | GMOs |  |
|  | DNA loaded onto a gel to separate by size and charge |  |  |  |
| Cloning |  |  |  |  |
|  | Sequenced the entire Human Genome using samples for individuals around the world. |  |  |  |
|  |  | Nasal Spray with new gene to cure Cystic Fibrosis |  |  |