**Protein Synthesis – Notes** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**What are the 2 stages of Protein Synthesis?**

Using the diagram on below to answer the following:

|  |  |  |
| --- | --- | --- |
|  | Transcription | Translation |
| Location? |  |  |
| What is made? |  |  |
| What things are involved? (list as many as you can) |  |  |





**Part 1: Transcription**

Where does it occur? In the **\_\_\_\_\_\_\_\_**

DNA is used as a **\_\_\_\_\_\_\_\_** to form a molecule of single-stranded **\_\_\_\_\_\_\_** (**\_\_\_\_\_\_\_\_\_\_\_**RNA)

**What are the 3 parts of Transcription?**

1. **Initiation**
	* One section of DNA is **\_\_\_\_\_\_\_\_\_\_\_** (Hydrogen bond between nitrogen bases are **\_\_\_\_\_\_\_\_\_\_\_\_\_**)
2. **Elongation**
	* **\_\_\_\_\_\_\_\_\_\_\_\_\_** ribo-nucleotides **\_\_\_\_\_\_\_\_\_\_\_** hydrogen bond with their **\_\_\_\_\_\_\_\_\_\_\_\_\_** nucleotides on the DNA template
	* Only **\_\_\_\_\_**of the DNA strands is used as the template.
	* Ex: DNA – A T C G

 RNA – **\_\_\_\_\_\_\_\_**

1. **Termination**
	* RNA polymerase reaches **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
	* RNA polymerase **\_\_\_\_\_\_\_\_\_\_\_\_\_** from DNA, releasing **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** mRNA strand
	* DNA **\_\_\_\_\_\_\_\_\_\_\_** into its double helix
	* mRNA is transported **\_\_\_\_\_\_\_\_** of the nucleus

