**Topic (\_\_/2 points) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Notes**

| **Connections/Questions****(\_\_/5 points)** | **Terms/Description/Tables/Graphs****(\_\_/10 points)** |
| --- | --- |
|  | * Draw a sketch of DNA, labeling the deoxyribose, phosphate group, nitrogen base, and nucleotide.
* List the 4 types of nitrogen bases, matching which base pairs with which.
* What is meant by “complimentary base pairing?”
* If a DNA strand has the base sequence of TCTGGAACAGTCA, what is its complimentary strand?
* Why do cells need to replicate their DNA?
* Process of replication:
	+
	+
	+
	+ Draw a sketch of replication
* Protein synthesis
	+ Summary:
		-

 * + -
		-
	+ DNA vs RNA

|  |  |  |
| --- | --- | --- |
|  | **DNA** | **RNA** |
| Shape |  |  |
| Sugar |  |  |
| Base pairs |  |  |
| Location(s) |  |  |

* + Transcription
		- Purpose:
		- Process:
		- Example:
		- Sketch:
	+ Translation
		- Purpose:
		- Process:
		- Example:
		- Sketch:
* What happens if there is a mistake while copying the DNA or RNA?
	+ Types of mutations
		- Point mutation
		- Frameshift mutation
	+ Effects of mutations
 |

**Synthesis**

| **Summary & Reflection****(\_\_/5 points)** |
| --- |
|  |