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

**Notes**

| **Connections/Questions****(\_\_/5 points)** | **Terms/Description/Tables/Graphs****(\_\_/10 points)** |
| --- | --- |
|  | * Chromosome –

dna to chromosome* What is the relationship between a cell, the nucleus, a chromosome, and DNA?
* Humans have \_\_\_\_\_\_ chromosomes or \_\_\_\_\_\_ pairs, 50% come from \_\_\_\_ and 50% come from \_\_\_\_.
* DNA
	+ Structure
		- Determined by
		- Shape –
		- Macromolecule –
		- Subunit –
			* Consists of
1.
2.
3.
*
* Complimentary base pairing:
	+
	+

* **Cell Division**
	+ The cell cycle consists of
	+ What is the difference between mitosis and cell division?
	+ Mitosis

|  |  |  |
| --- | --- | --- |
| **Phase** | **Description** | **# of Chromosomes** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

* + - Purpose of mitosis
			*
			*
			*
			*
* Asexual Reproduction
	+ Description
	+ Types
	+ Describe the process of cloning
* What is the relationship between mitosis and cancer?
* Meiosis
	+ Why can’t mitosis be used for sexual reproduction?
	+ Process:

|  |  |  |  |
| --- | --- | --- | --- |
| **Phase** | **Description** | **# of Chromosomes** | **# of Cells** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

* + - Purpose of meiosis
		- How does genetic variation arise in meiosis?
		- Comparison of mitosis and meiosis

|  |  |  |
| --- | --- | --- |
|  | **Mitosis** | **Meiosis** |
| Purpose |  |  |
| Chromosome number |  |  |
| # of Cells |  |  |
| Genetic variation |  |  |

* Fertilization
	+ Purpose
	+ Process
 |

**Synthesis**

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