Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Unit 5

Period: \_\_\_\_\_ Page: \_\_\_\_\_

**Unit 5 Map - Cell Division**

Pre-AP Biology

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Topic** | **Specific Learning Target** | **Questions on Test\*** | **Quiz Score** | **Test Score** |
| 1. DNA Organization | A. I can identify the parts of a chromosome. | **3** |  |  |
| B. I can explain why DNA copies and coils up into a chromosome before cell division. | **1 (embedded)** |
| 2. Mitosis | C. I can explain why cells must divide when they get too large. | **1-2** |  |  |
| D. I can identify the stages of the Cell Cycle. | **8** |
| E. I can explain and draw what happens in each stage of Mitosis—prophase, metaphase, anaphase, and telophase. | **(embedded with above)** |
| F. I can compare and contrast cytokinesis in plant vs. animal cells. | **1** |
| G. I can explain how mitosis is different from cell division in prokaryotic cells (binary fission). | **1** |
| 3. Meiosis | H. I can compare and contrast sexual and asexual reproduction. | **3** |  |  |
| I. I can explain and draw what happens in each stage of Meiosis I. | **2** |
| J. I can explain and draw what happens in each stage of Meiosis II. | **1** |
| K. I can describe how meiosis creates egg and sperm cells in humans. | **2** |
| L. I can explain what a karyotype depicts and explain how it relates to nondisjunction. | **2** |
| 4. Cell Cycle Regulation | M. I can describe the methods cells use to control the cell cycle. | **2** |  |  |
| N. I can explain what happens when cell cycle controls fail (i.e. cancer). | **2** |

***\*There are a total of 48 questions on the test, but only 30 are accounted for here. There are many questions that embed multiple targets in them\****

**KEY TERMS:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| DNA | Chromatin | Chromatid | Chromosome | Karyotype | Cell Division | Cell Cycle |
| Interphase | G1 | G2 | G0 | S phase | Prophase | Metaphase |
| Anaphase | Telophase | Cytokinesis | Cell Plate | Cleavage Furrow | Mitosis | Binary Fission |
| Meiosis | Sexual | Asexual | Somatic | Gamete | Meiosis I | Meiosis II |
| Egg | Sperm | Nondisjunction | Cancer | Apoptosis | Centromere | Centriole |
| Haploid | Diploid | Benign | Metastasis | Crossing over | Oncogene | Proto-oncogene |

