**Cell Division Unit Test Study guide**

You may use the cell cycle foldable on the test, but only with the approved information written/explained in class.

\*Why cells need to divide

\*What stresses a cell could experience if it does not divide (hint: moving materials in and out of the cell, overload of the cell’s DNA trying to keep up with producing materials, etc.

\*The different phases and subphases in the cell cycle, what occurs in each phase (hint: the foldable)

\*Parts of the chromosome (hint: sister chromatids, centromere, etc)

\*Structures in the cell involved in cell division, such as nucleus, cytoskeleton, etc., the function of each of those structures.

\*What is crossing over and when does it occur.

\*What do diploid and haploid mean?

\*The reason for and results of mitosis and meiosis.

\*Compare and contrast mitosis and meiosis for number of divisions, number of daughter cells produced, how the chromosome number changes throughout the process, what is the genetic makeup of the daughter cells (identical, mix of parents), name the steps involved.

\*Explain why the chromosome number at the end of meiosis is important.

\*Name the proteins that regulate the cell cycle.

\*Know how those regulators work, internal and external cues for cell division.

\*What are the results when the regulators do not work correctly, are not made, or are no longer recognized by the cell.

\*Similarities and differences between plant and animal cell division.

\*Similarities and differences between prokaryotes and eukaryotes cell reproduction.

\*what affect cell size has on a cell’s ability to be efficient.

\*Know why chromosomes are not visible in the cell except during cell division.

\*Contrast the cells produced by each mitosis and meiosis.

\*Define homologous chromosome.

\*Know the correct order of the phases in the cell cycle and mitosis and be able to recognize pictures of each.

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