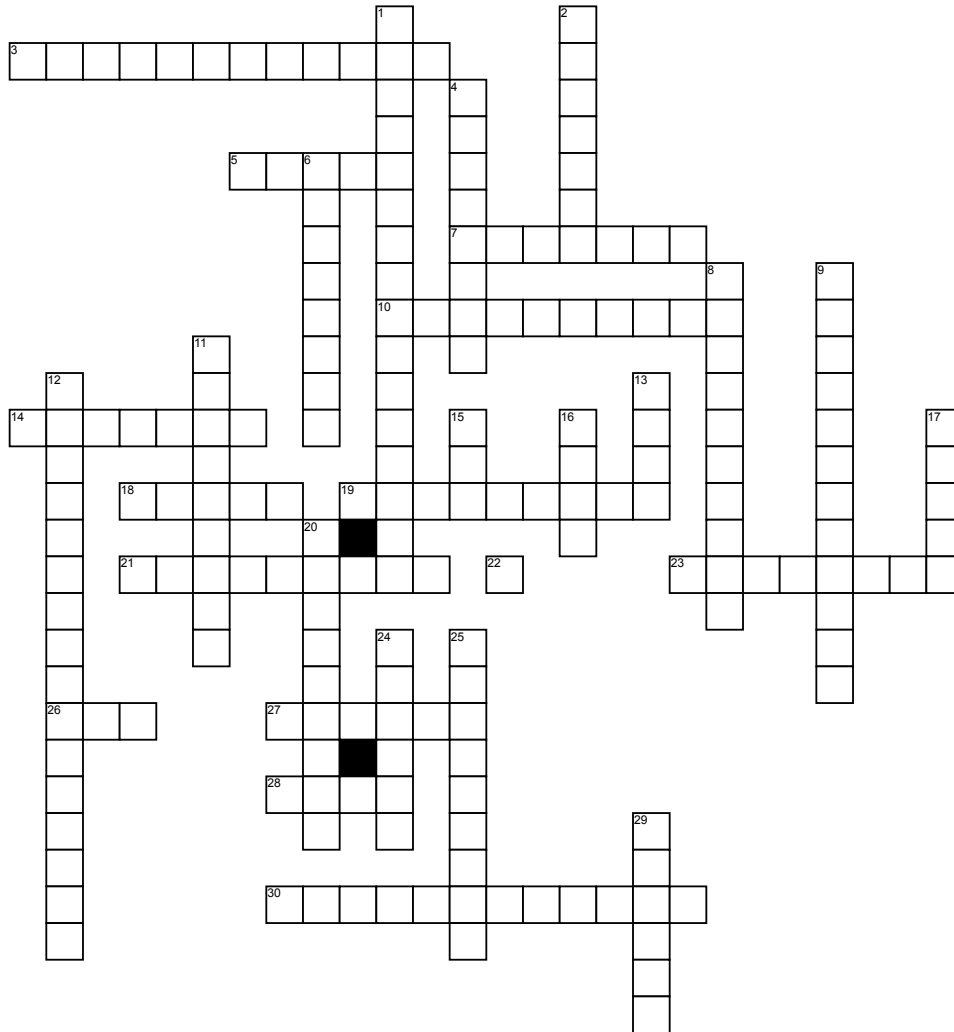


Name: _____

Date: _____

Mitosis



Across

- 3. During interphase, _____ extend from these centrosomes.
- 5. What cells do not have centrioles?
- 7. This structure composed of microtubules radiating from the poles of the dividing cell division.
- 10. What happens before Mitosis?
- 14. Mitosis may take _____ or hours, depending upon the kind of cells and species of organisms.
- 18. In animal cells, a radial array of microtubules extending from the centrioles toward the plasma membrane.
- 19. The last stage in mitosis; chromosomes are clustered at opposite poles and decondense.
- 21. At this stage all chromosomes are aligned at the equator of the cell, called the metaphase plate.
- 22. In prophase, the chromosomes condense into _____-shaped structures that can be easily seen under a microscope.
- 23. First step in mitosis
- 26. During mitosis _____ cell divides once to form two identical cells.
- 27. Uncontrolled cell division occurs in...

- 28. How many phases are in mitosis?
 - 30. Mitosis can also be called _____.
- Down**
- 1. If not corrected in time, mistakes made during mitosis can result in changes in the DNA that can potentially lead to _____.
 - 2. The protein that forms microtubules.
 - 4. In metaphase, the centrioles are now at _____ poles of the cell with the mitotic spindle fibers extending from them.
 - 6. In this stage of Mitosis, the proteins holding centromeres of sister chromatids are degraded, freeing individual chromosomes.
 - 8. pairs of identical chromosomes are attached to each other at an area called the...?
 - 9. At this stage chromosomes attach to microtubules at the kinetochores.
 - 11. How many chromosomes are in a cell?
 - 12. One of two identical copies of each chromosome.
 - 13. Chromosomes vary in how many ways?
 - 15. A cell with 22 chromosomes undergoes mitosis. How many daughter cells are created?

- 16. Acronym for Mitosis
- 17. During cell division in a plant cell, a cell _____ grows between the two new cells to separate the cytoplasm.
- 20. In anaphase, the sister chromatids are then pulled apart by the mitotic spindle which pulls one _____ to one pole and the other chromatid to the opposite pole.
- 24. In telophase, a membrane forms around each set of chromosomes to create two new _____.
- 25. DNA and protein that makes up chromosomes is called _____.
- 29. The major purpose of mitosis is for _____ and to replace worn out cells.

Word Bank

Anaphase	microtubules	minutes	Tubulin	Sister Chromatids	cancer
Prophase	Aster	Prometaphase	plant	centromere	chromatin
Metaphase	Plate	two	Interphase	Telophase	Spindle
nuclei	one	x	twenty-two	opposite	chromatid
Five	genetic disorders	Five	growth	PMAT	Cell division