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CHAPTER 6 – MITOSIS

1. Which one is *not* most probably the result of mitosis:
   1. Baby development
   2. Wound repair
   3. Hair growth
   4. Making sex cells
2. How many daughter cells are made during mitosis:
   1. 2
   2. 4
   3. 6
   4. 8
3. What happens during the interphase of the cell cycle:
   1. The cell is dividing
   2. The cell is resting
   3. The cell is growing
   4. The cell is splitting
4. In the mitotic cell cycle, which phase is most probably characterized by a replicated chromosome:
   1. G0
   2. G1
   3. telophase
   4. G2
5. A replicated chromosome has how much DNA:
   1. 1 molecule
   2. 2 molecules
   3. ½ molecule
   4. 1 ½ molecules
6. In which step of mitosis a replicated chromosome becomes un-replicated:
   1. prophase
   2. metaphase
   3. anaphase
   4. telophase
7. Sister chromatids are:
   1. Found on different chromosomes.
   2. joined at a centromere
   3. made only of DNA
   4. Made of proteins
8. During which phase of mitosis do the chromosomes line up in the center of the cell?
   1. prophase
   2. metaphase
   3. anaphase
   4. telophase
9. During which phase of mitosis do the sister chromatids separate?
   1. anaphase
   2. metaphase
   3. prophase
   4. telophase
10. Which of the following characterizes cell division *only* in plants?
    1. cell plate
    2. cleavage furrow
    3. binary fission
    4. cytokinesis
11. Which one is the correct order of steps during interphase?
    1. G1, S, G2
    2. G1, G2, S
    3. S, G1, G2
    4. G2, S, G1
12. The DNA or chromosomes are duplicated in:
    1. the mitotic phase.
    2. G1.
    3. the S phase.
    4. G2.
13. The division of the cytoplasm is called:
    1. mitosis.
    2. cytokinesis.
    3. binary fission.
    4. telophase.
14. The chromosomes become visible under the microscope for the first time during:
    1. interphase.
    2. prophase.
    3. metaphase.
    4. anaphase.
15. In which phase does the nuclear membrane breaks apart:
    1. prophase
    2. prometaphase
    3. metaphase
    4. anaphase
16. The correct order of mitosis steps is:
    1. Prophase, prometaphase, metaphase, telophase, anaphase
    2. Prophase, prometaphase, anaphase, metaphase, telophase
    3. Prophase, prometaphase, telophase, metaphase, anaphase
    4. Prophase, prometaphase, metaphase, anaphase, telophase
17. The process when a damaged cell destroys itself is called:
    1. Cell arrest
    2. Apoptosis
    3. Cytokinesis
    4. Interphase
18. The genes/proteins that stop the cell cycle to check for mistakes are called:
    1. Proto-oncogenes
    2. Oncogenes
    3. Tumor suppressor genes
    4. Positive regulator genes
19. The checkpoint for correct DNA duplication is in which phase of the cell cycle:
    1. G1
    2. S
    3. G2
    4. M
20. When spindle fibers are not attached to each sister chromatid then this is what happens:
    1. Each daughter cell has same chromosome number as the parent cell
    2. One daughter cell has more chromosomes than the other daughter cell
    3. Each daughter cell has less chromosomes than the parent cell
    4. Each daughter cell has more chromosomes than the parent cell
21. How many sex chromosomes there are in a brain cell:
    1. None
    2. One
    3. Two
    4. Four
22. How many autosomes do humans have in each body cell:
    1. 46
    2. 44
    3. 2
    4. 4
23. In mitosis each of the daughter cells of a parent cell containing 46 chromosomes will get how many chromosomes:
    1. 46
    2. 23
    3. 92
    4. 69
24. Cytokinesis follows which phase:
    1. Prophase
    2. Metaphase
    3. Anaphase
    4. Telophase