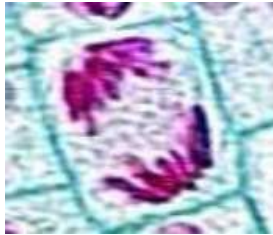


CHROMOSOME/MITOSIS/MEIOSIS REVIEW

Answer the following questions.

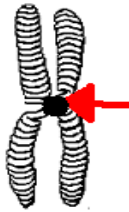
1. Name the stage of interphase in which cells copy their DNA. _____

2. Name this phase. _____

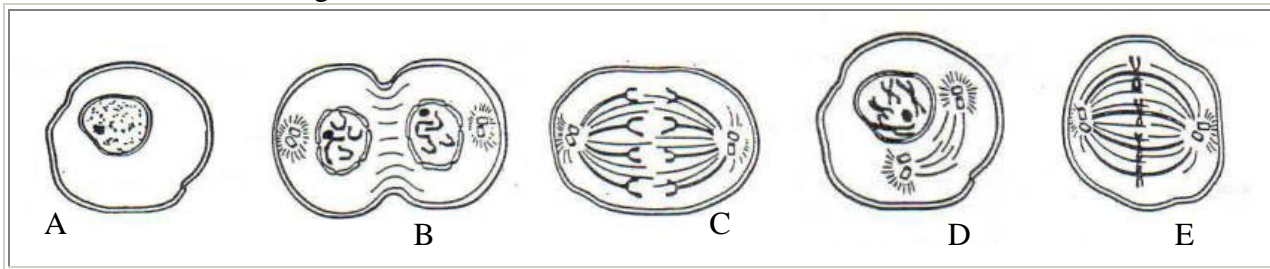


3. Name the phase in which spindle fibers and centrioles disappear. _____

4. Name this spot that holds the chromatid arms together. _____



5. Put the following cells in the correct order.



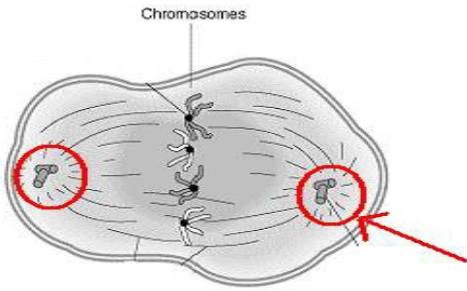
6. DNA that is spread out in the nucleus of a non-dividing cell is called _____.

7. Name the phase this cell is in. _____

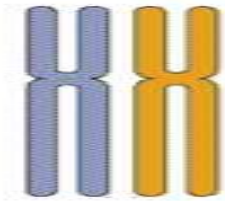


8. Name the phase of the cell cycle in which cells spend most of their time doing their job. _____

9. Name these structures where the spindle fibers grow from.



10. Phase of the cell cycle in which the cell makes organelles needed for the new cell. _____

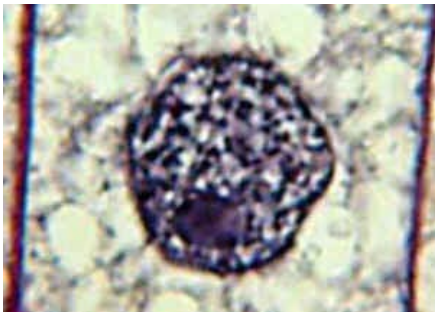


11. Chromosomes that are the same size, same shape, and carry genes for the same traits are called _____ chromosomes.

12. True or False - These two chromosomes are identical.

13. Name the phase of mitosis that follows anaphase. _____

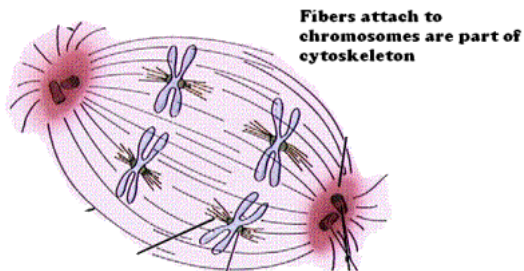
14. Name this phase in which a nucleus is visible and the DNA is spread out as chromatin.



15. Name the phase of mitosis in which chromatids separate and move to opposite ends of the cell.

16. TRUE or FALSE – Chromatids of a chromosome are identical.

17. These microtubule fibers that pull the chromosomes are called the _____.

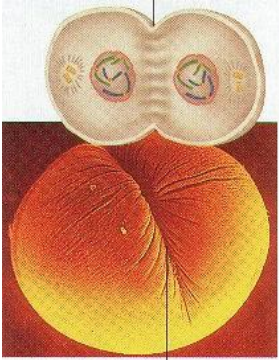


18. Phase of the cell cycle in which cells stop dividing.

19. Phase of the cell cycle that follows G_1

20. Phase in which the nuclear membrane and nucleolus disappear and spindle fibers and centrioles appear.

21. Tell the phase these cells are in. _____

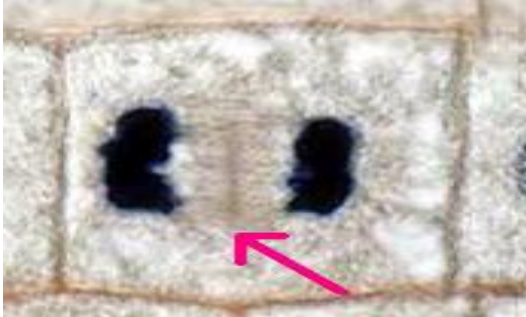


22. Phase of the cell cycle in which the nuclear membrane and nucleolus return. _____

23. Name the 3 phases (in order) that make up interphase. _____

24. Phase in which the cytoplasm splits. _____

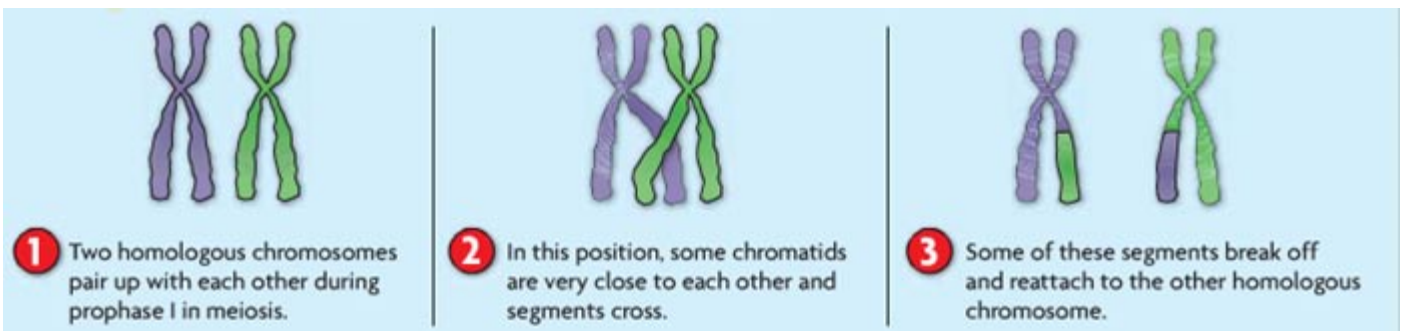
25. Phase in which chromosomes spread out (unwind) into chromatin. _____



26. What phase is this cell in? _____

27. What is this dividing wall called? _____

28. If a cell has a total of 34 chromosomes, how many chromatids does it have? _____?



29. Which process is happening in the picture above? _____

30. During which stage of meiosis does this happen? _____

31. What event pulled the two chromosomes next to each other? _____

32. Add the following terms and phrases to the Venn diagram on the next sheet comparing mitosis and meiosis. (It is alright if you simply add the # into the diagram.)

1. Produces haploid cells

2. Occurs in germ cells
(produces sex cells)

3. Occurs in plant and
animal cells

4. In humans, produces
cells with 23
chromosomes

5. Involves cellular
division

6. DNA is copied once

7. Occurs in body
(somatic) cells

8. Produces 4 cells

9. Produces cells that are
identical to each other

10. Homologous
chromosomes line up
paired with each other

11. Cell divides only
once

12. Produces diploid
cells

13. Produces 2 cells

14. Has 2 separate
divisions

15. New cells are
different from each
other

16. In humans, produces
cells with 46
chromosomes

17. Homologous
chromosomes do not
line up next to each
other

Mitosis

Both

Meiosis

