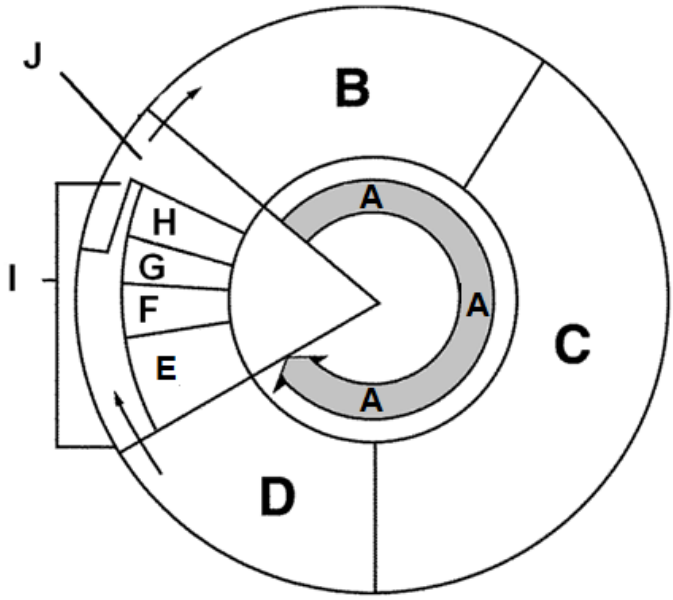
# Mitosis Practice




Label the parts of the cell cycle diagram and briefly describe what is happening:

| | |
|---|---|
| A | |
| B | |
| C | |
| D | |
| E | |
| F | |
| G | |
| H | |
| I | |
| J | |

1) Chromosomes move to the middle of the cell during what phase?

2) What are sister chromatids?

3) What holds the chromatids together?

4) When do the sister chromatids separate?

5) During which phase do chromosomes first become visible?

6) During which phase does the cleavage furrow start forming?

7) What is another name for mitosis?

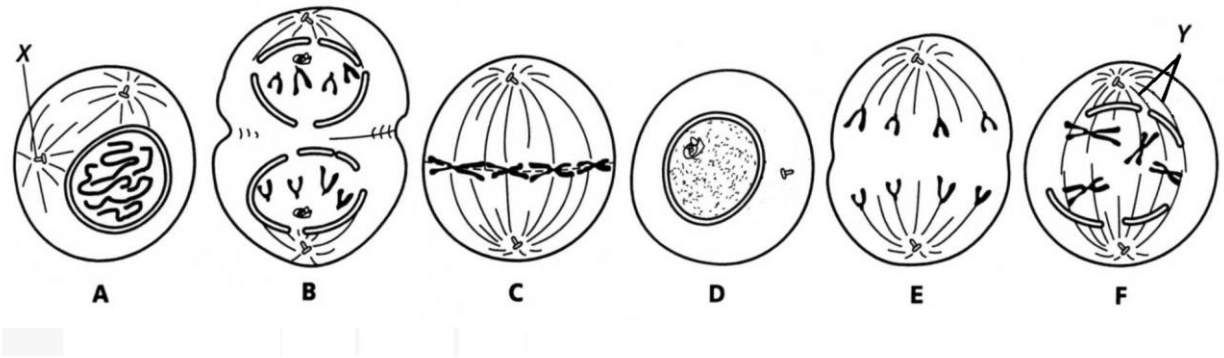
8) What is the structure that breaks the spindle fiber into 2?

9) What makes up the mitotic apparatus?

10) Complete the table by checking the correct column for each statement.

| Statement | Interphase | Mitosis |
|---|---|---|
| Cell growth occurs | | |
| Nuclear division occurs | | |
| Chromosomes are finishing moving into separate daughter cells. | | |
| Normal functions occur | | |
| Chromosomes are duplicated | | |
| DNA synthesis occurs | | |
| Cytoplasm divides immediately after this period | | |
| Mitochondria and other organelles are made. | | |

The Animal Cell Cycle – Phases are out of order




11) Which cell is in metaphase?

12) Cells A and F show an early and late stage of the same phase of mitosis. What phase is it?

13) In cell A, what is the structure labeled X?

14) In cell F, what is the structure labeled Y?

15) Which cell is not in a phase of mitosis?

16) A new membrane is forming in B. What is this phase called?

17) Sequence the six diagrams in order from first to last.

18) What is the end product of mitosis?

19) If the original cell has 46 chromosomes, how can each new daughter cell also have 46 chromosomes?

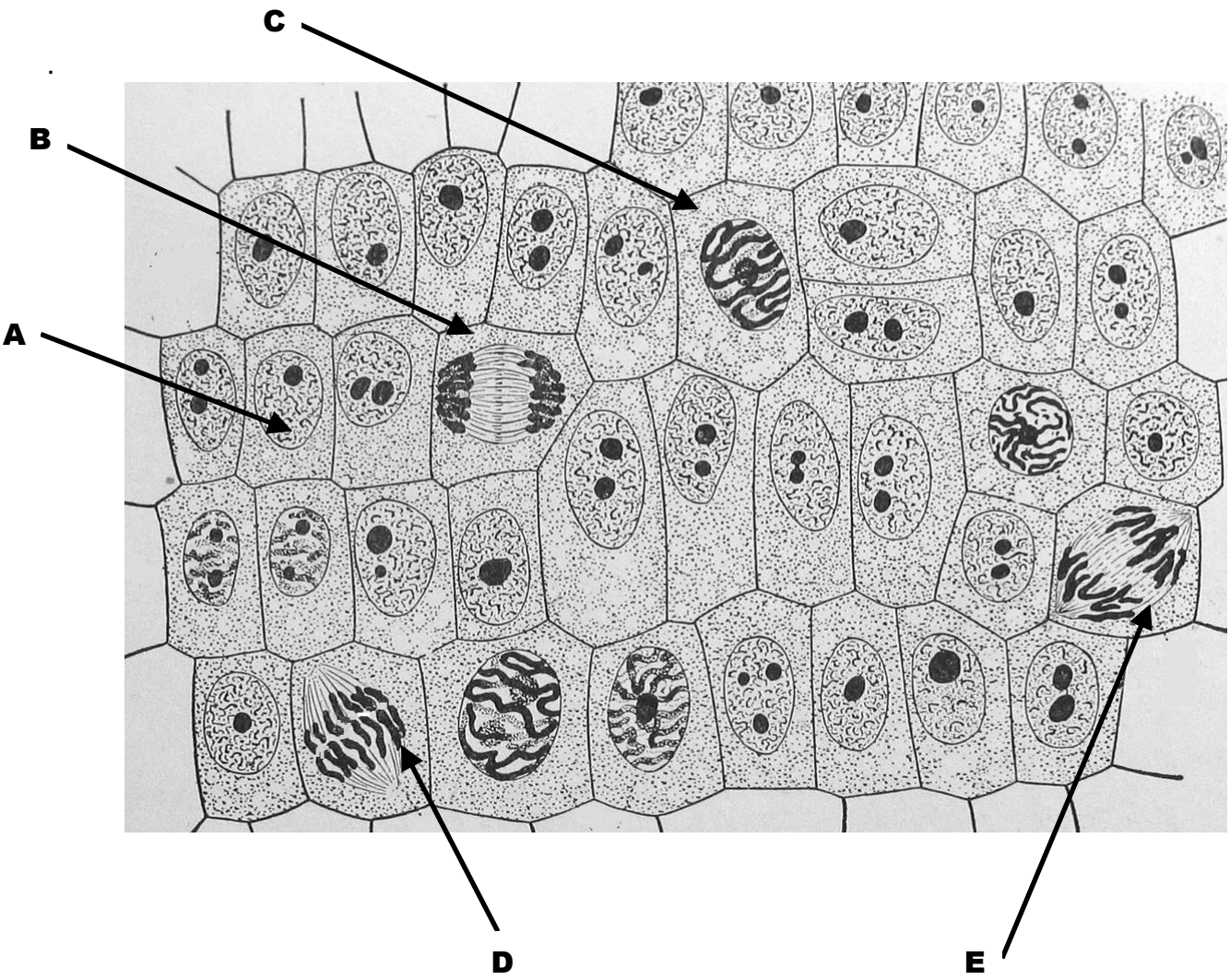
20) 24. What is the main difference between cell division in plants and animals?

21) What is the purpose of mitosis?

22) What is apoptosis?

23) If we do not go through apoptosis we can get cancer, explain why.

24) Complete this sentence: As cell size goes _____ effectiveness of diffusion and osmosis goes _____. This drives the cells to stay small!




Name the phase shown in the picture above.

| Picture | Stage |
|---|---|
| A | |
| B | |
| C | |
| D | |
| E | |