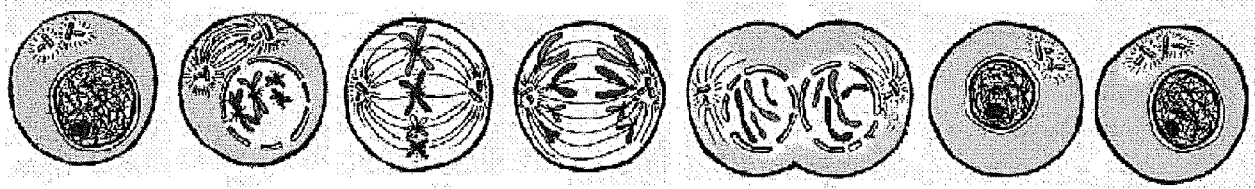


Name:

Block:

Mitosis and Cell Division Worksheet

The Cell Cycle (Phases are in order)



Interphase

Prophase

Metaphase

Anaphase

Telophase

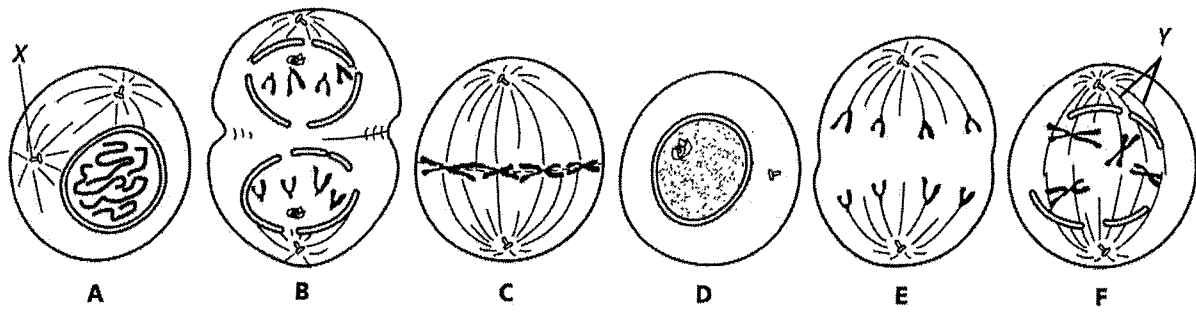
Interphase

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?

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

Statement	Interphase	Mitosis
7. Cell growth occurs		
8. Nuclear division occurs		
9. <u>Chromosomes</u> are finishing moving into separate daughter cells.		
10. Protein production is high		
11. Chromosomes are duplicated		
12. DNA synthesis occurs		
13. Cytoplasm divides immediately after this period		
14. Mitochondria and other organelles are made.		

The Animal Cell Cycle – Phases are out of order for questions 15 - 21

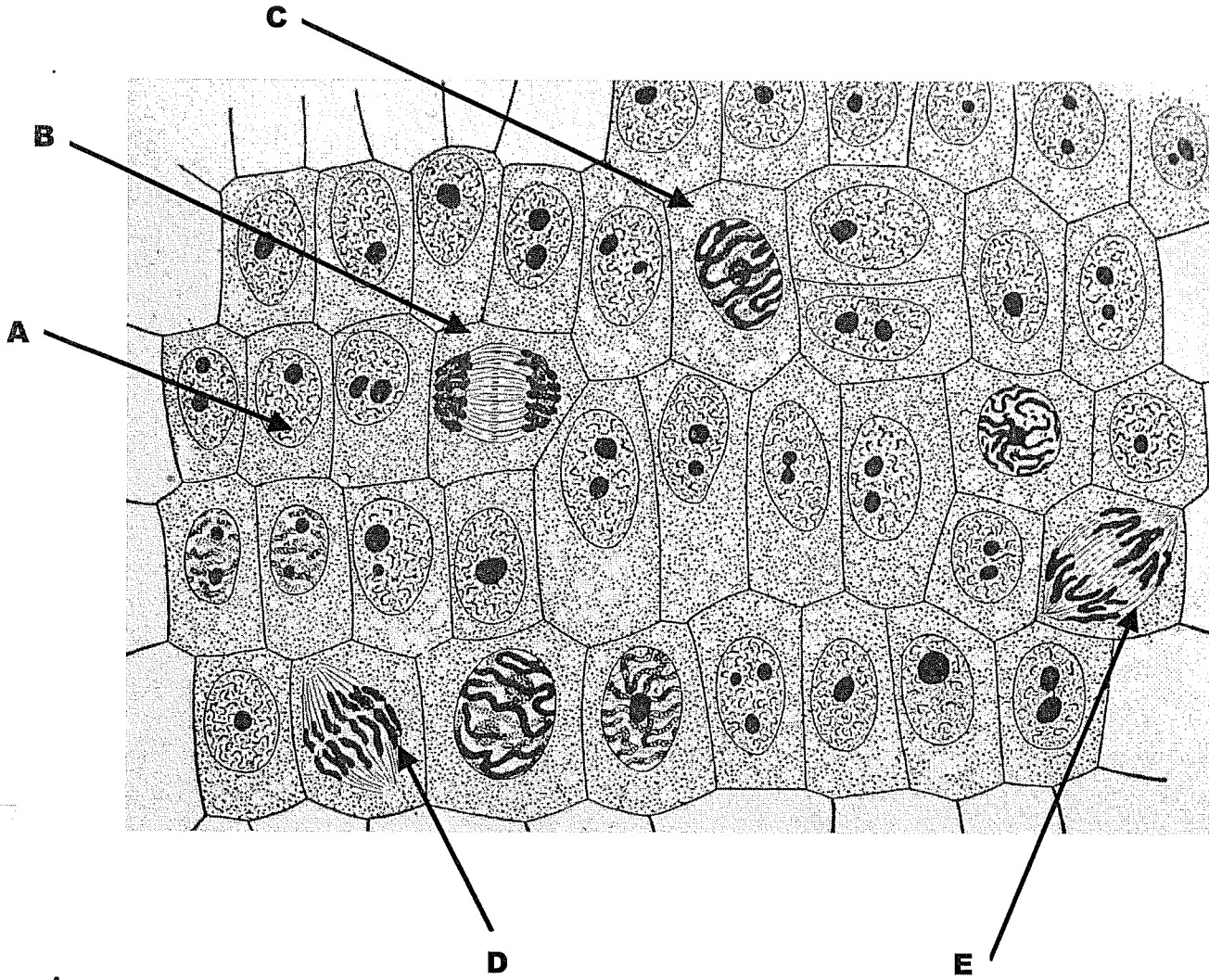


15. Which cell is in metaphase? _____
16. Cells A and F show an early and late stage of the same phase of mitosis. What phase is it?

17. In cell A, what is the structure labeled X? _____
18. In cell F, what is the structure labeled Y? _____
19. Which cell is not in a phase of mitosis? _____
20. A new membrane is forming in B. What is this phase called? _____
21. Sequence the six diagrams in order from first to last. _____

22. What is the end product of mitosis?
23. If the original cell has 46 chromosomes, how can each new daughter cell also have 46 chromosomes?
24. What is the main difference between cell division in plants and animals?
25. What is the purpose of mitosis?
26. When the rate of the cell cycle gets out of control, this happens:

Identify which stage of mitosis each lettered plant cell is in:



- A.
- B.
- C.
- D.
- E.

