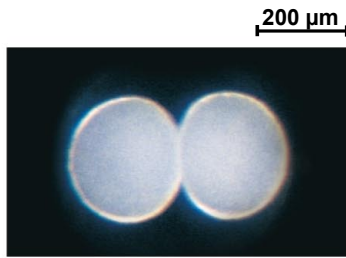
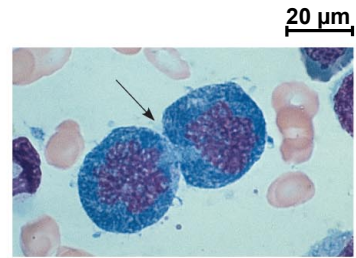


(a) Reproduction

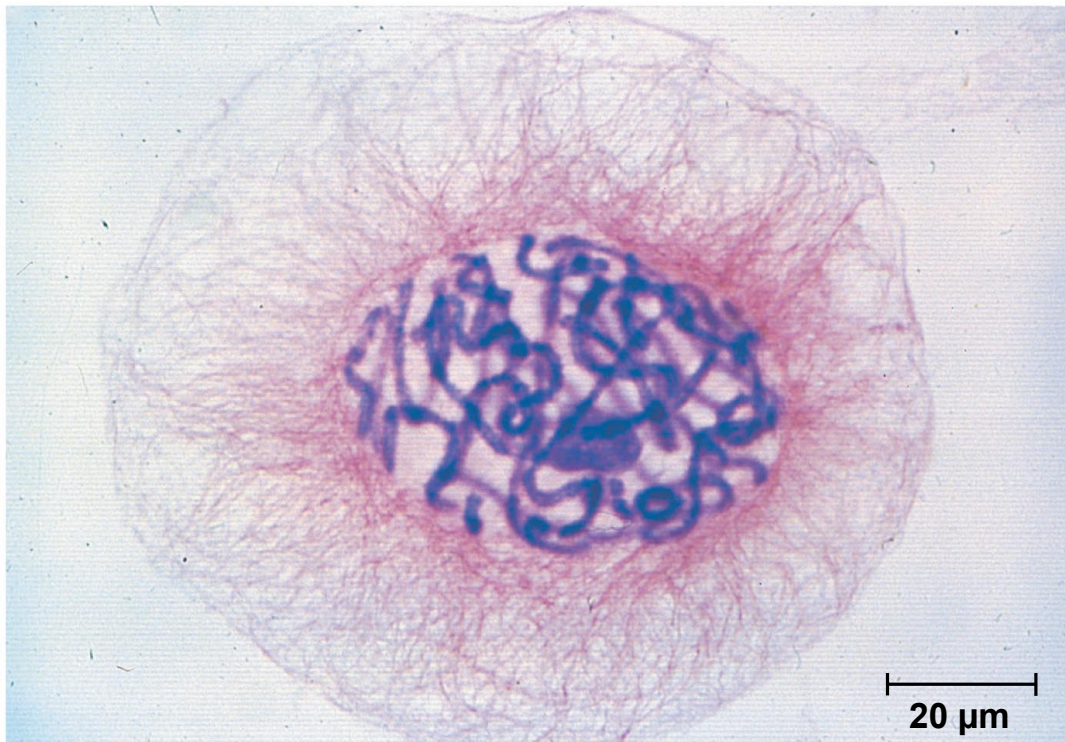


(b) Growth and development

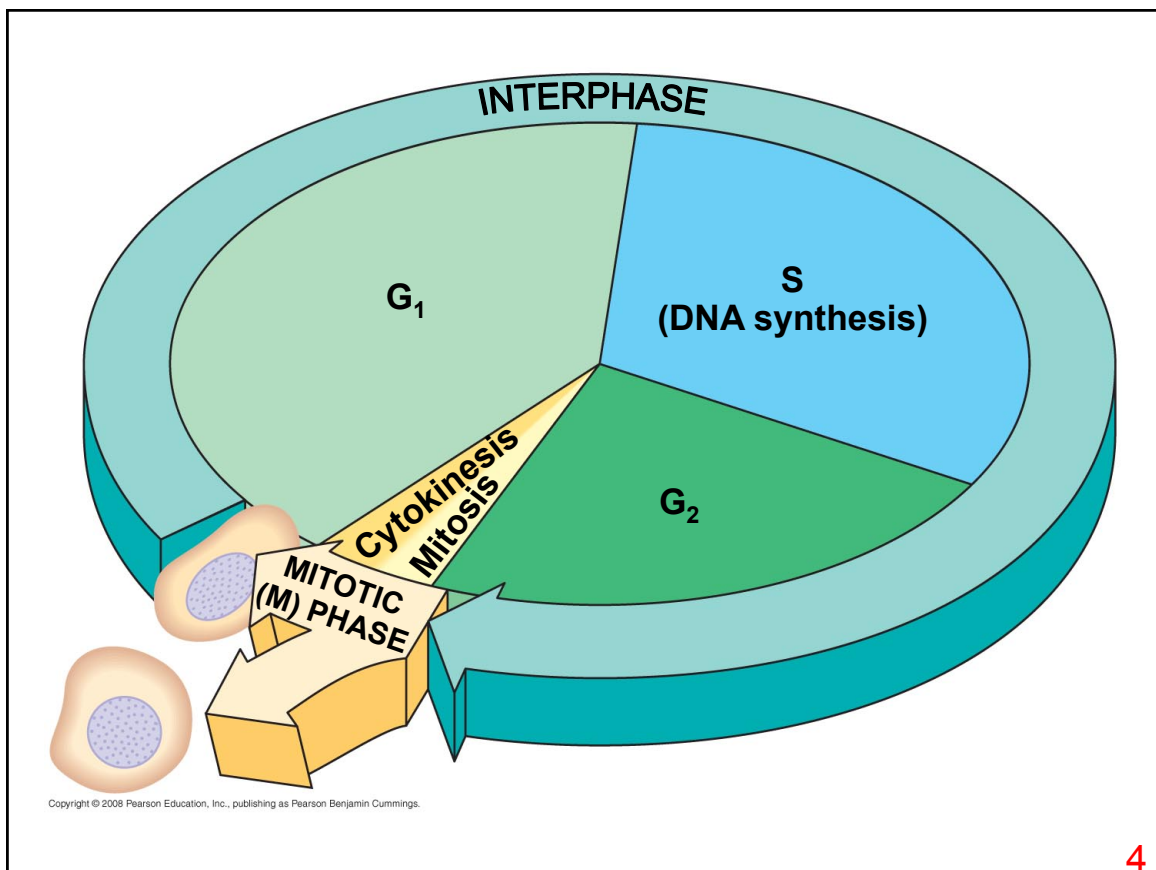
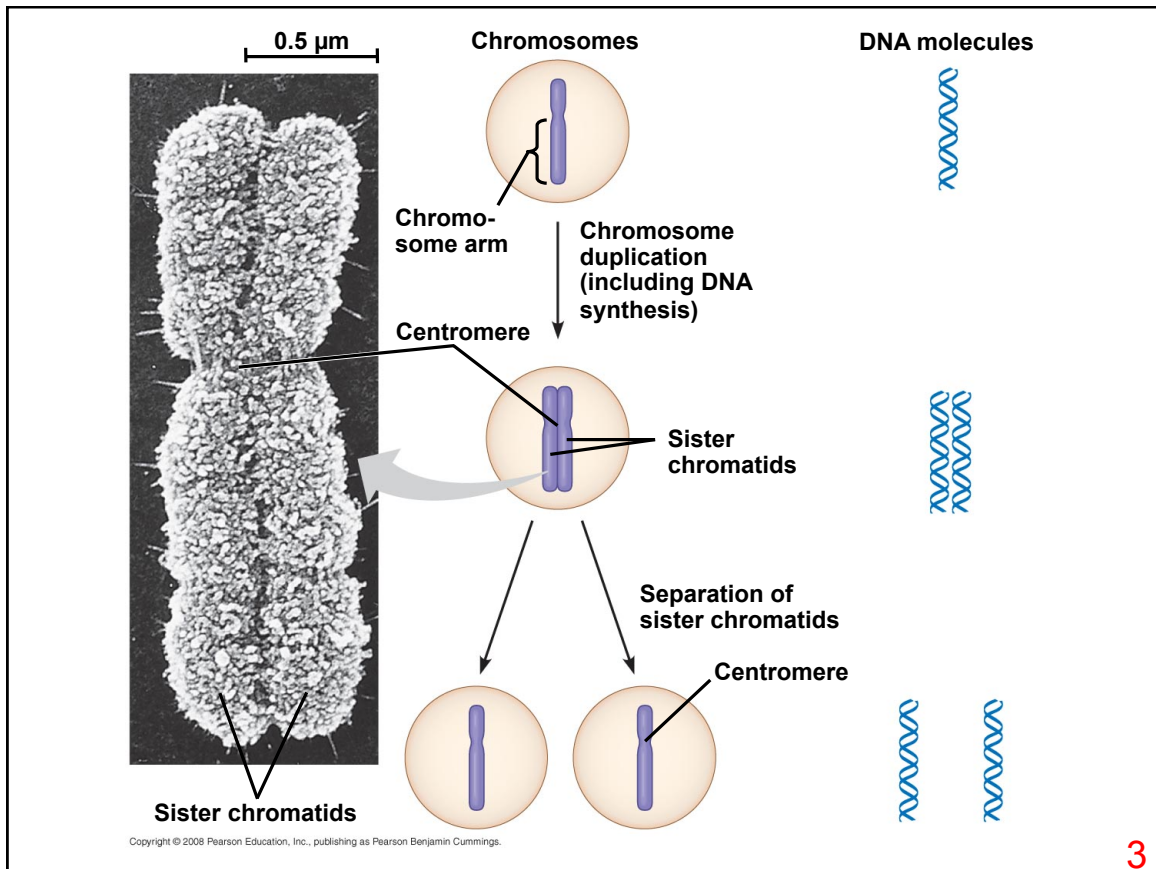


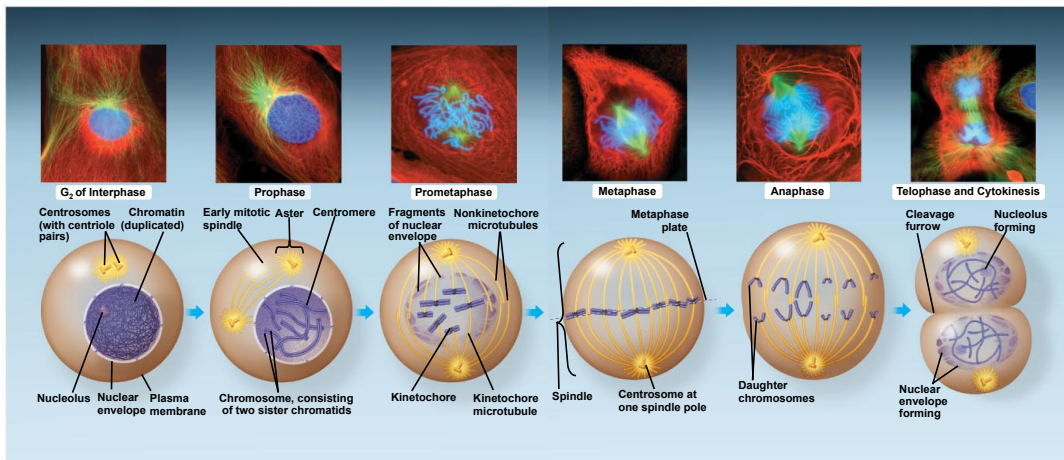
(c) Tissue renewal

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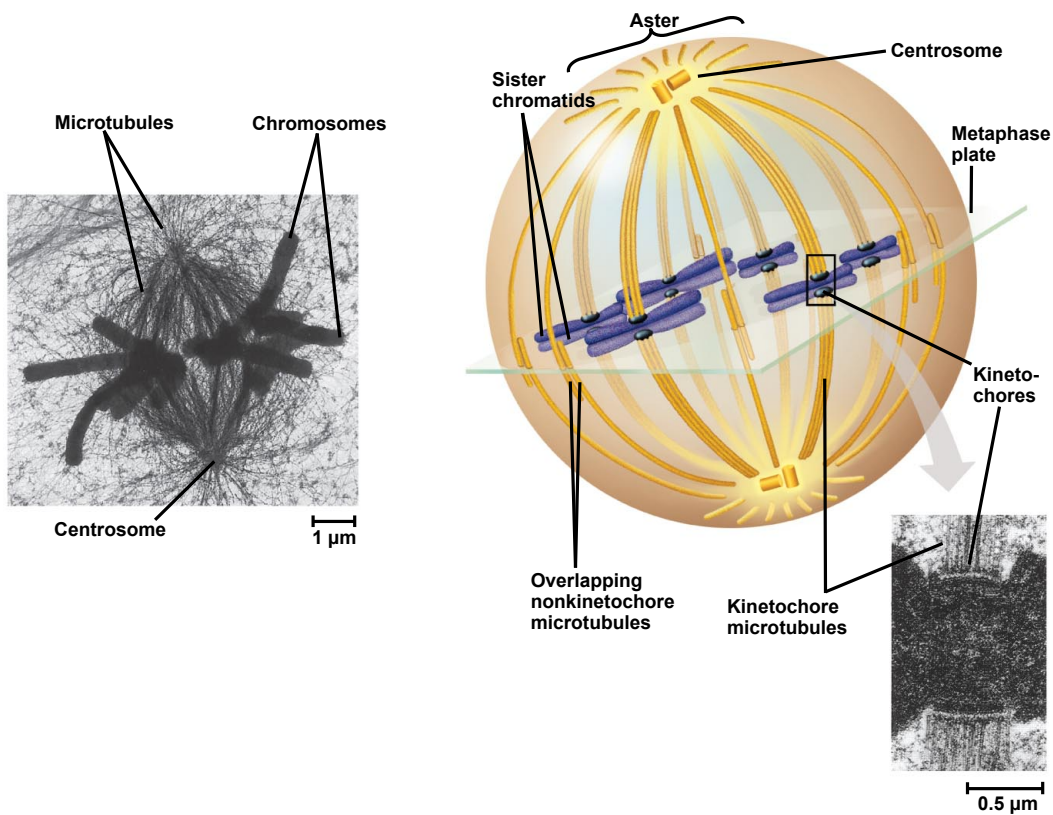
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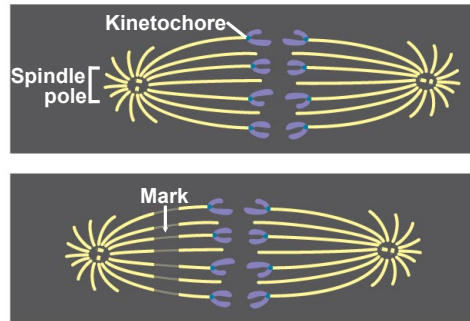
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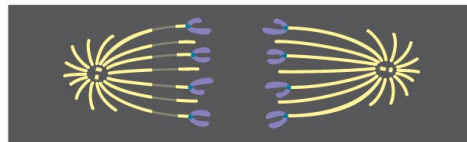
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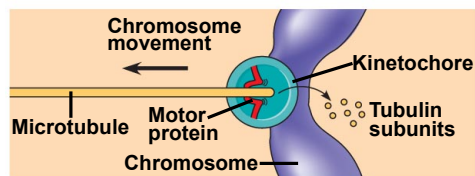
EXPERIMENT



RESULTS

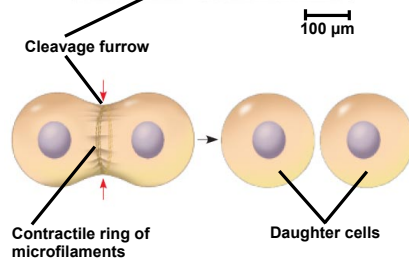
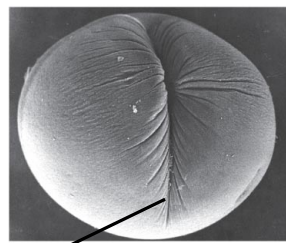


CONCLUSION



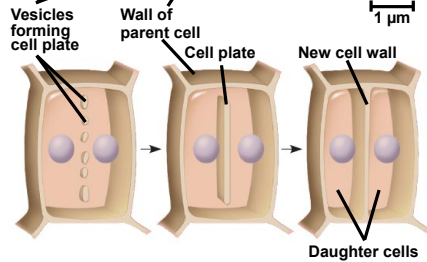
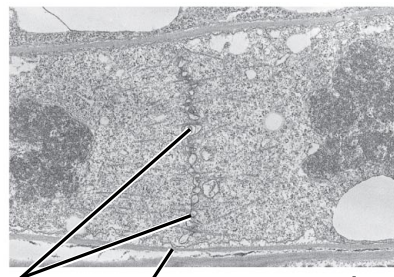
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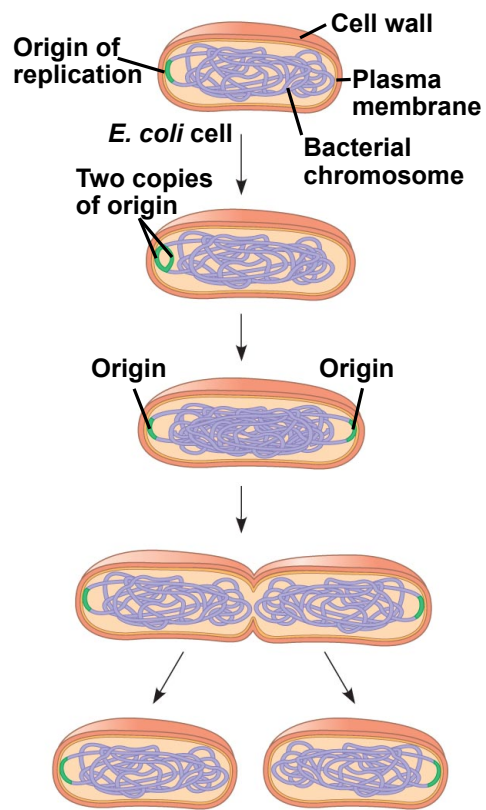
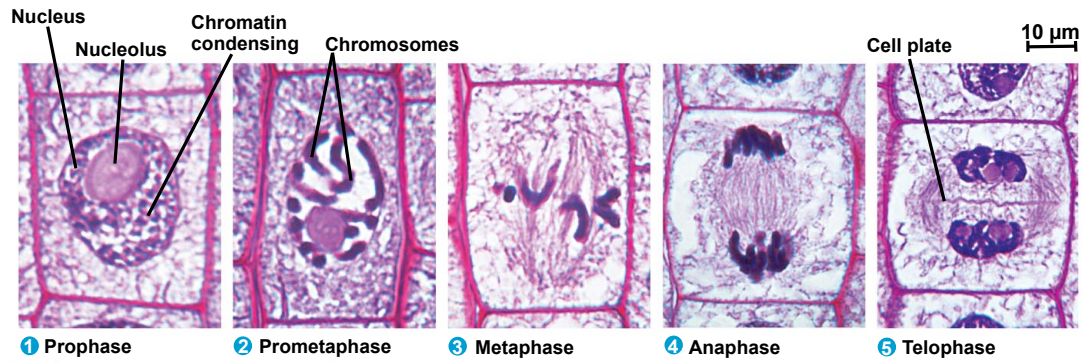
(a) Cleavage of an animal cell (SEM)

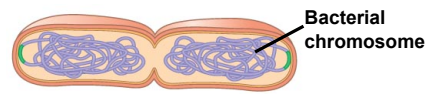
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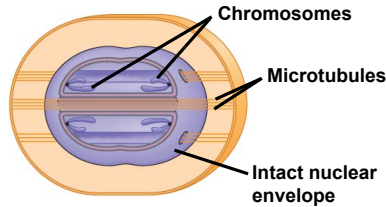
(b) Cell plate formation in a plant cell (TEM)

8

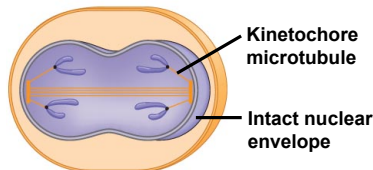




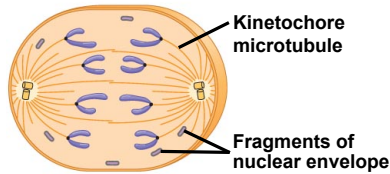
(a) Bacteria



(b) Dinoflagellates



(c) Diatoms and yeasts

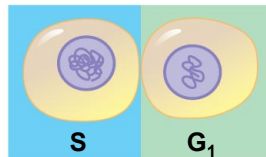


(d) Most eukaryotes

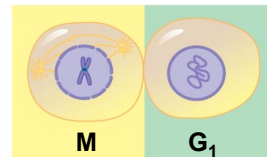
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EXPERIMENT

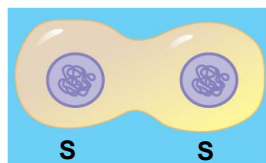
Experiment 1



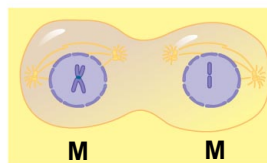
Experiment 2



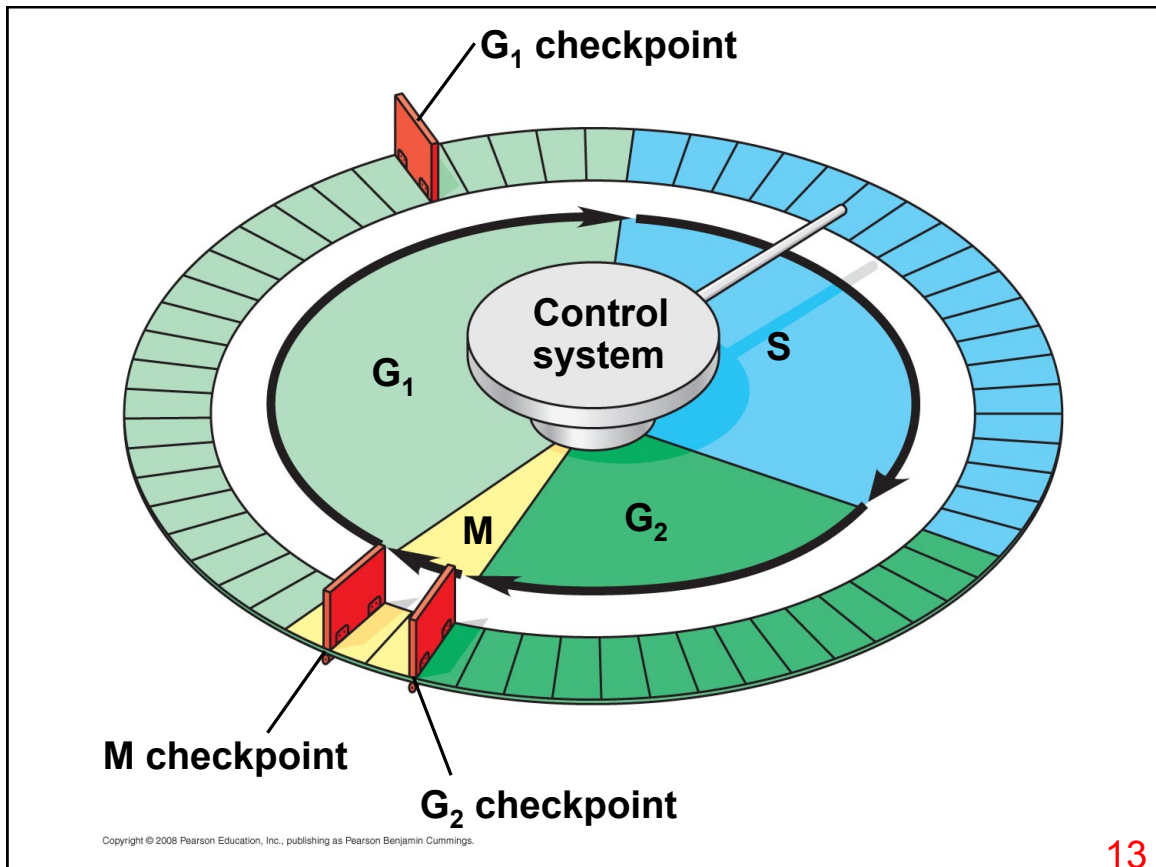
RESULTS



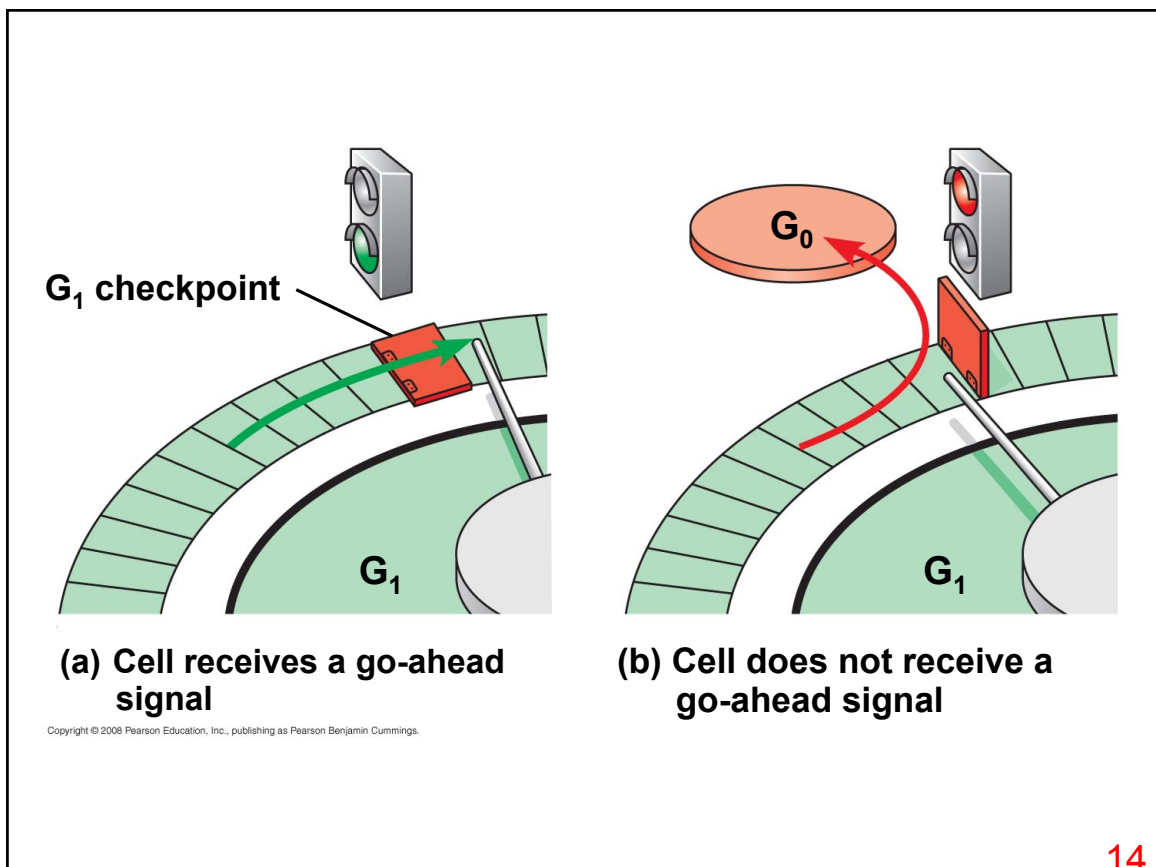
When a cell in the S phase was fused with a cell in G_1 , the G_1 nucleus immediately entered the S phase—DNA was synthesized.



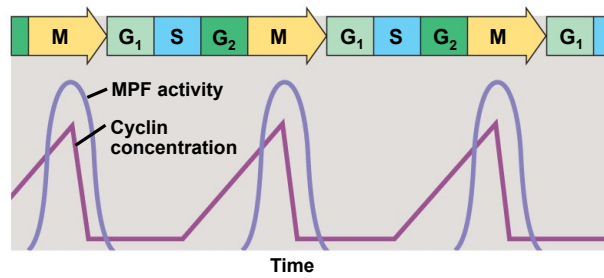
When a cell in the M phase was fused with a cell in G_1 , the G_1 nucleus immediately began mitosis—a spindle formed and chromatin condensed, even though the chromosome had not been duplicated.



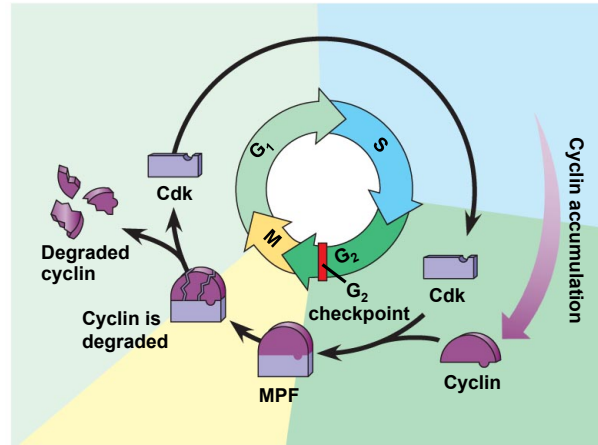
13



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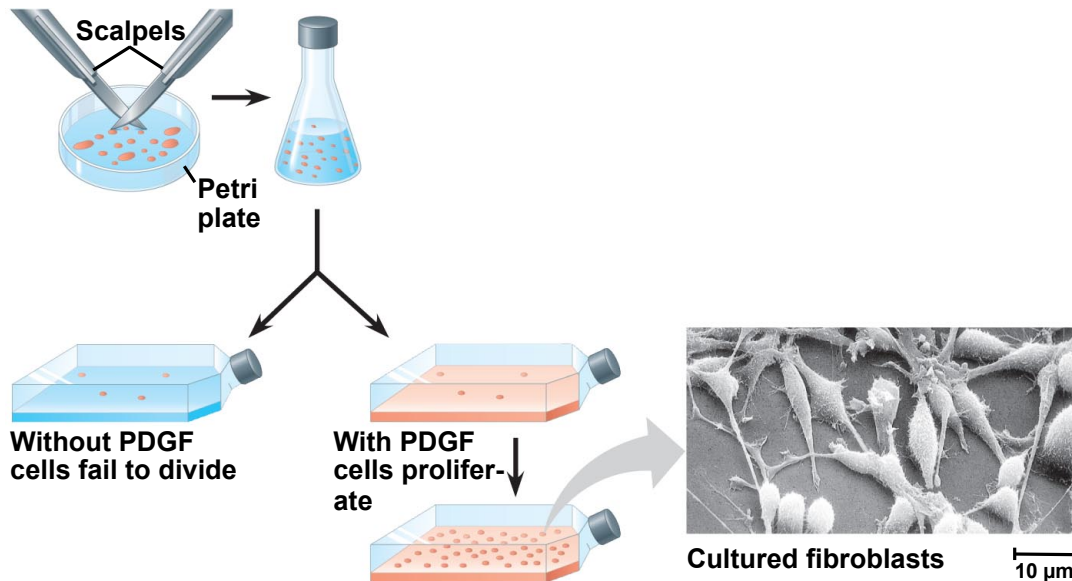


(a) Fluctuation of MPF activity and cyclin concentration during the cell cycle



(b) Molecular mechanisms that help regulate the cell cycle

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