

OUTLINE 8

VIII. THE CELL CYCLE

A. The Prokaryotic Cell Cycle

B. The Eukaryotic Cell Cycle

1. Interphase

a. G1 phase

b. S phase

c. G2 phase

2. Mitosis - Cytokinesis

C. Control of the Cell Cycle

1. Two early hypotheses

2. Experimental evidence

3. Cytoplasmic signal molecules

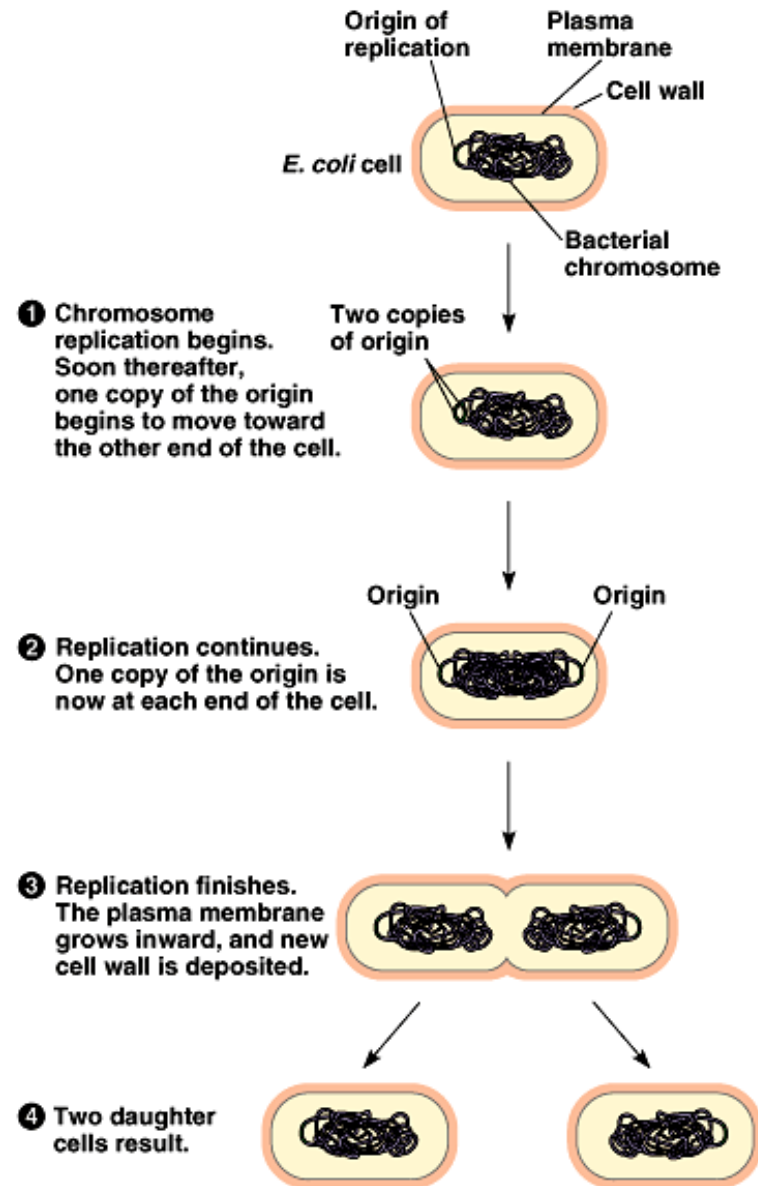
a. Cyclins

b. Cdk

4. Example of control of cell cycle

Fig. 12.10

The Prokaryotic Cell Cycle



The Eukaryotic Cell Cycle

Fig. 12.4

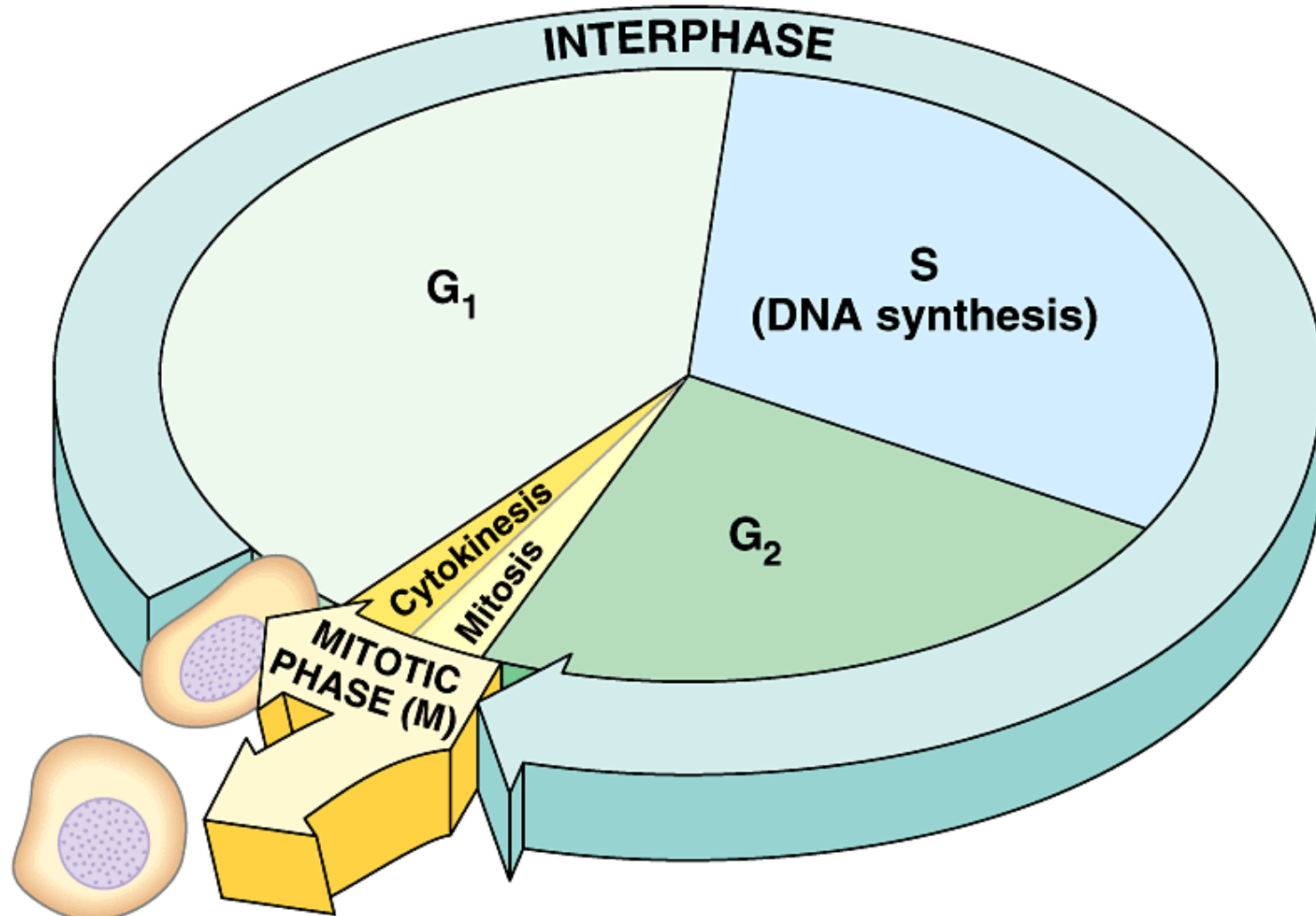
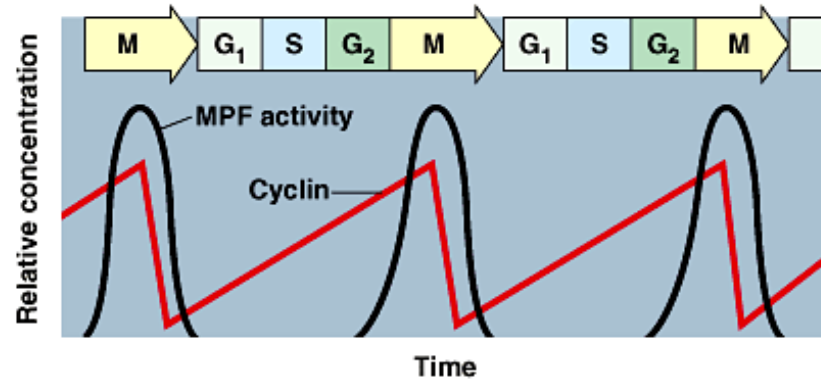
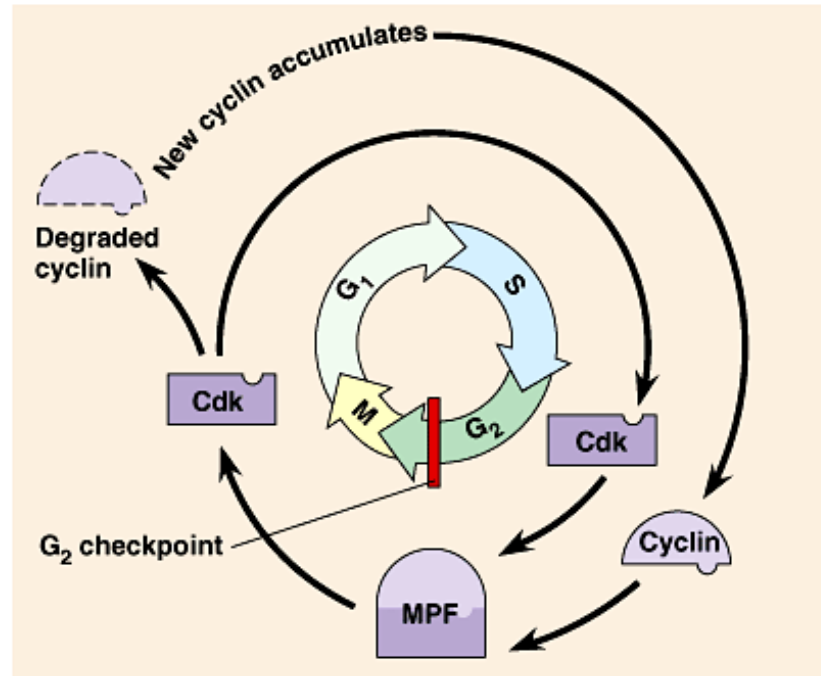


Fig. 12.14

Control of the Eukaryotic Cell Cycle



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



(b) Molecular mechanisms

Fig. 12.12

Results of a cell fusion experiment

