

Interphase



- DNA begins to duplicate
- Developing
 - making more cytoplasm
 - making more organelles
- Growing cell getting bigger

n - mitochondria

l - vacuole

- lysosome

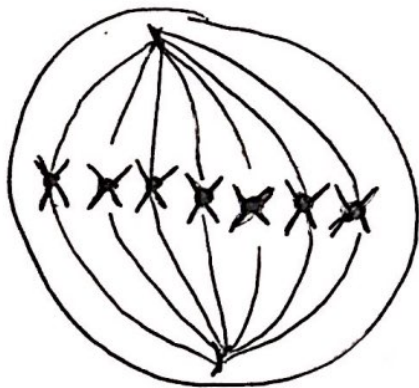
er - endoplasmic reticulum

gb - golgi body

> single chromatid

x - sister chromatid

Mitosis - Meta phase



- DNA move toward center of cell

Spindle fibers attach to centromeres

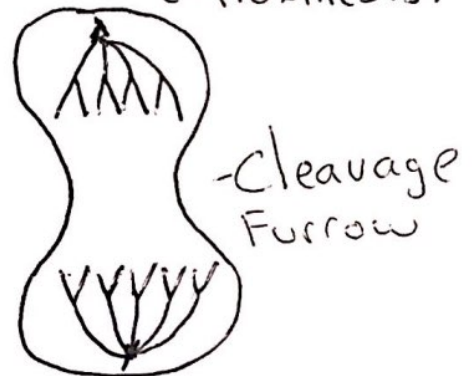
Phase is over as soon as chromosomes begin

Mitosis - Prophase



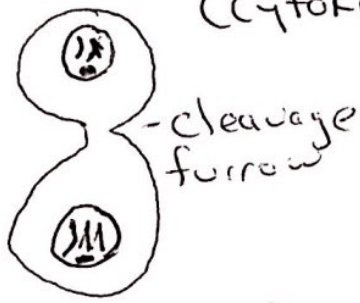
- All organelles made
- Nuclear membrane dissolves
- All DNA duplicated
- Centrioles form and move toward poles
- Spindles begin to form
- Chromosomes begin to flow into cytoplasm

Mitosis - Anaphase (cytokinesis)



- Separated chromatid move toward centrioles
- Spindle fibers retract
- Chromatids move toward centrioles
- cell membrane begins to "pinch"

Mitosis - Telophase (Cytokinesis)

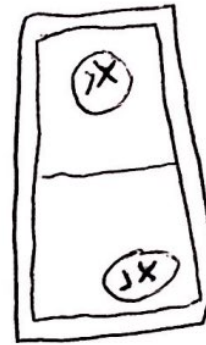
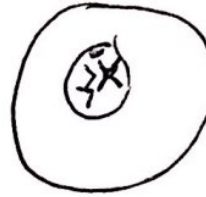


- Nuclear membranes form
- Nuclei form
- Chromatid begin to straighten
- Nucleolus begin to form
- Cell membrane pinches in more

Cytokinesis



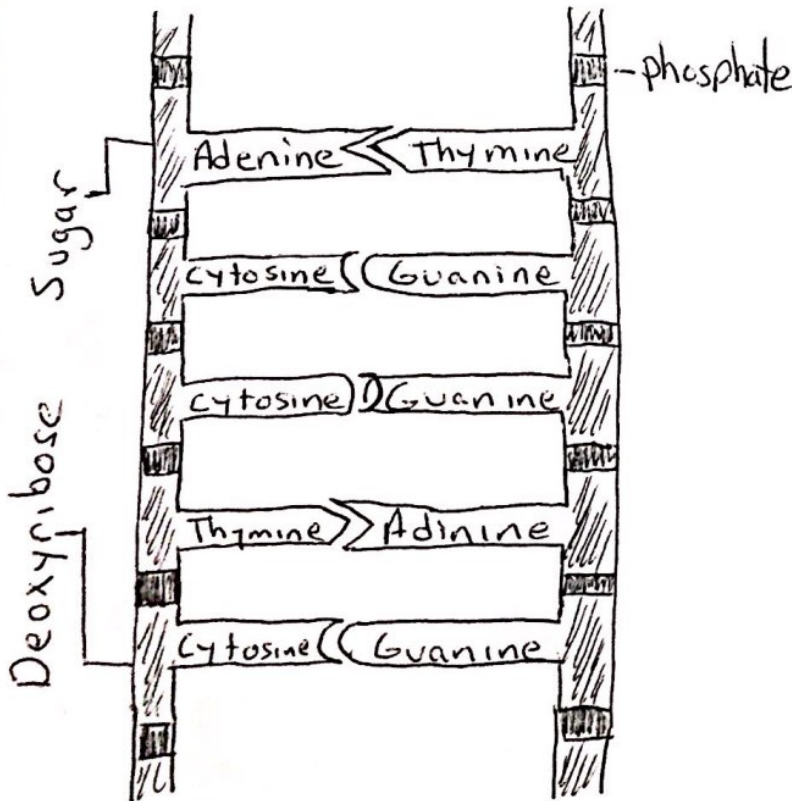
- 2 daughter cells
- Nuclei and structures grow and develop
- Interphase begins



- too rigid for cell wall to "pinch" in
- cell plate forms to separate daughter cells

Know This

DNA Duplication



DNA Duplication

(not for 7th grade)

