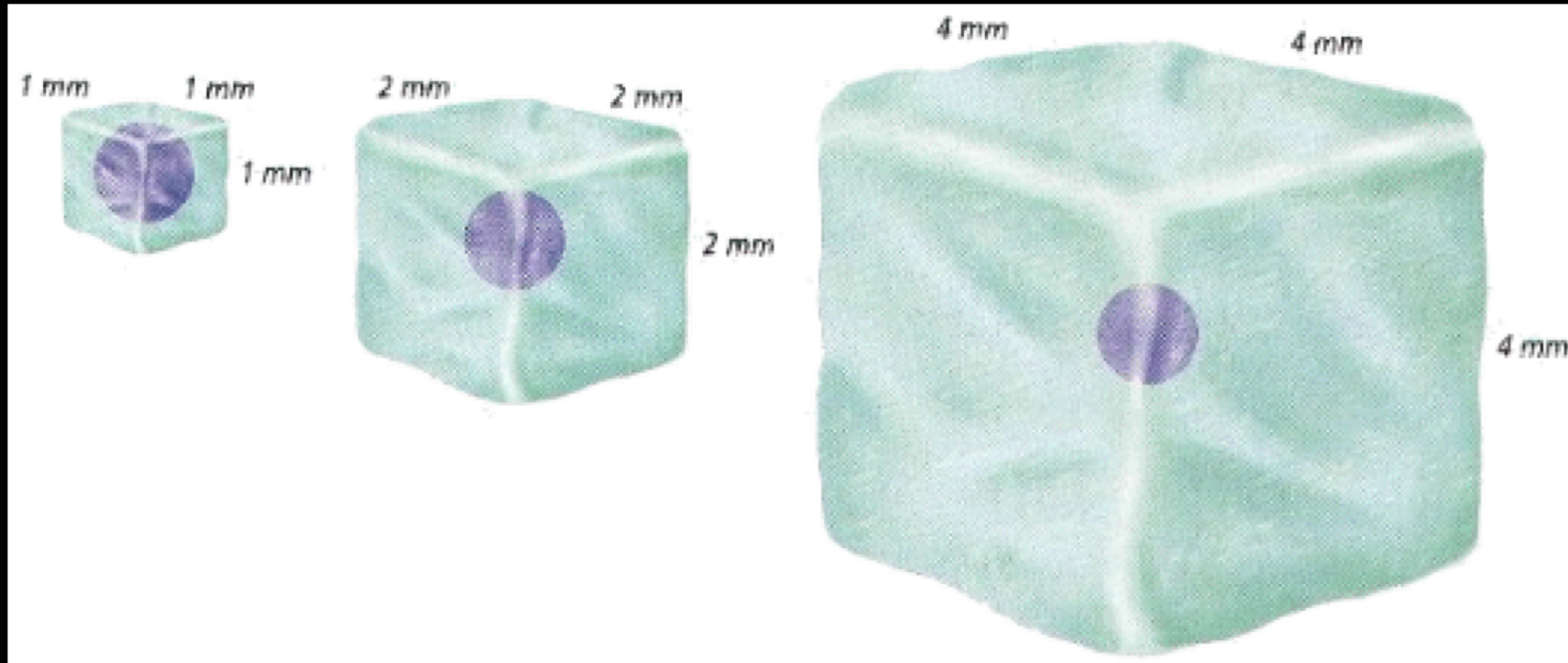


Ch 11.1 & 11.2: Cell Growth, Division & Reproduction

Essential Questions:

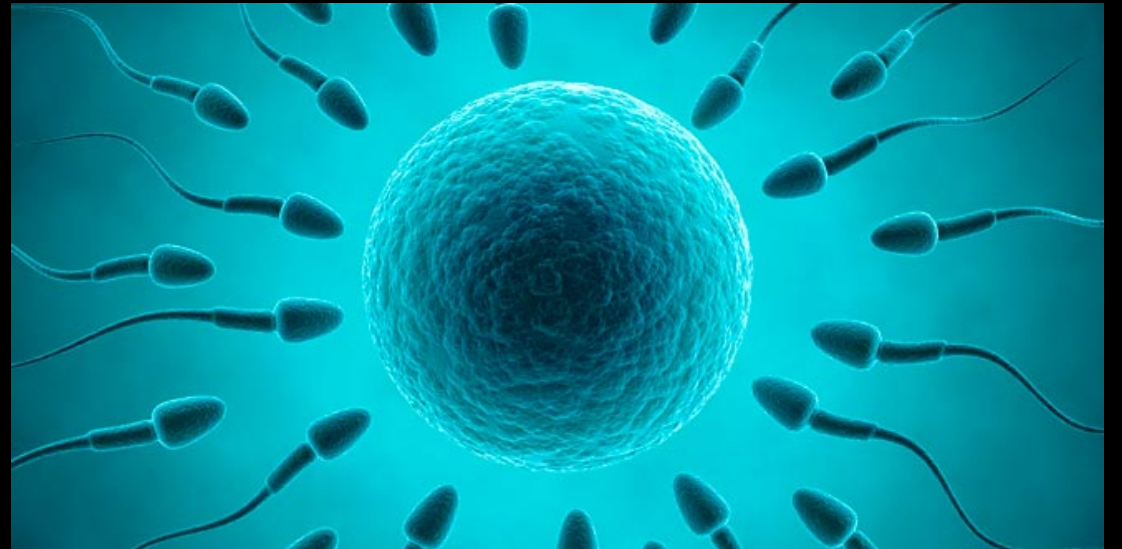
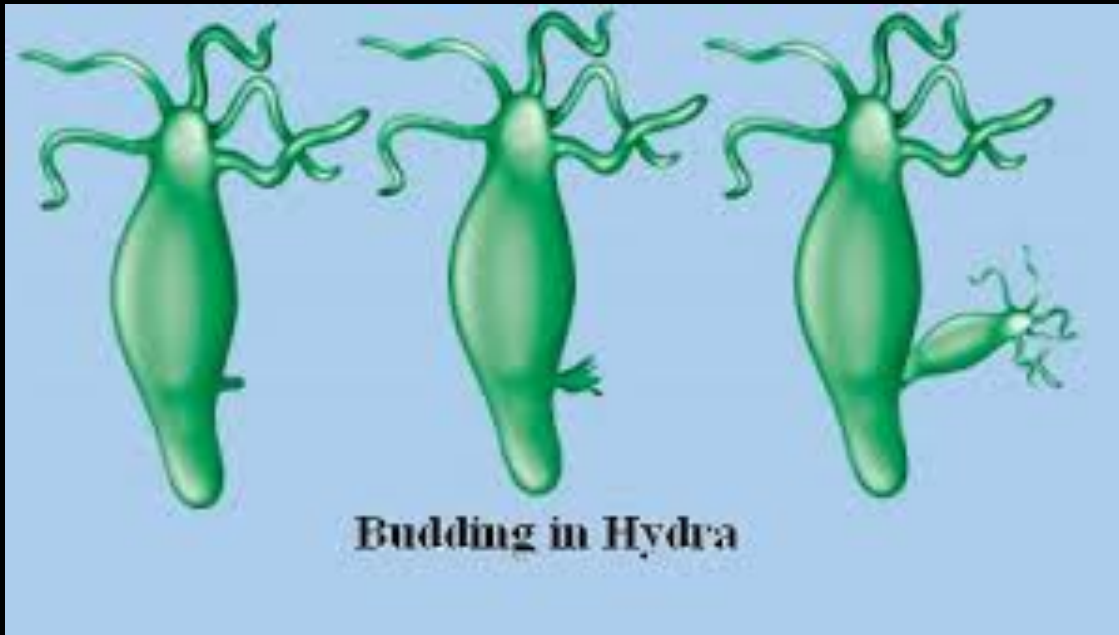
- What problems does growth cause for cells?
- How do asexual & sexual reproduction compare?
- What is the role of chromosomes in cell division?
- What are the main events of the cell cycle?
- What happens during the phases of mitosis?
- How do the daughter cells split apart after mitosis?

- Limits to cell size
 - Problem of size
 - Ratio of surface area to volume
 - Traffic problems
 - Information overload
 - Cell division

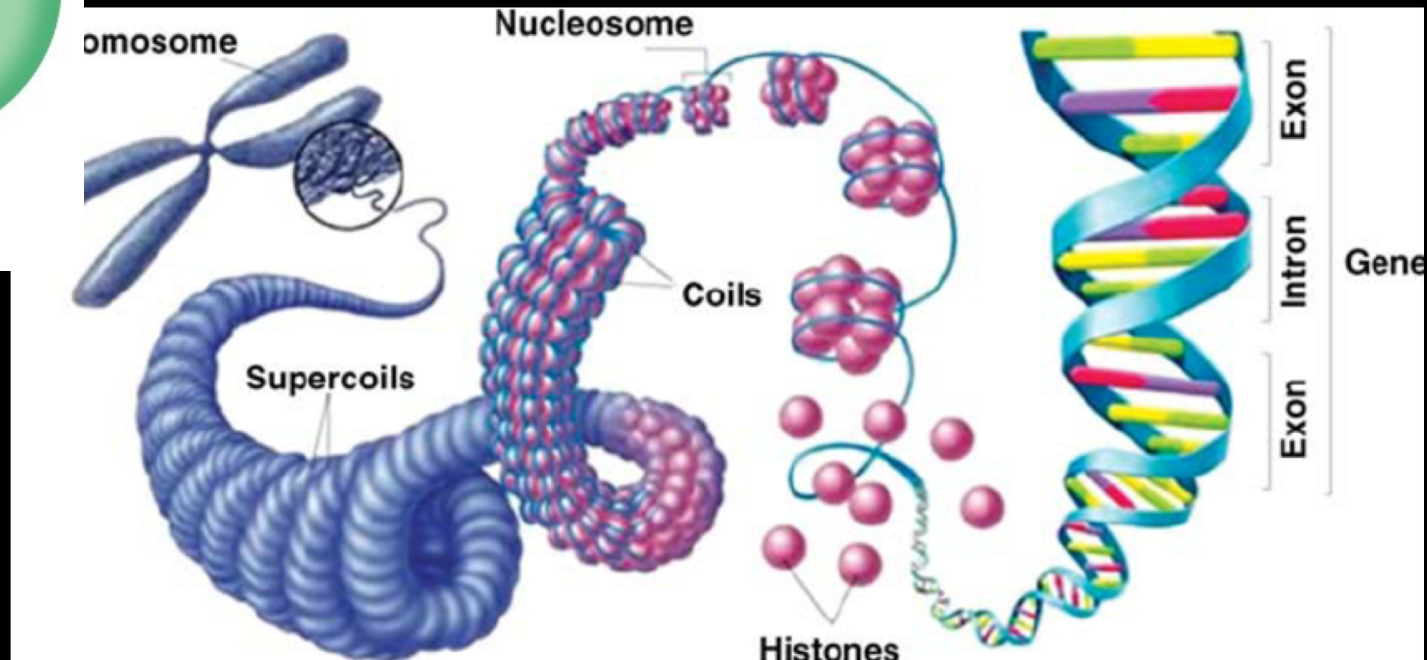
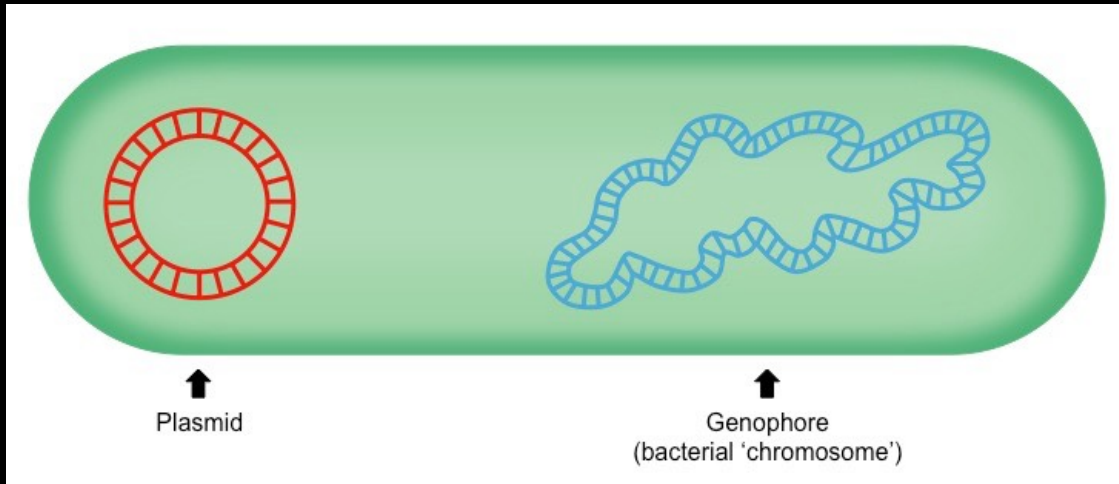


- Cell Division & Reproduction

- Asexual reproduction
- Sexual reproduction
- Comparing asexual & sexual reproduction

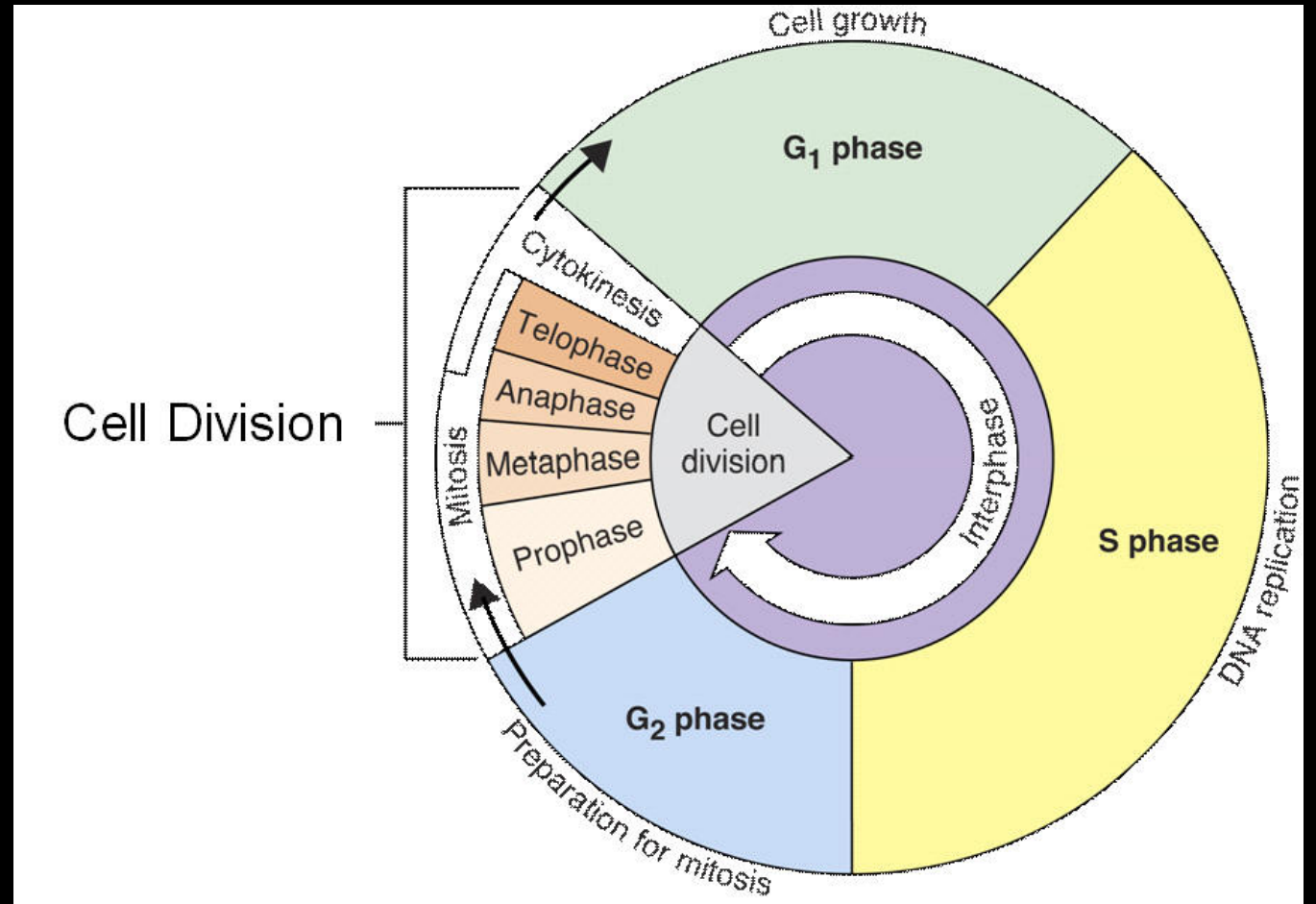


- Chromosomes
 - Prokaryotic chromosomes
 - Eukaryotic chromosomes
 - chromatin

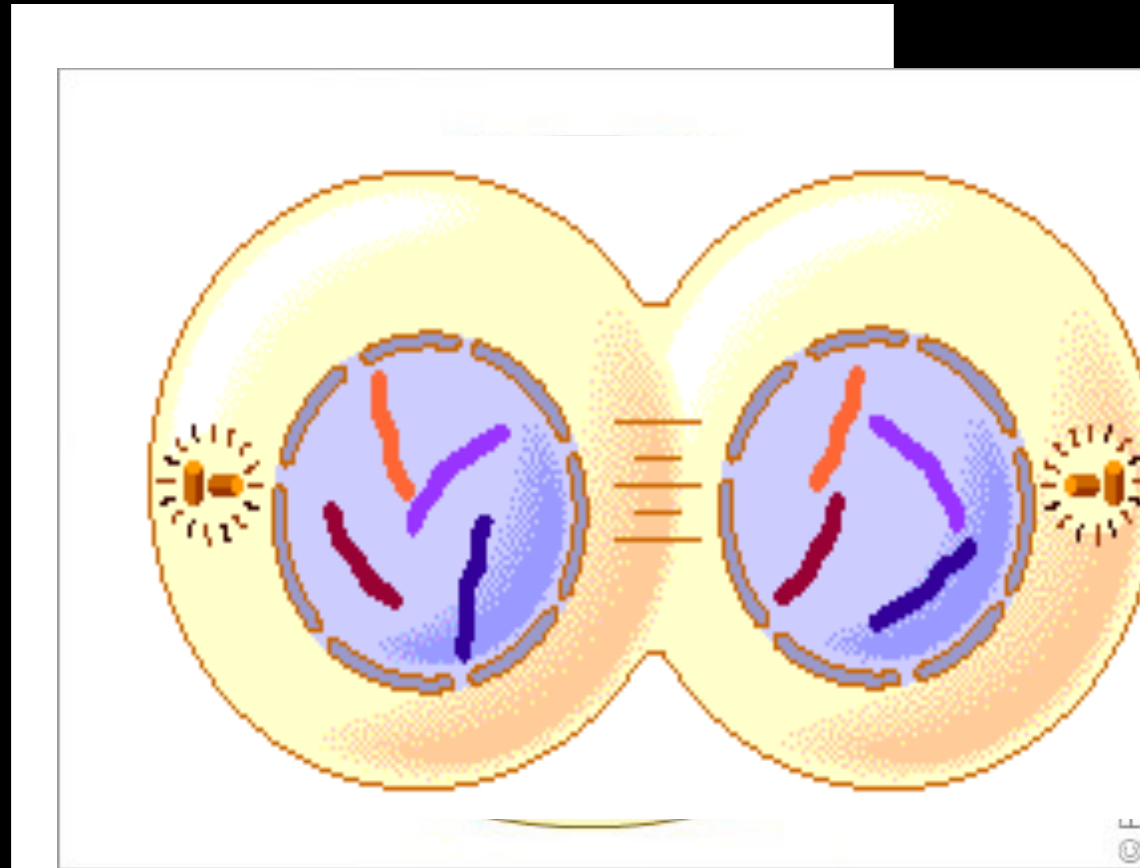


- The Cell Cycle

- Prokaryotic cell cycle
- Eukaryotic cell cycle
 - Interphase
 - G₁: cell growth
 - S: DNA replication
 - G₂: prep for cell division
 - M: cell division



- Mitosis
 - Prophase
 - Chromatids
 - Centromere
 - Centrioles
 - Metaphase
 - Anaphase
 - Telophase



Telophase

The chromosomes are at the poles, and are becoming more diffuse. The nuclear envelope is reforming. The cytoplasm may be dividing.

- Cytokinesis
 - In animal cells
 - In plant cells

