

## Chapter 11 Test – What to Know

- Cell size – why aren't cells large?
- Cell cycle
  - Definition
  - Names of all 4 phases of the cell cycle and the order in which they occur
  - Main event of each
  - Be able to label a diagram of the cell cycle
- Mitosis
  - Definition
  - Names of 4 phases and the order in which they occur
  - Main events of the 4 phases
  - Be able to label sketches of 4 phases of mitosis
  - Cytokinesis
    - Definition
    - How it happens in animal cells
    - How it happens in plant cells
- DNA
  - How is DNA in daughter cells related to the “parent” cell?
  - How is DNA in daughter cells related to each other?
- Chromosomes
  - Structure – centromere, sister chromatids
- Cell structures in mitosis
  - Centrioles
  - Spindles
- Distinguish between cell cycle and mitosis
- Distinguish between mitosis and cytokinesis
- Apoptosis
  - Definition
  - Problem with excessive rates of
- Cancer
  - Definition
  - Tumor – define
  - Why understanding cell cycle is critical to fighting cancer
- Cell differentiation
  - Definition
  - Stem cells
    - Definition
    - Adult vs. embryonic
    - Why stem cell research is controversial