



Cell Cycle



- ◆ Represents the sequence of cellular growth and division during the life of an organism.



Interphase



- ◆ Includes the first 3 phases of the cycle. A cell spends 90% of its time in interphase.



First growth (G_1) phase



- ◆ Cell grows rapidly
- ◆ Carries out its routine functions.



Synthesis (S) Phase



- ◆ DNA is copied
- ◆ Each chromosome consists of two chromatids attached at the centromere.



First growth (G_2) phase



- ◆ Preparations are made for the nucleus to divide.
- ◆ Microtubules are arranged in preparation for mitosis.



Mitosis



- ◆ Nucleus of a cell divides into two nuclei.
- ◆ Each nucleus ends up with the same number and kinds of chromosomes.



Cytokinesis



- ◆ Process during cell division when the cytoplasm divides.