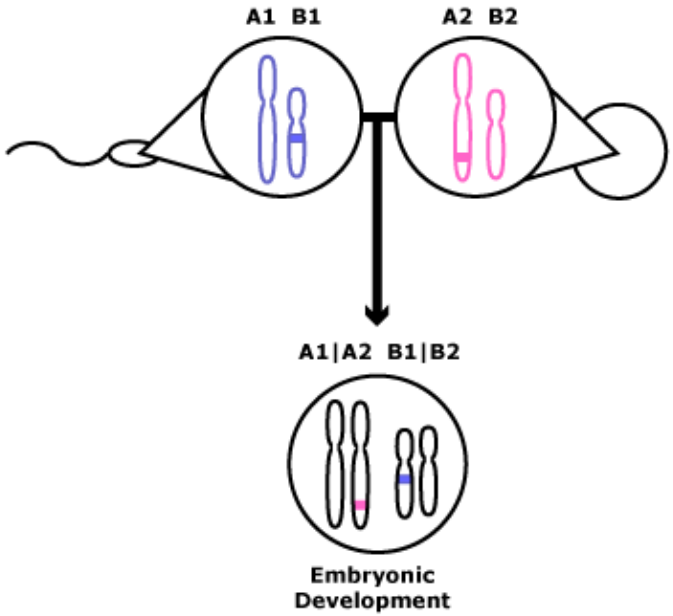
Meiosis

A Few Definitions/Facts:

Homologous , diploid, haploid

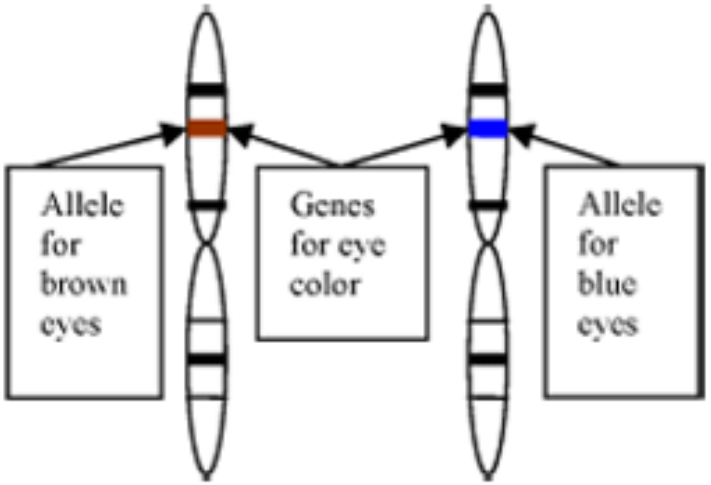
- We have 46 c/s in our body , 23 pairs
- Matching pairs are known as homologous c/s
- Diploid (2N): each of our cells have a diploid #
- Haploid (N): gamete cells have half the amount of c/s



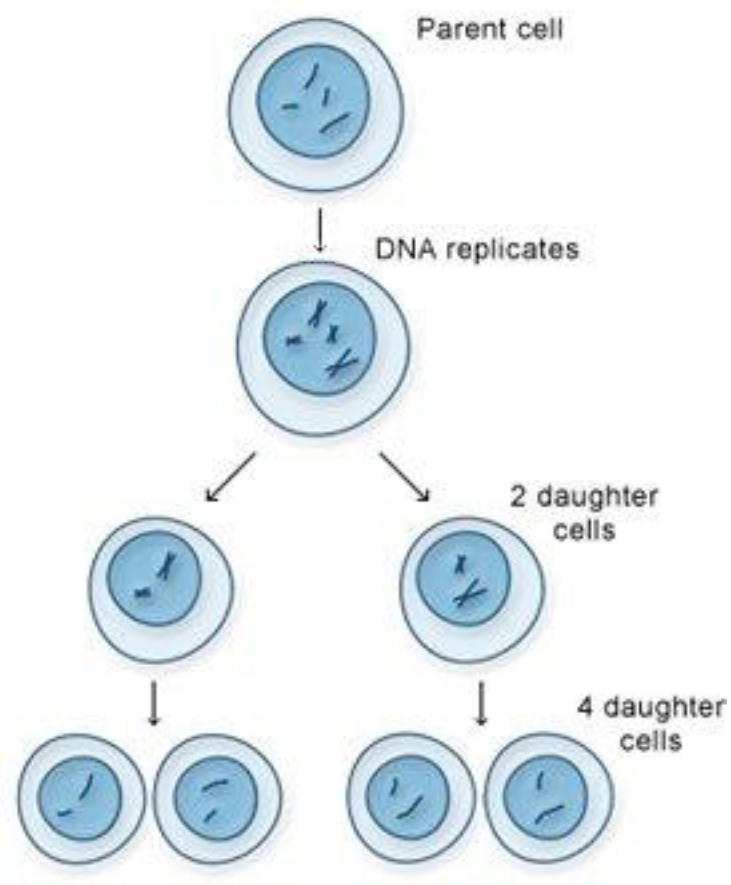
A Few Definitions/Facts (cont):

Genes vs. Alleles

- Genes and alleles are on c/s
- A gene would be eye color
- An allele would be blue, brown, green, etc.

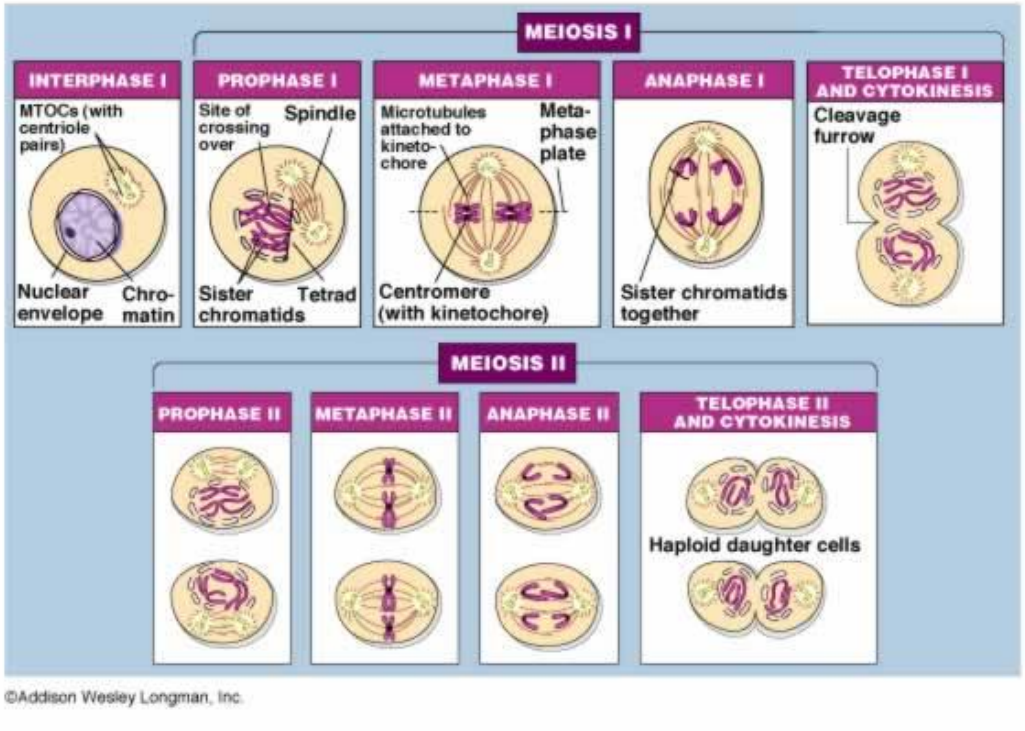


Meiosis: # of c/s per cell is cut in half by separating homologous c/s in a diploid cell



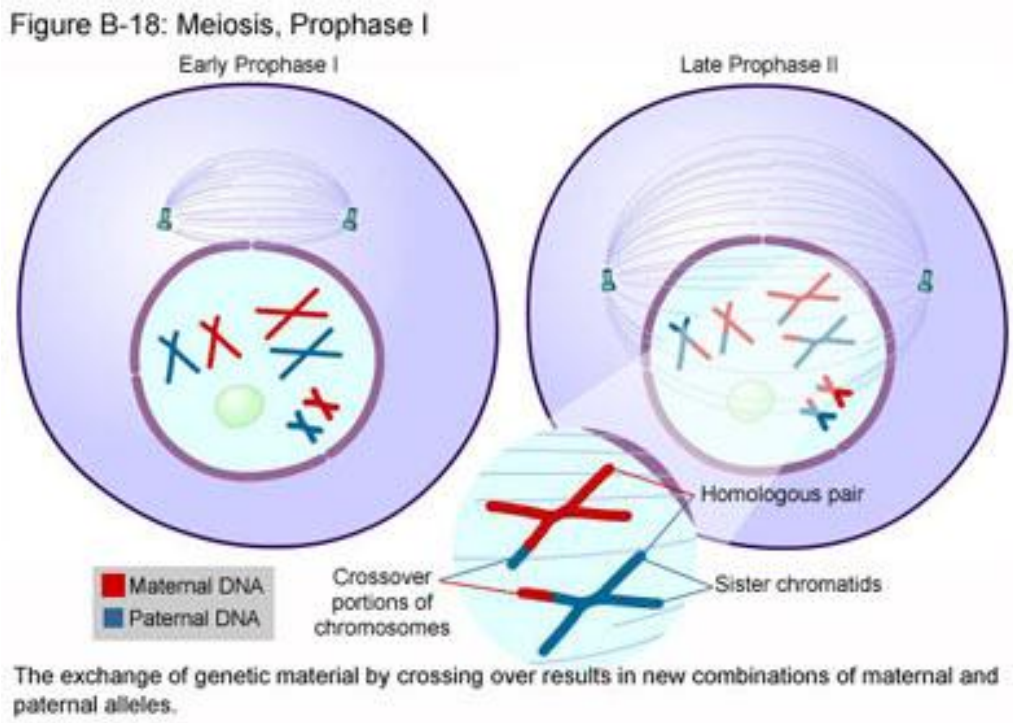
Interphase I

- Look on page 276
- DNA Replication



Meiosis I - prophase I

- Homologous c/s pair up (crossing over may occur)
- Spindle fibers form
- Nuclear envelope breaks down
- Centrioles move to opposite sides

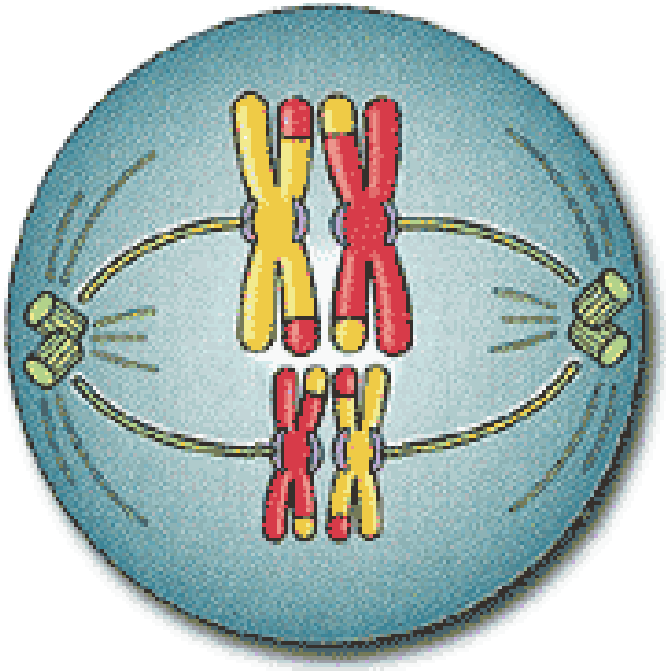


Meiosis I – metaphase I

- Homologous c/s line up at the center

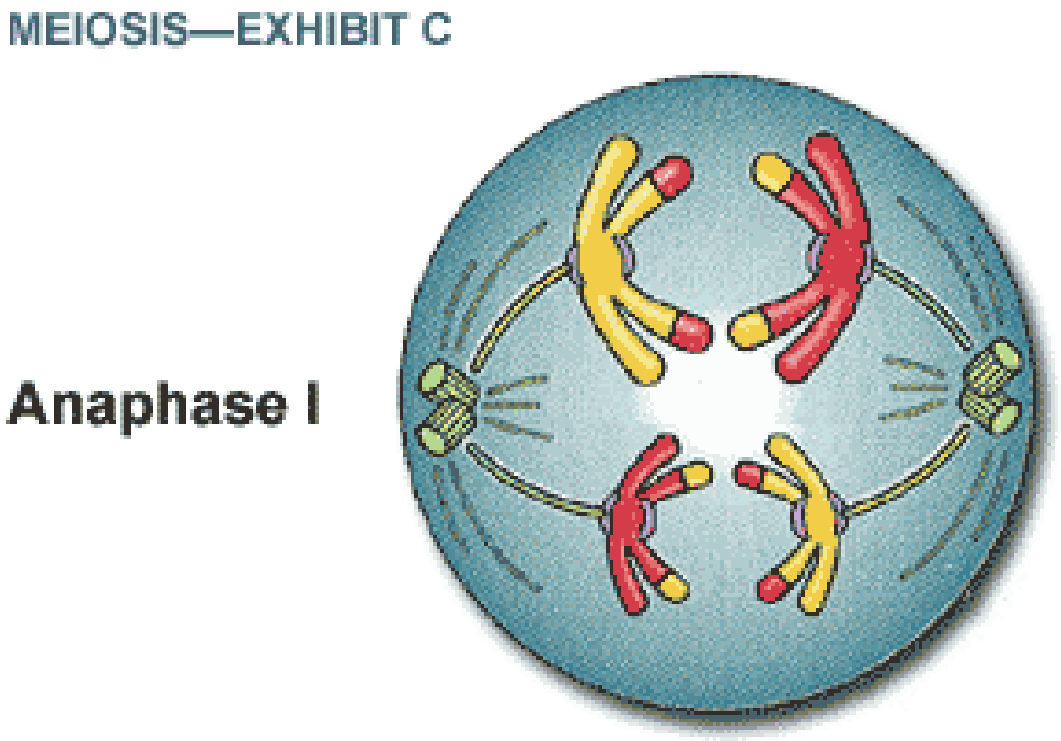
MEIOSIS—EXHIBIT B

Metaphase I



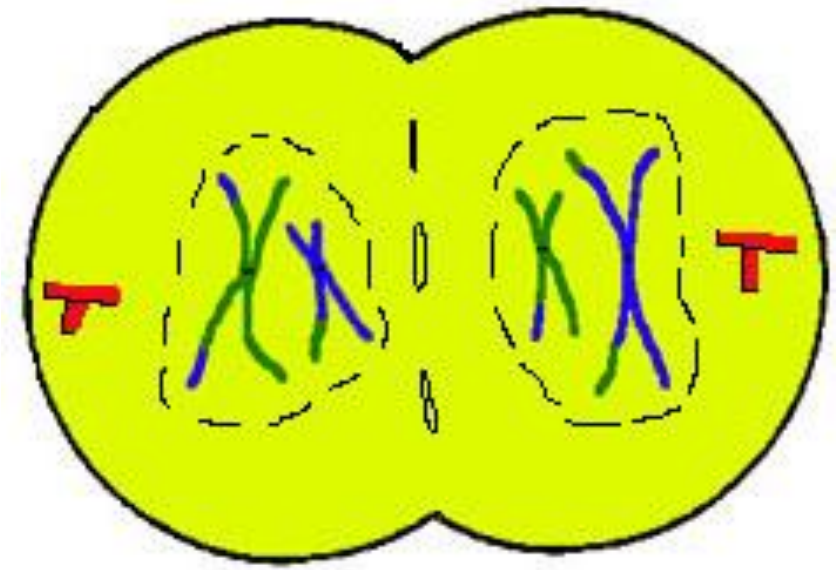
Meiosis I – Anaphase I

- Homologous c/s separate

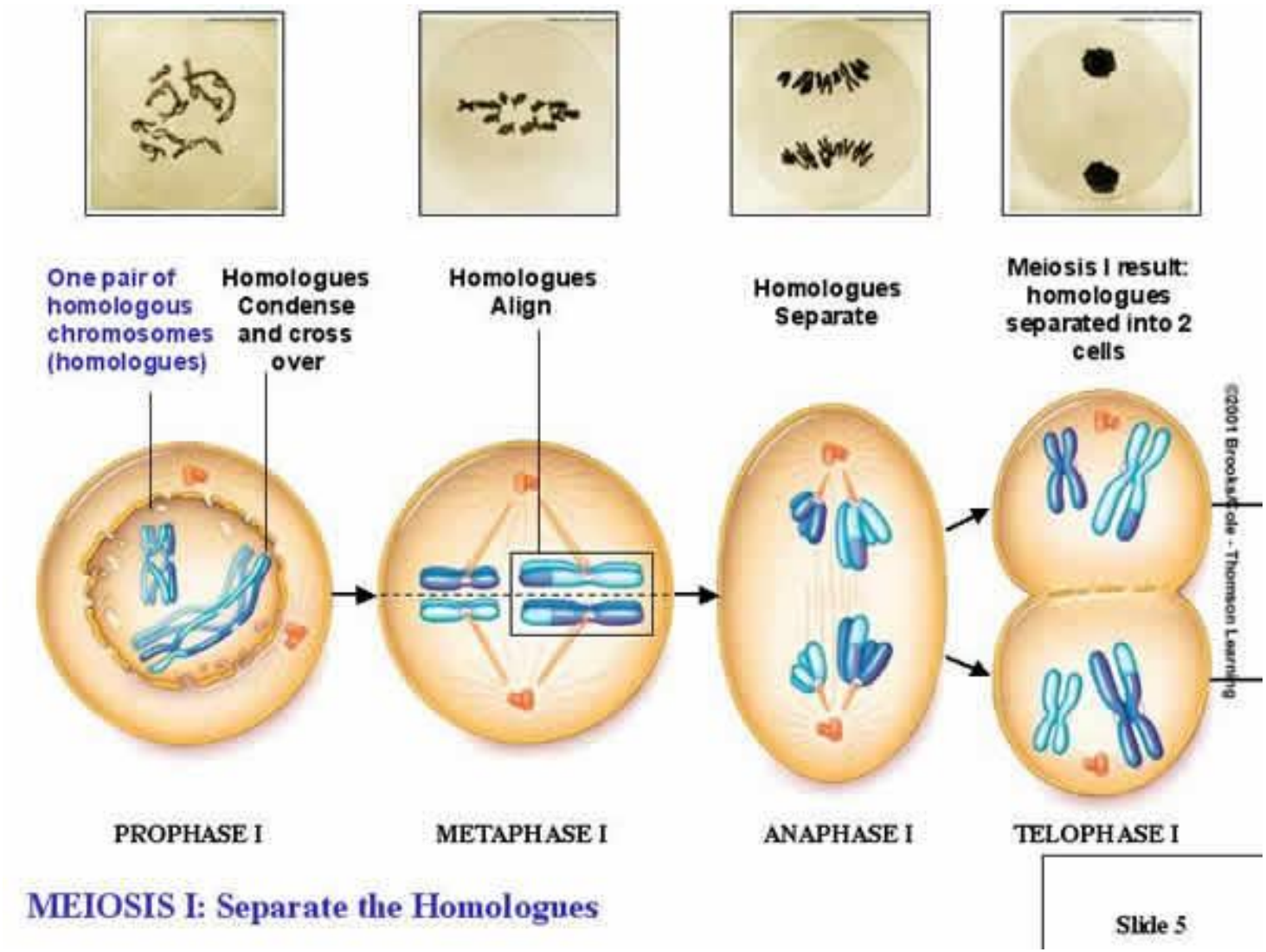


Meiosis I – Telophase I

- The cell is just waiting for the cytoplasm to split
- Nuclei reform

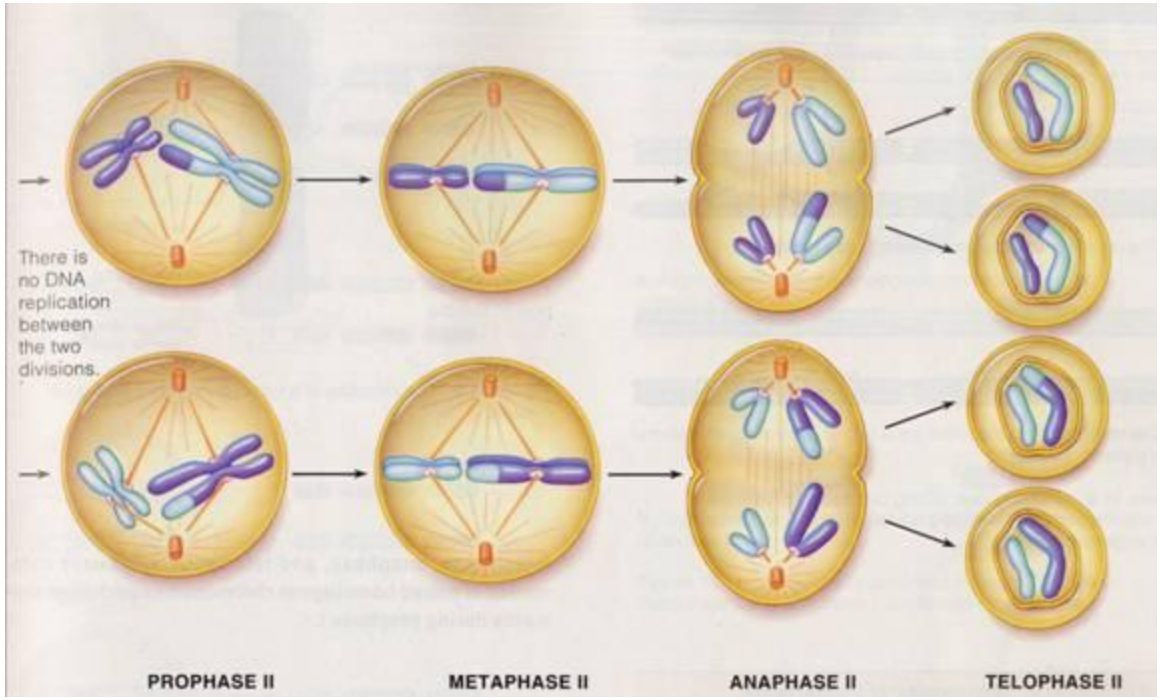


Summary of Meiosis I



Meiosis II-exactly the same as mitosis except….

- The cells only have half the # of c/s at the end



Differences Between Mitosis and Meiosis: