

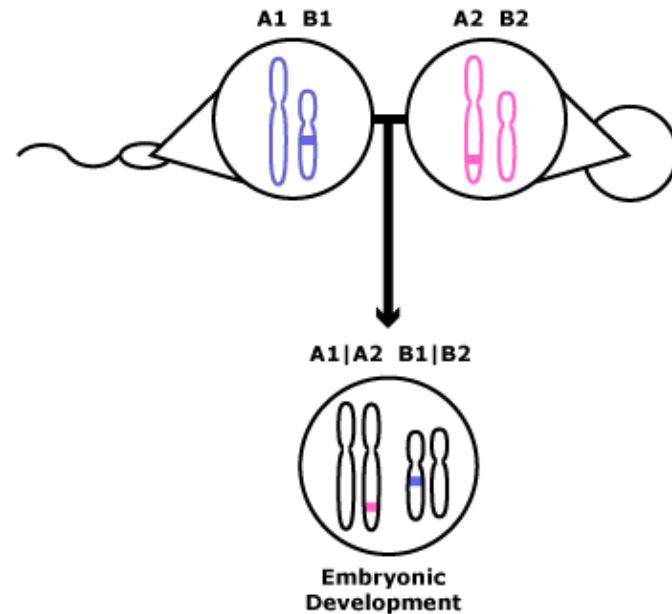


MEIOSIS

A FEW DEFINITIONS/FACTS:

Homologous , diploid,
haploid

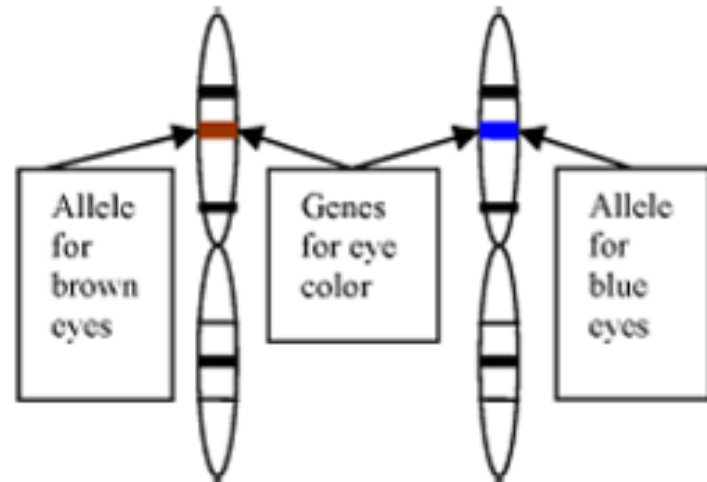
- We have 46 c/s in our body , 23 pairs
- Matching pairs are known as homologous c/s
- Diploid (2N): each of our cells have a diploid #
- Haploid (N): gamete cells have half the amount of c/s



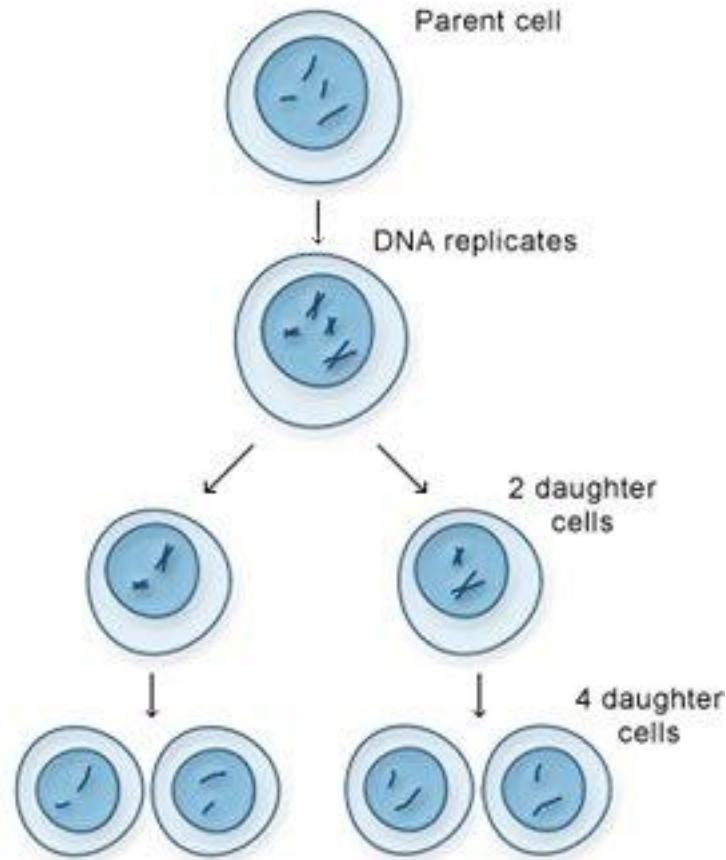
A FEW DEFINITIONS/FACTS (CONT):

Genes vs. Alleles

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

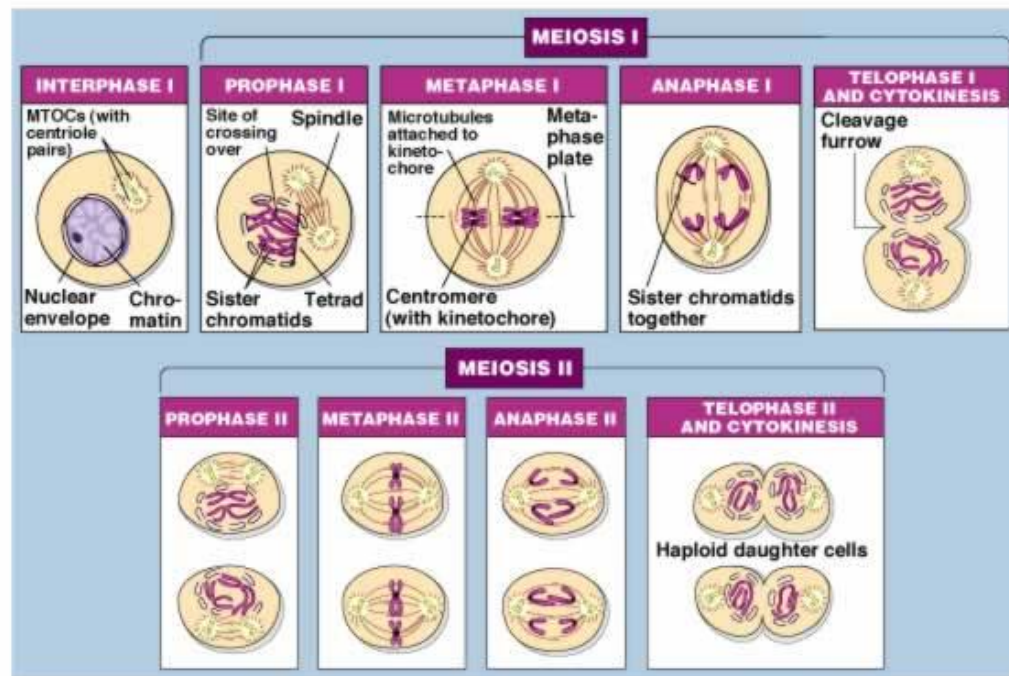


MEIOSIS: # OF C/S PER CELL IS CUT IN HALF BY SEPARATING HOMOLOGOUS C/S IN A DIPLOID CELL



INTERPHASE I

- Look on page 276
- DNA Replication



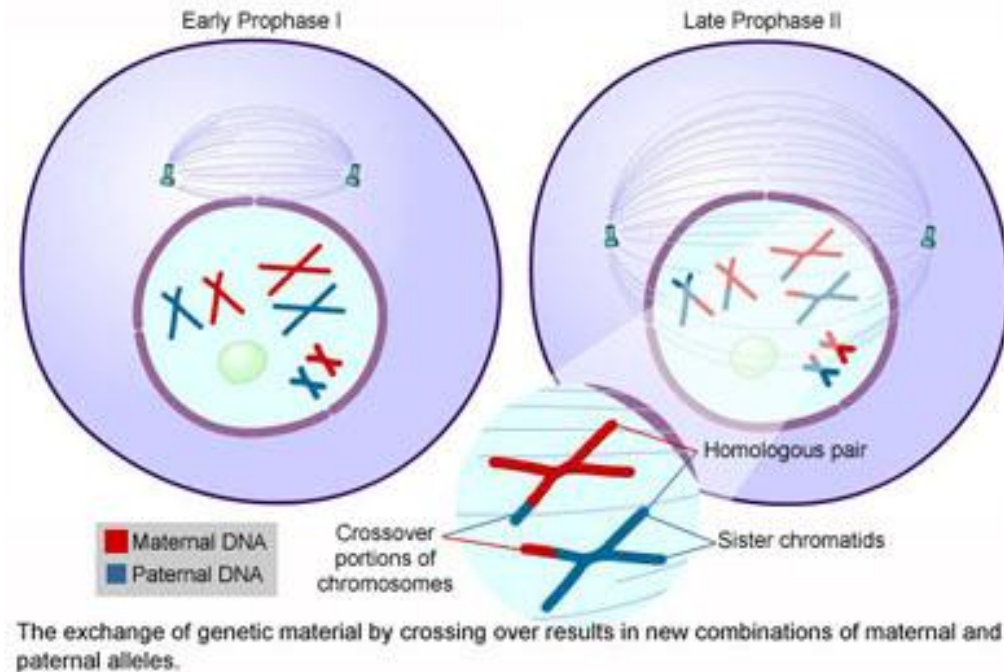
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MEIOSIS I - PROPHASE I

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

Figure B-18: Meiosis, Prophase I

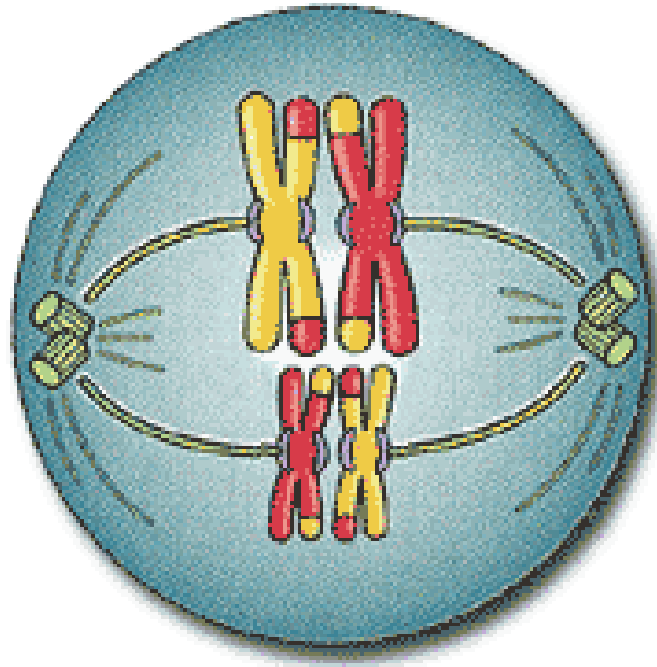


MEIOSIS I – METAPHASE I

- Homologous c/s line up at the center

MEIOSIS—EXHIBIT B

Metaphase I

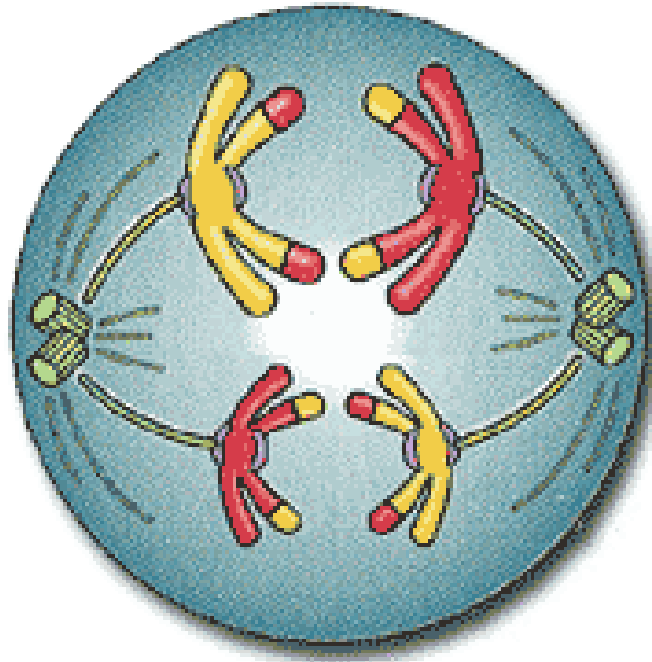


MEIOSIS I – ANAPHASE I

- Homologous c/s separate

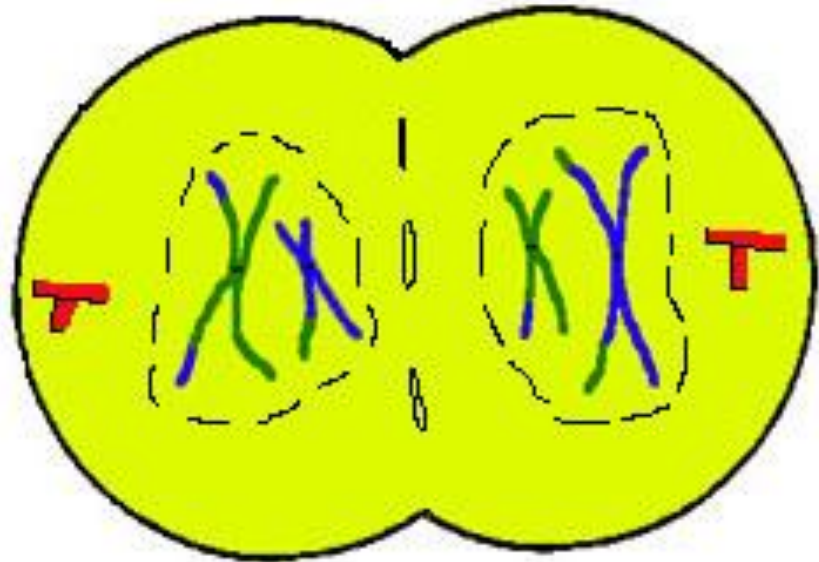
MEIOSIS—EXHIBIT C

Anaphase I

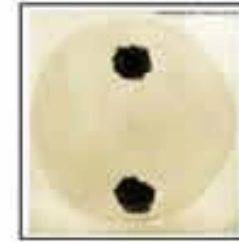
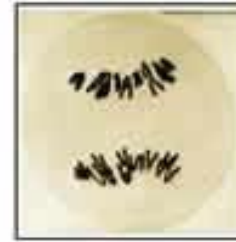
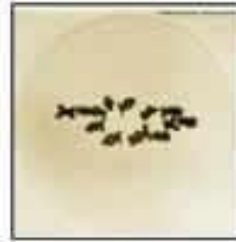


MEIOSIS I – TELOPHASE I

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



SUMMARY OF MEIOSIS I



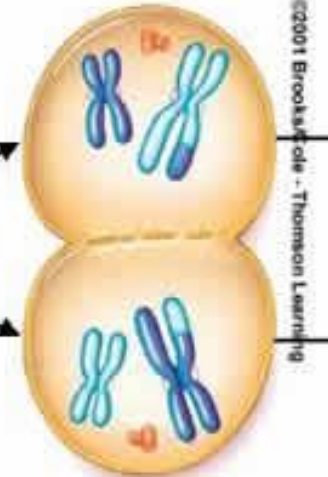
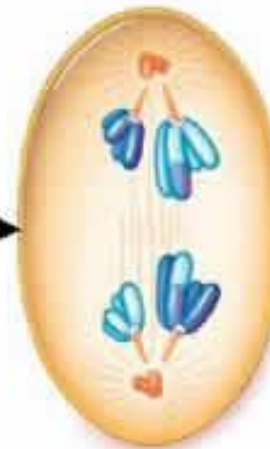
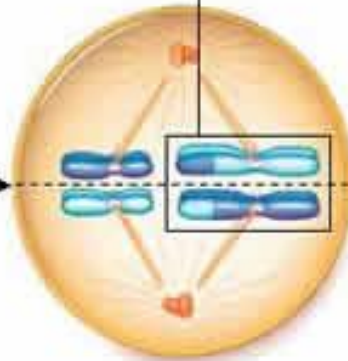
One pair of homologous chromosomes (homologues)

Homologues Condense and cross over

Homologues Align

Homologues Separate

Meiosis I result: homologues separated into 2 cells



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PROPHASE I

METAPHASE I

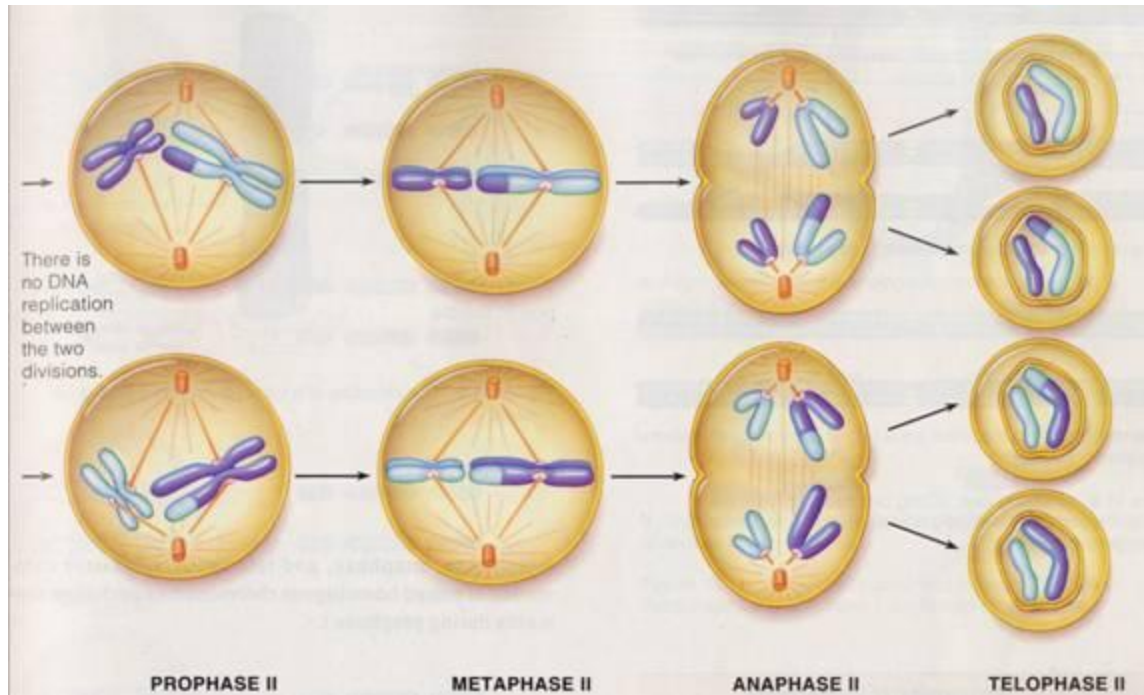
ANAPHASE I

TELOPHASE I

MEIOSIS I: Separate the Homologues

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:

