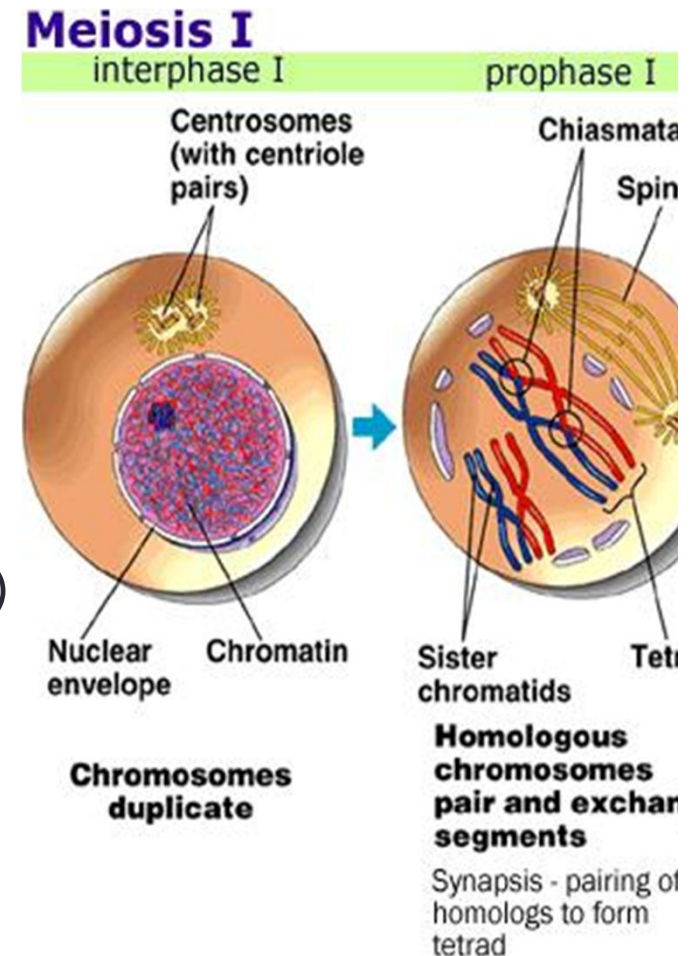


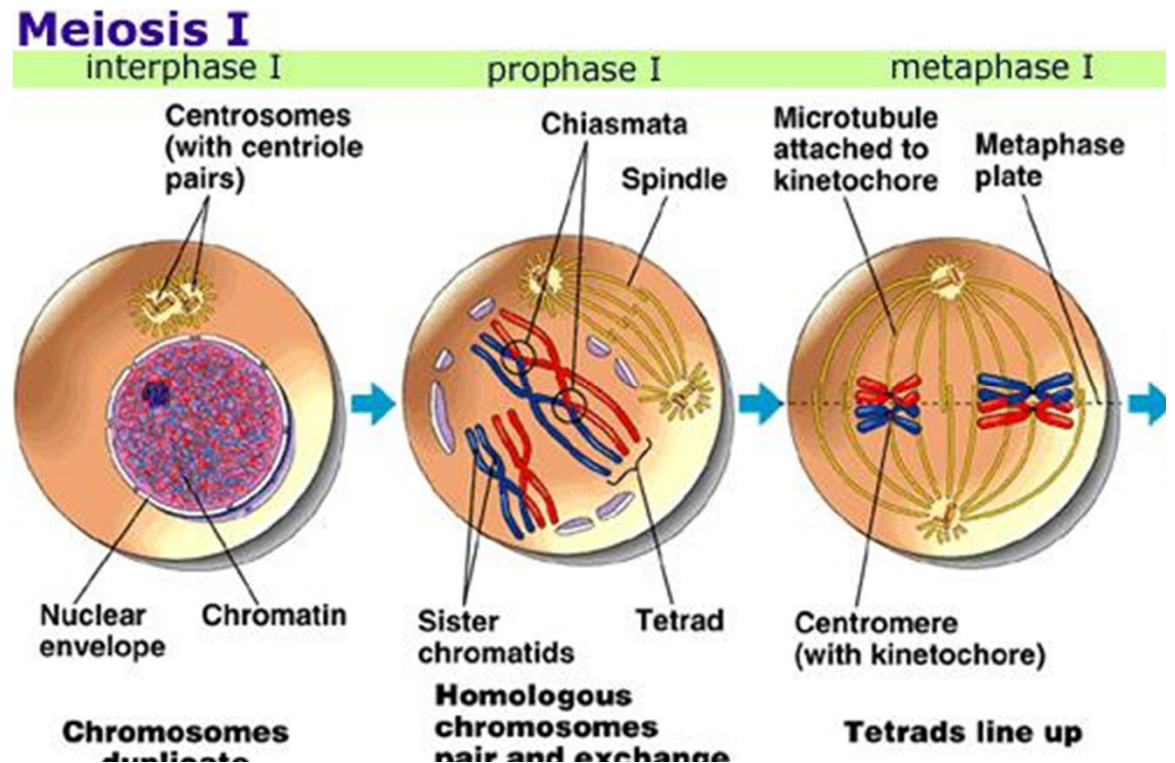
Meiosis I

- Interphase
 - Carry out normal cell processes
 - Replicate DNA
 - Make proteins
- Prophase I
 - Replicated chromosomes become visible
 - Homologous chromosomes condense
 - **Synapsis** – form chromosome pairs (tetrad)
 - **crossing over** – segments of chromosomes are exchanged between homologous chromosomes



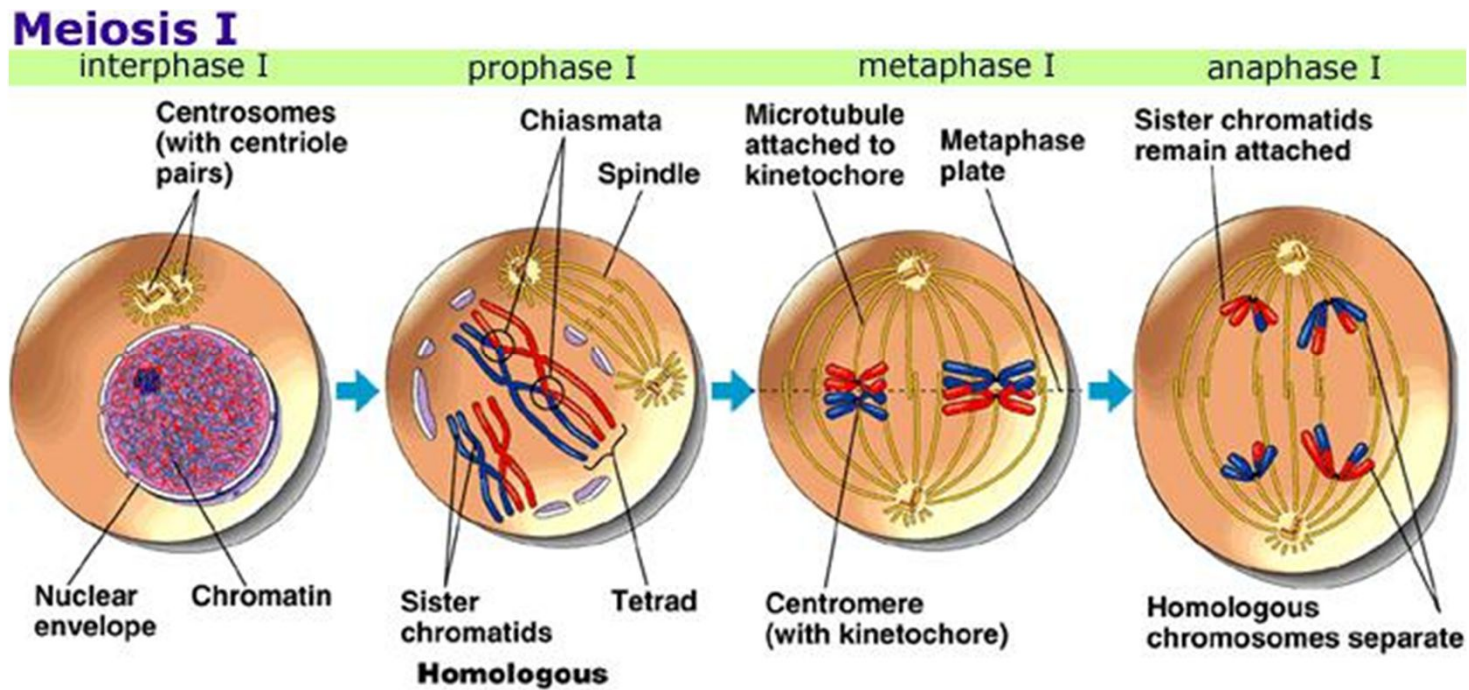
Meiosis I

- Metaphase I
 - Homologous chromosomes line up at the middle of the cell
 - Spindles attach to the centromere of each chromosome
 - Lined up as PAIRS, not in one line like mitosis



Meiosis I

- Anaphase I
 - Homologous chromosomes separate
 - Each one moves towards the poles using spindle fibers
 - Chromosome number reduces from $2n$ to n when they separate
 - Still consists of sister chromatids,



Meiosis I

- Telophase I
 - Chromosomes made of sister chromatids reach the poles
 - Each pole has one member of original pair
 - Still consists of sister chromatids joined at a centromere
 - Sister chromatids might not be identical due to crossing over
 - Cytokinesis occurs pinching the cells in two
 - Cells now can enter Meiosis II

