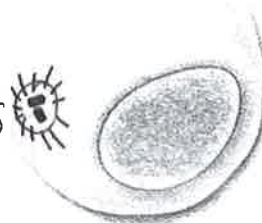


Phases of Meiosis

Interphase

centrioles



Animal cell
DNA is replicated
but not visible.

MEIOSIS I

Prophase I

Spindle formation

Diploid cell

$$2n=4$$

Tetrad

Pair of homologous chromosomes.

can swap alleles

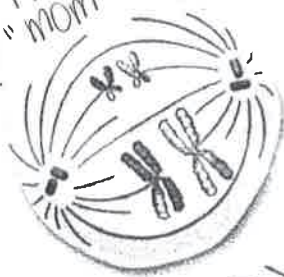
Crossing-Over or genes

"n" represents # found in egg or sperm

From "dad"

From "mom"

Metaphase I

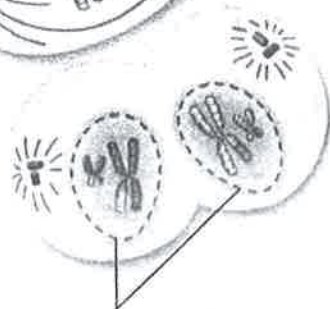


Lines up along center paired with homologous chromosome.

Anaphase I



Telophase I and Cytokinesis



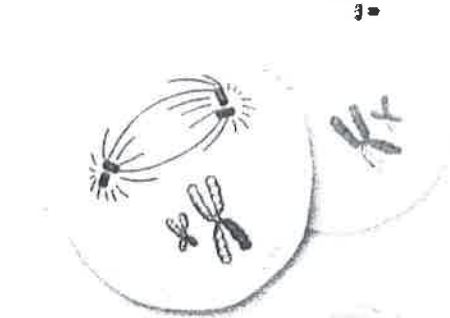
Nuclear membranes

Genes that are closer together on a chromosome tend to be inherited together or are linked

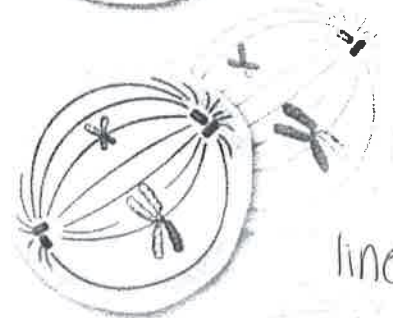


Two Cells With Two Replicated Chromosomes

MEIOSIS II



Prophase II



Metaphase II

All chromosomes are in a single line along the center.



Anaphase II

Sister chromatids separate.



Telophase II and Cytokinesis

Cells are haploid

$n = 2$

Four Haploid Daughter Cells

From one diploid cell at the start.

Meiosis II functions like mitosis.