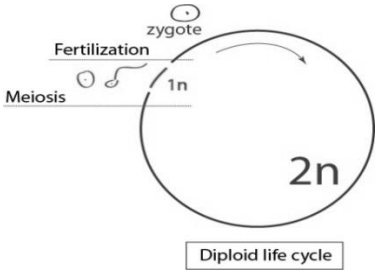
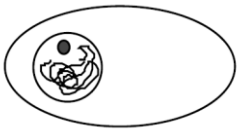
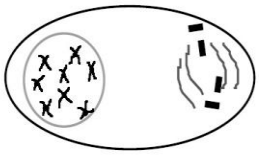
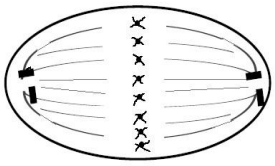
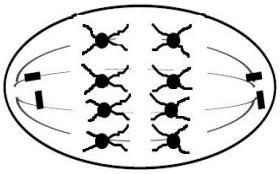
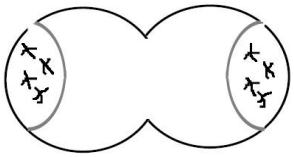
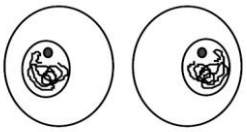
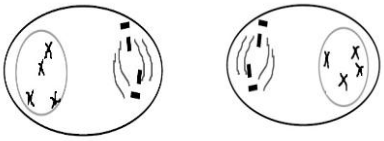
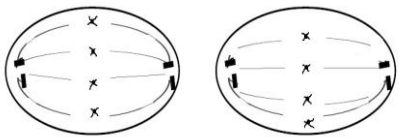
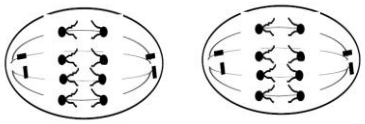
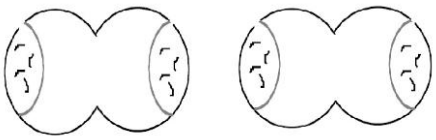
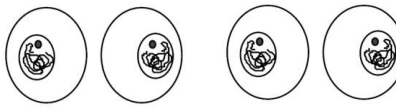
Meiosis



Interphase 	• DNA is replicated • Each chromosome duplicates to become 2 sister chromatids, but they are loosely coiled, so not visible yet.
Prophase I 	• Nuclear envelope disintegrates. • Chromosome start to become visible because they coil, shorten & thicken (condense). • Centrioles (in animal cells) begin to make spindle fibers to move the chromosomes around. • Homologous chromosomes pair (synapsis) up to form bivalents. • They swap portions of chromatid at crossing-over
Metaphase I 	• Bivalents move to the center of the cell along protein tubules called spindle fibers. • They line up on the equator of the spindle fibers.
Anaphase I 	• Spindle fibers contract and pull the chromosome pairs apart.

Telophase I 	• Chromosomes arrive at the poles of the cell • The cell divides into two
Cytokinesis 	• Physical process of cell division, which divides the cytoplasm of a parental cell into two daughter cells.
Prophase II 	• Chromosomes relax, then condense again • A second set of spindle fibers forms at right angles to the spindle fibers in the first division.
Metaphase II 	• Chromosomes line up on equator of the spindle fibers. • Note spindle fibers form at right angles to 1st division
Anaphase II 	• Spindle fibers contract, centromeres split, & chromatids are pulled apart • Once pulled apart they are called chromosomes
Telophase II 	• Chromosomes arrive at the poles of each cell • Each cell divides into two • Four sex cells (gamete s) are made

Cytokinesis 	● Physical process of cell division, which divides the cytoplasm of a parental cell into two daughter cells.