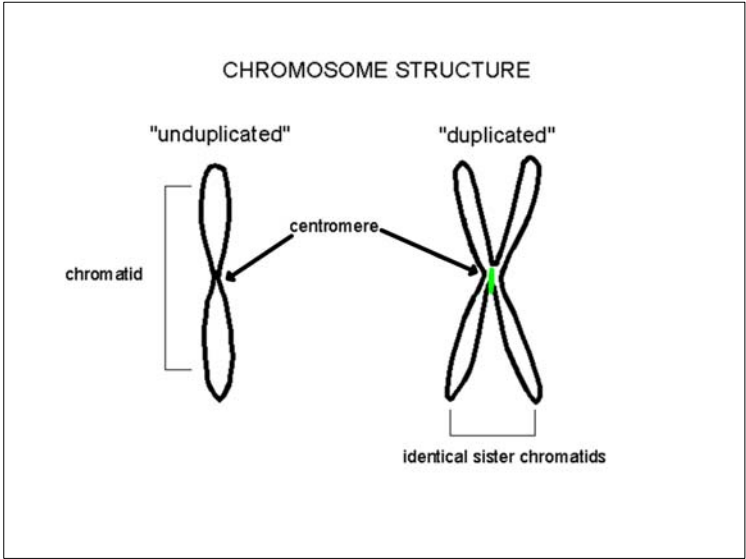
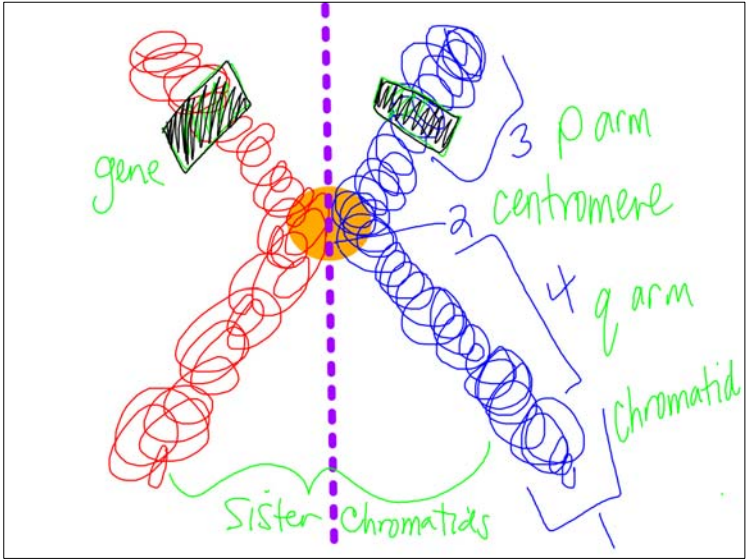
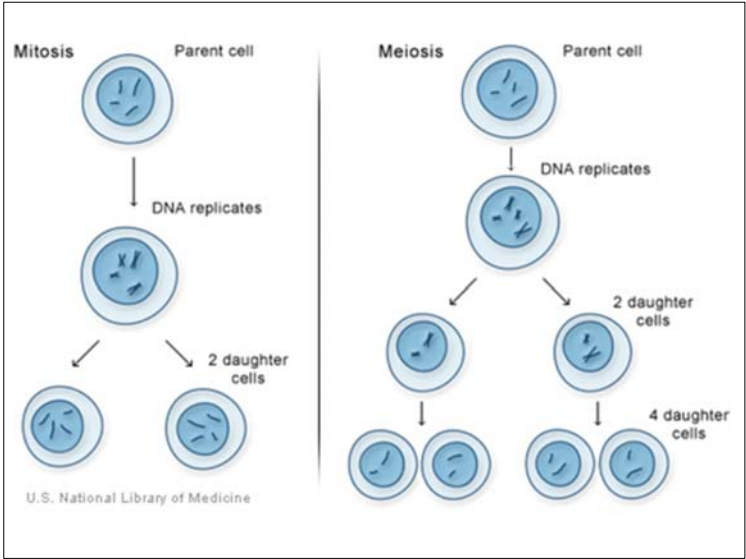
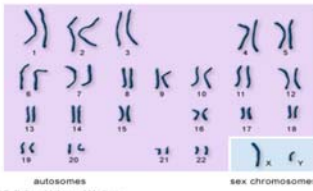
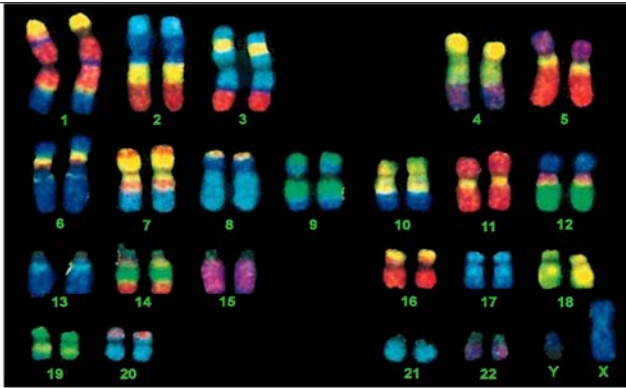
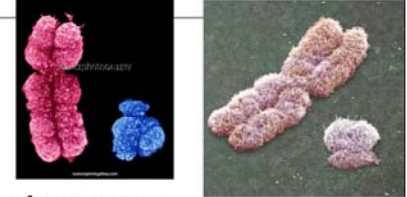


Mitosis	<u>Pg. 9</u>	Meiosis
occurs in a body cell (somatic cell)		occurs in a gamete producing organ
which is a diploid cell		which is a diploid cell
that undergoes 1 cell division		that undergoes 2 cell divisions
forming 2 identical diploid cells		forming 4 unique haploid cells
having the same		having half
number of chromosomes		the number of chromosomes
as the original cell		as the original cell



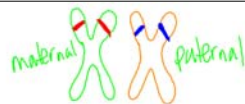


Chromosomes

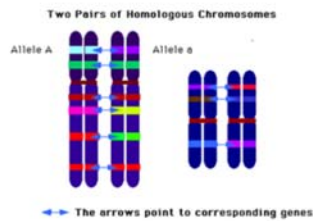
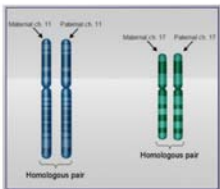


- 2 chromosomes are **sex chromosomes**
 - Female: XX Male: XY (pair 23)
- 44 chromosomes are **autosomes** (pairs 1-22)

■ 2 copies of each autosome = **Homologous chromosomes**



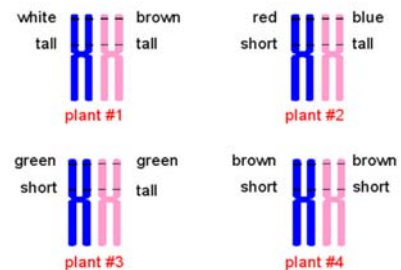
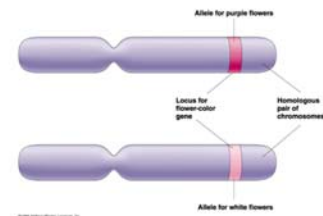
□ Same size, length, shape and carry same genes for the same traits

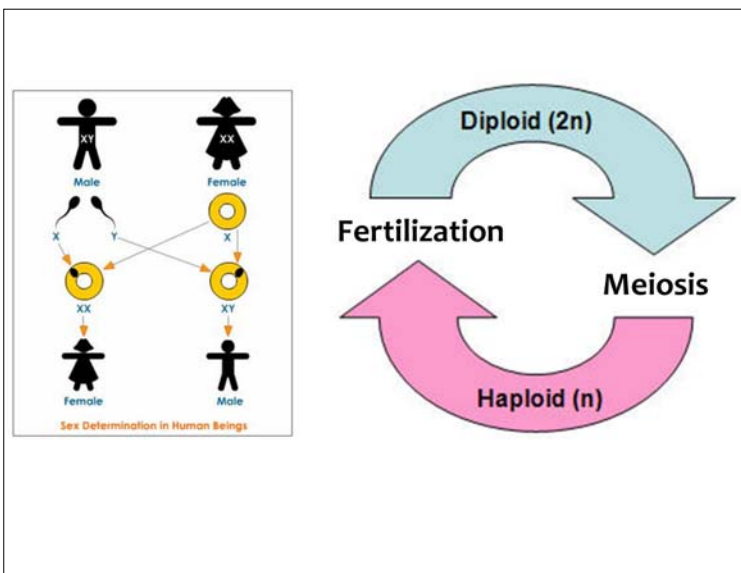


■ On Homologous chromosomes are **alleles**:

□ Alternate forms/variations of genes

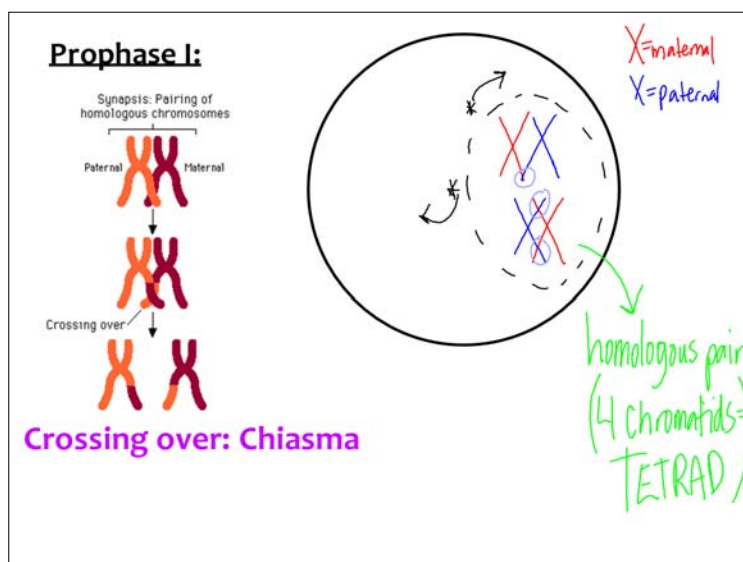
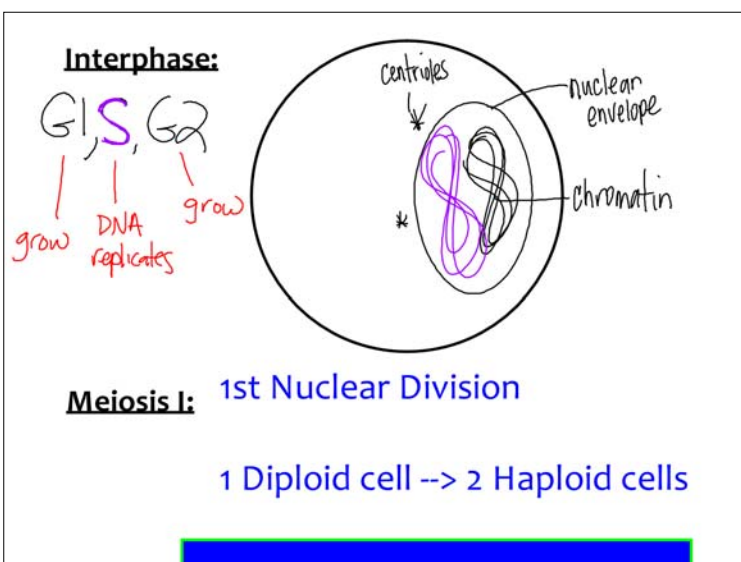
Alleles:

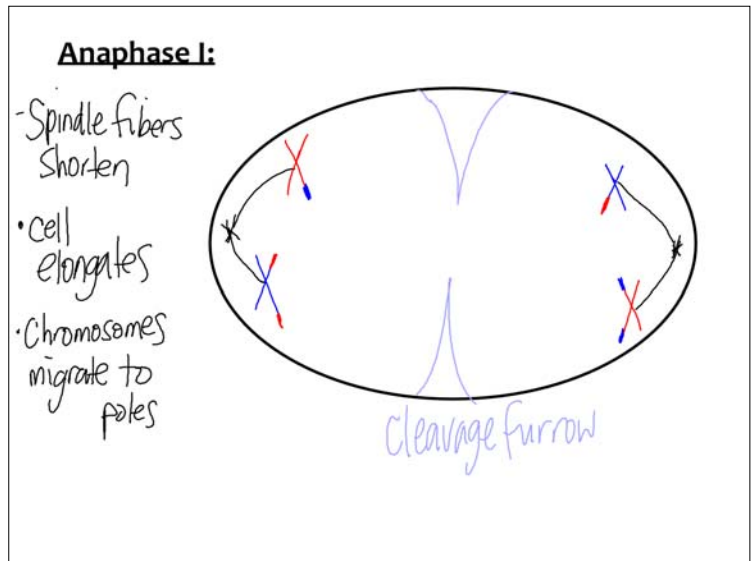
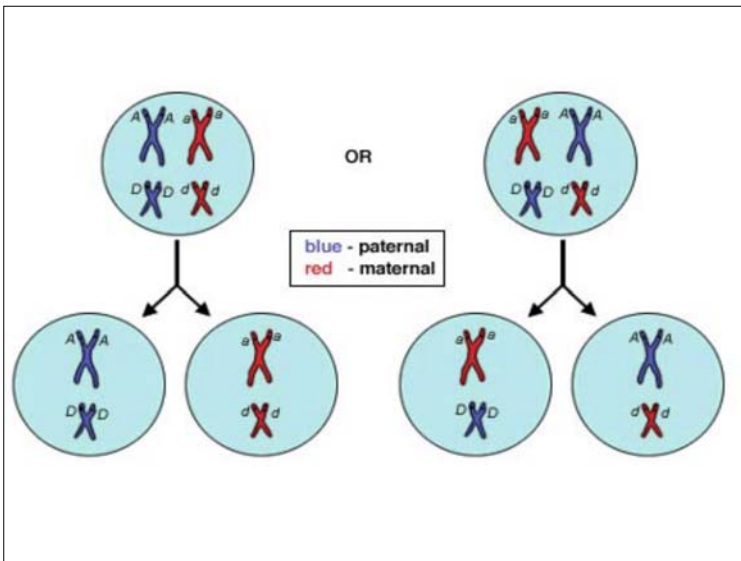
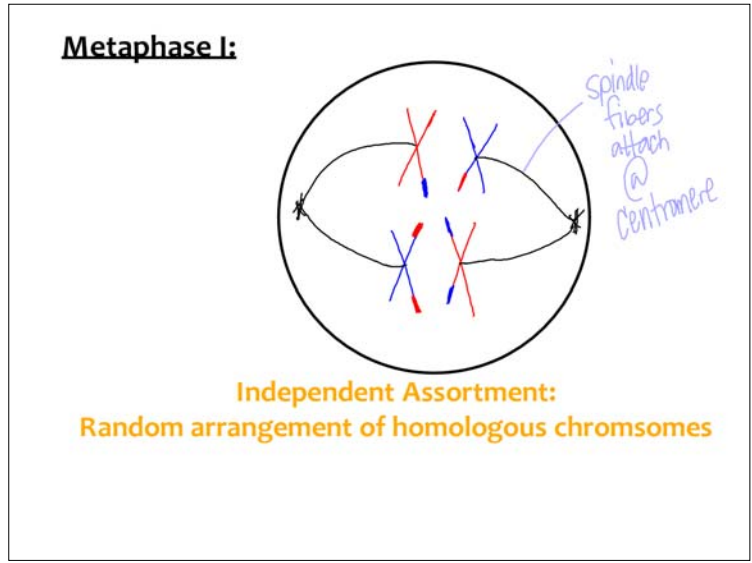
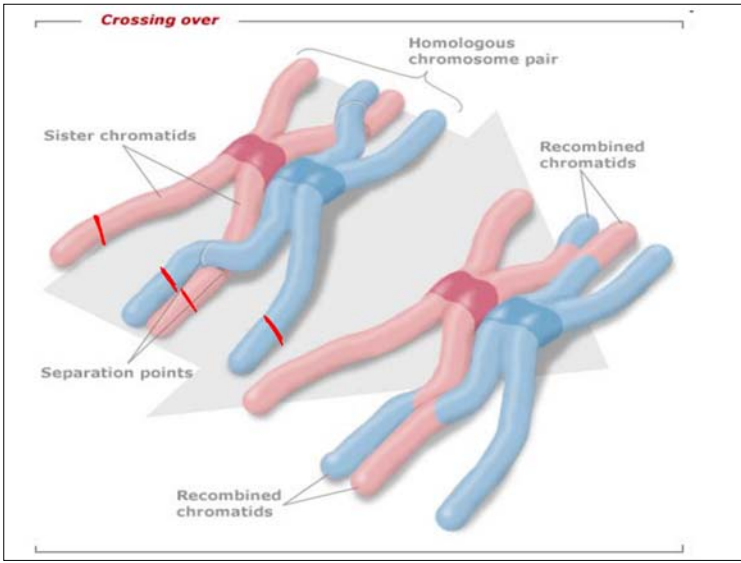




Why are we the way we are??

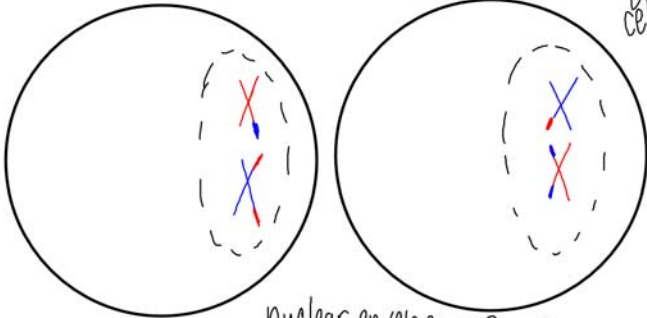
- Do you have your mother's eyes?
- Will you be bald like your father?
- How can two "normal" adults have a child with Downs syndrome?
- Is it possible to be born with blue eyes if your family has all brown eyes?





Telophase I: / cytokinesis

2 haploid unique daughter cells



nuclear envelope reforms