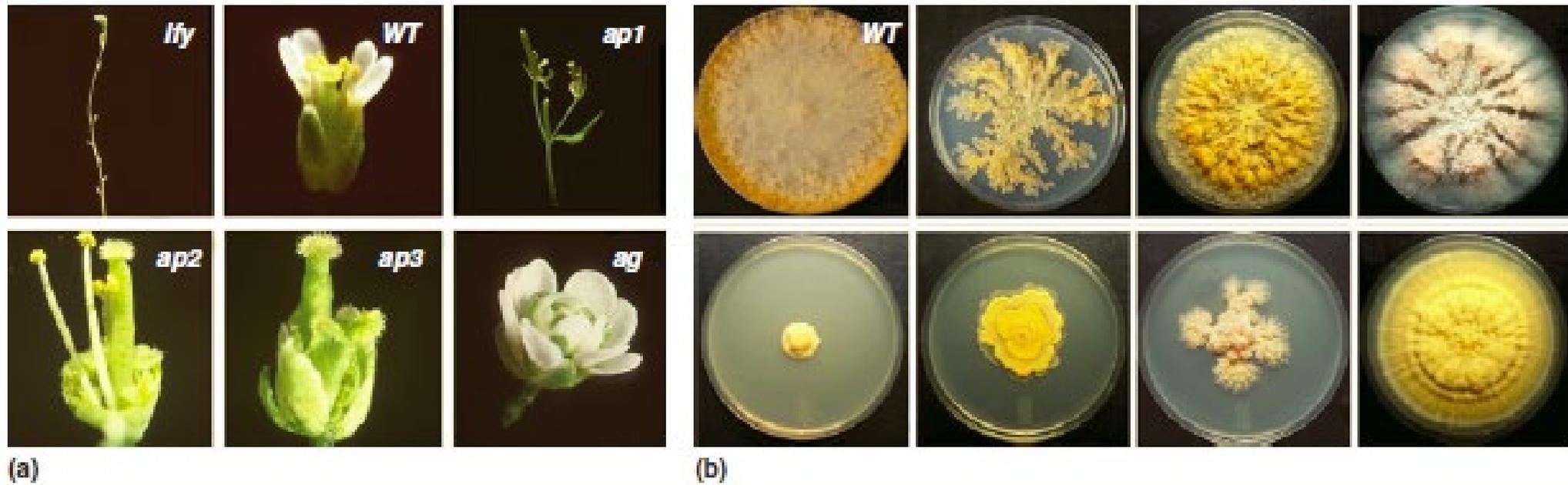
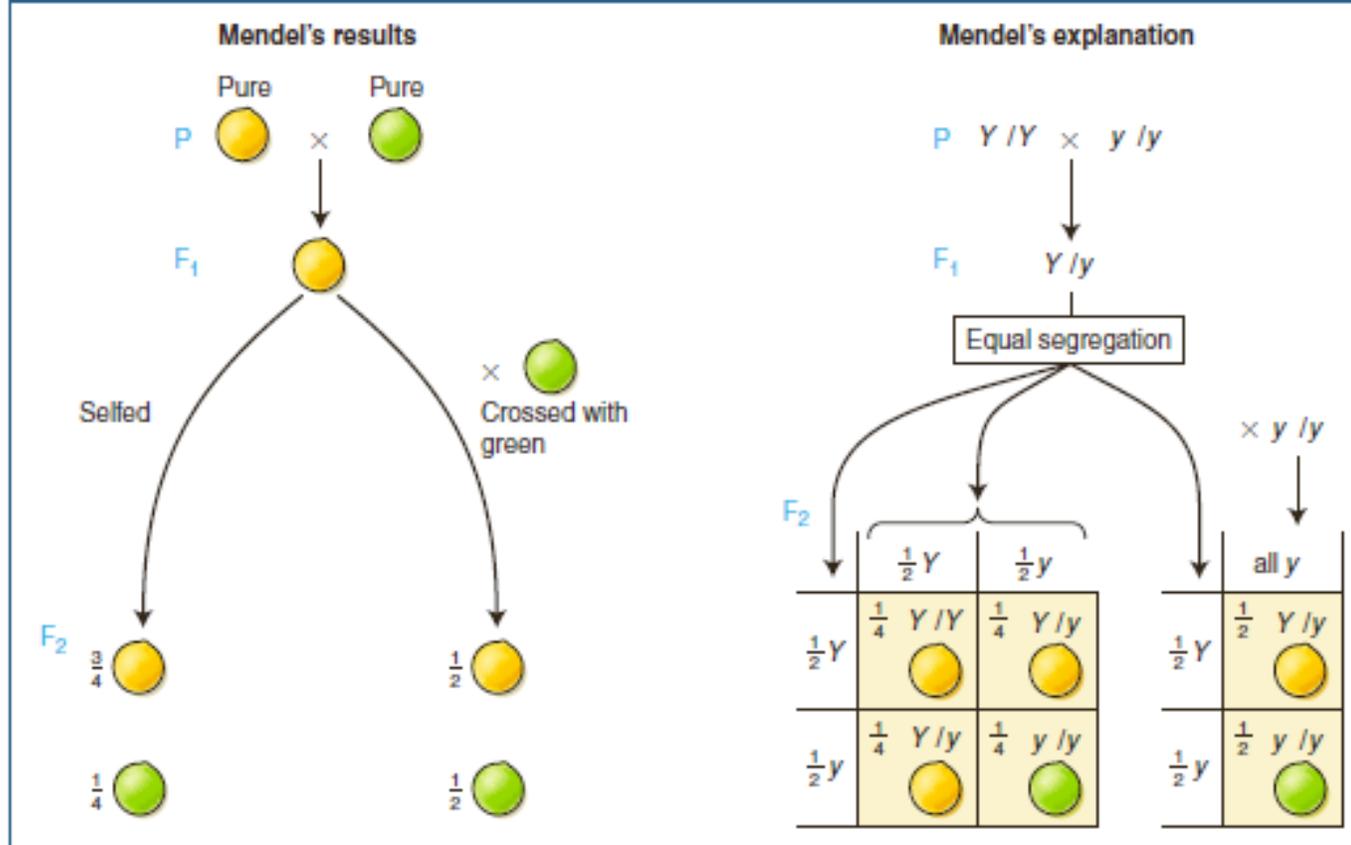


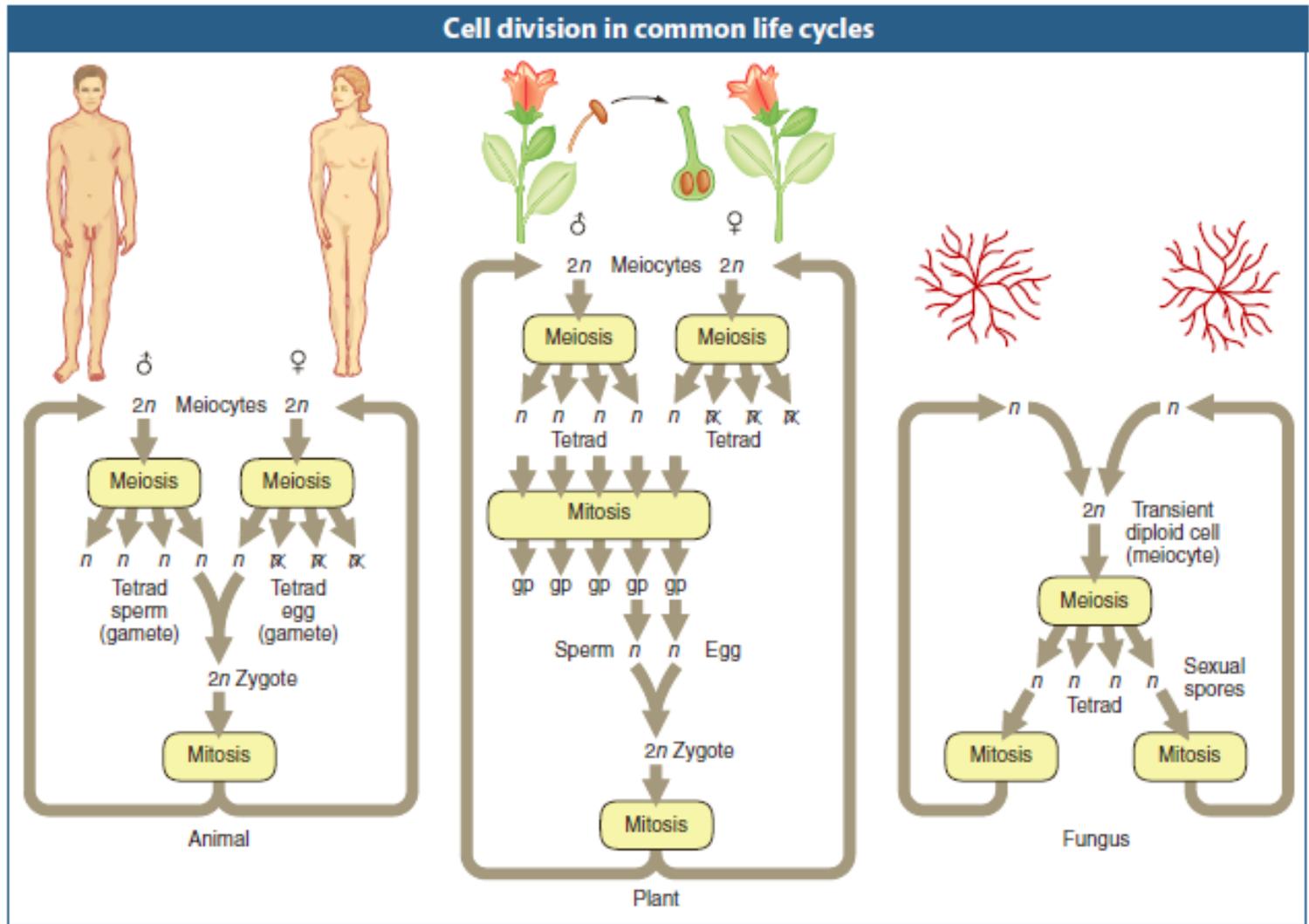
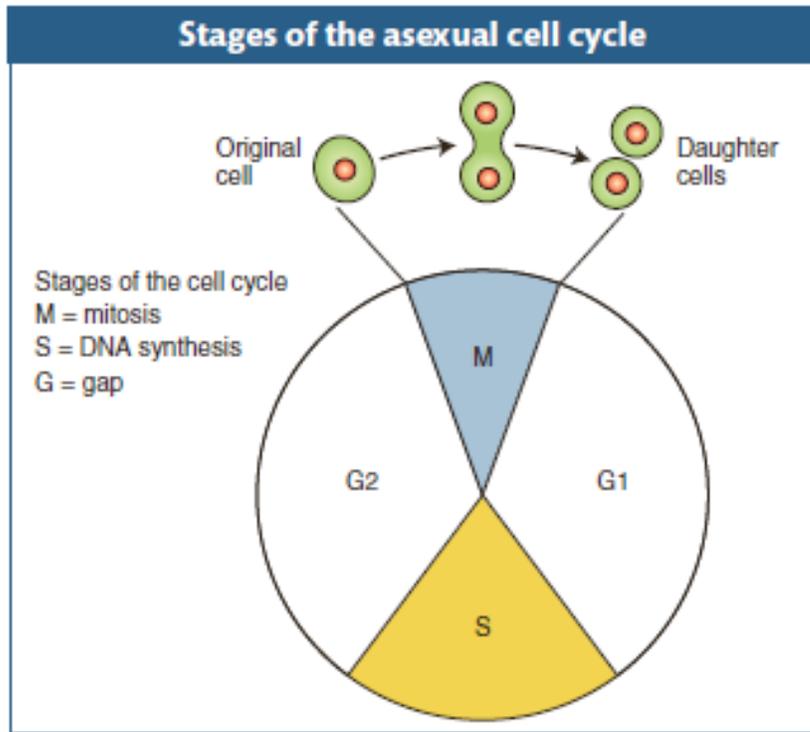
## 2. Tek Genli Kalıtım

## Genetic analysis begins with mutants

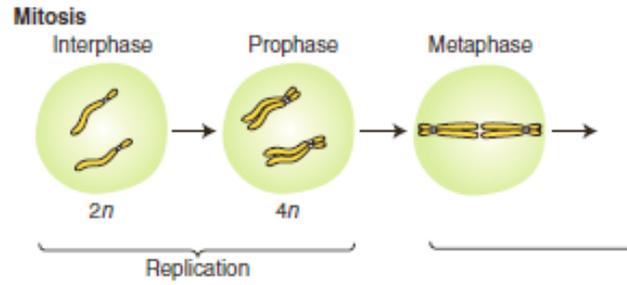


## A single-gene model explains Mendel's ratios

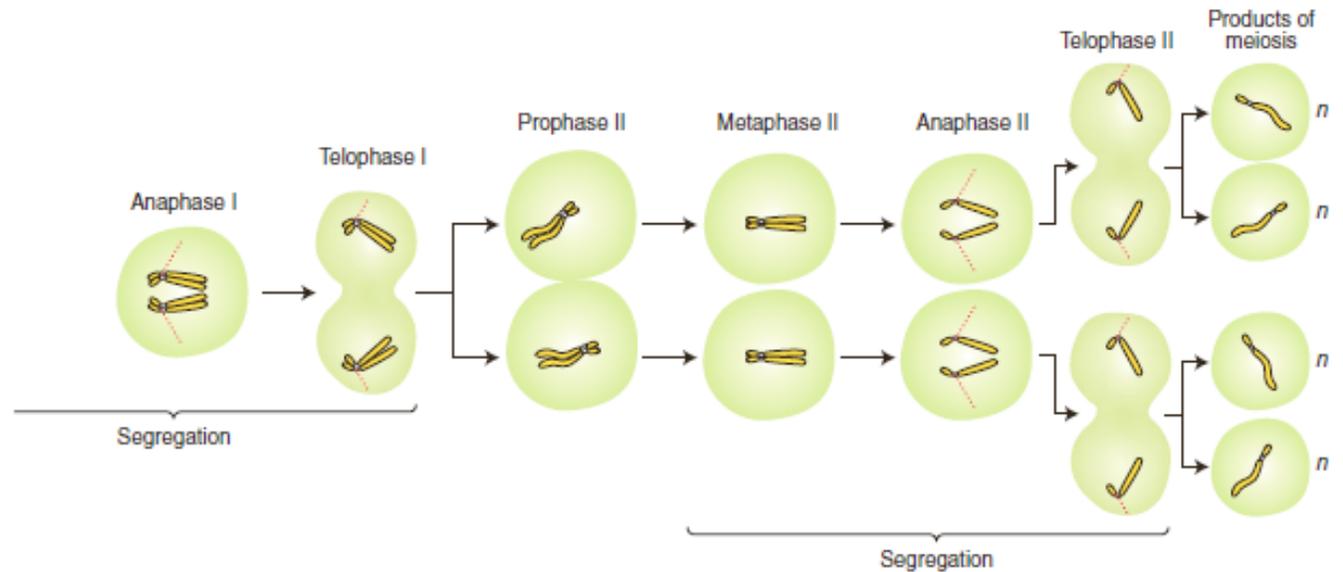
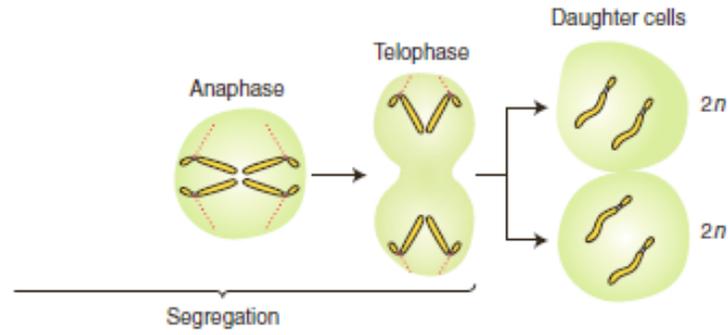
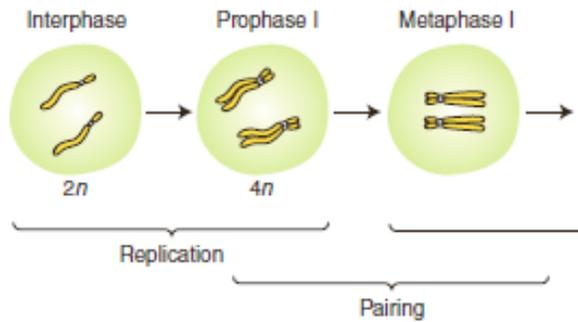




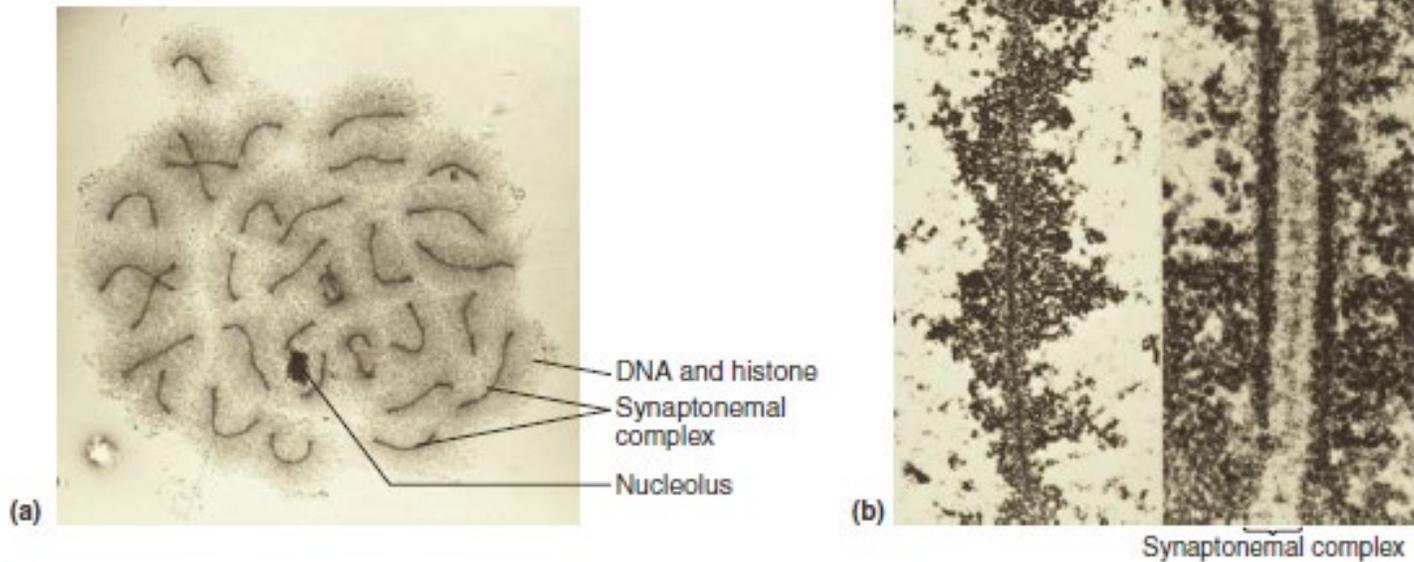
## Key stages of meiosis and mitosis



## Meiosis



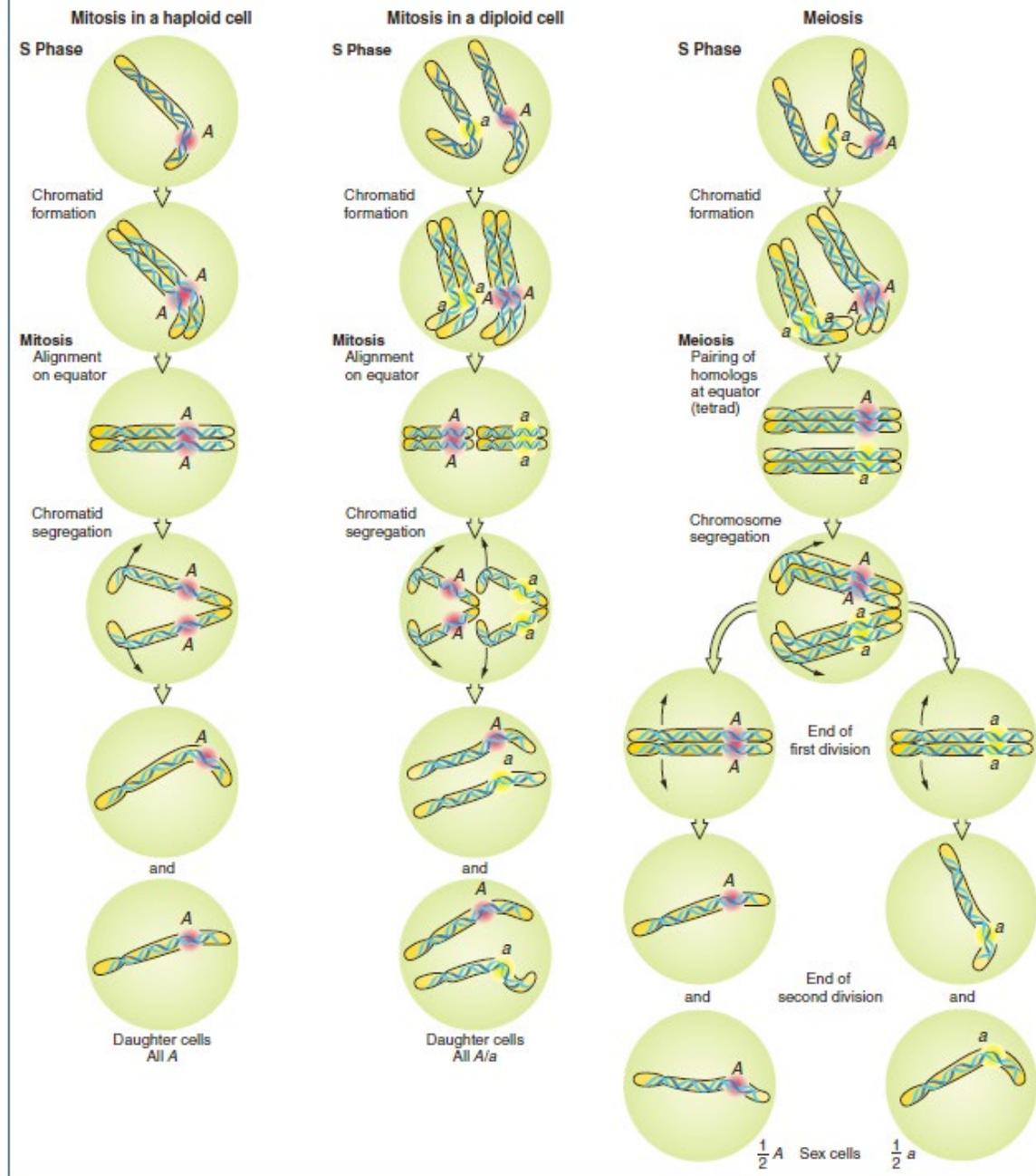
## Synaptonemal complexes at meiosis



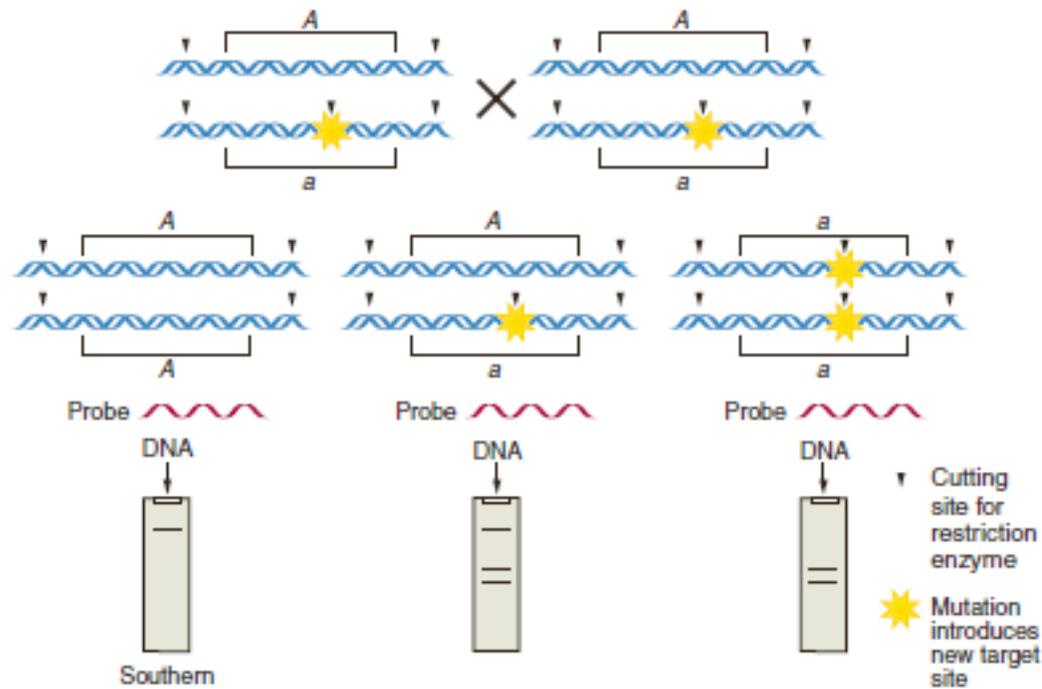
## DNA molecules replicate to form identical chromatids

Chromatid formation	DNA replication
<p>Homozygous diploid <math>b^+/b^+</math></p>	
<p>Heterozygous diploid <math>b^+/b</math></p>	
<p>Homozygous diploid <math>b/b</math></p>	
<p>Haploid <math>b^+</math></p>	
<p>Haploid <math>b</math></p>	

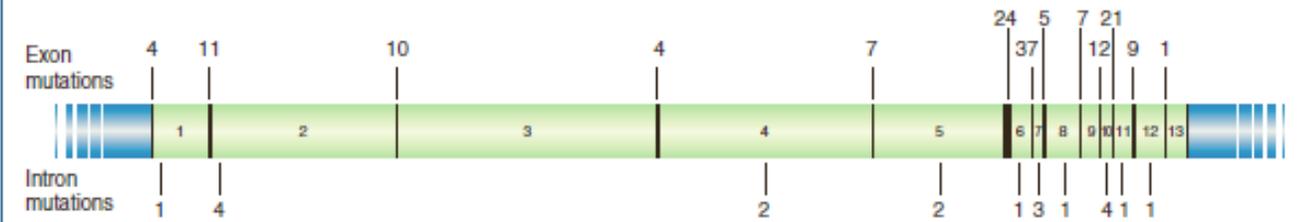
## Nuclear division at the DNA level



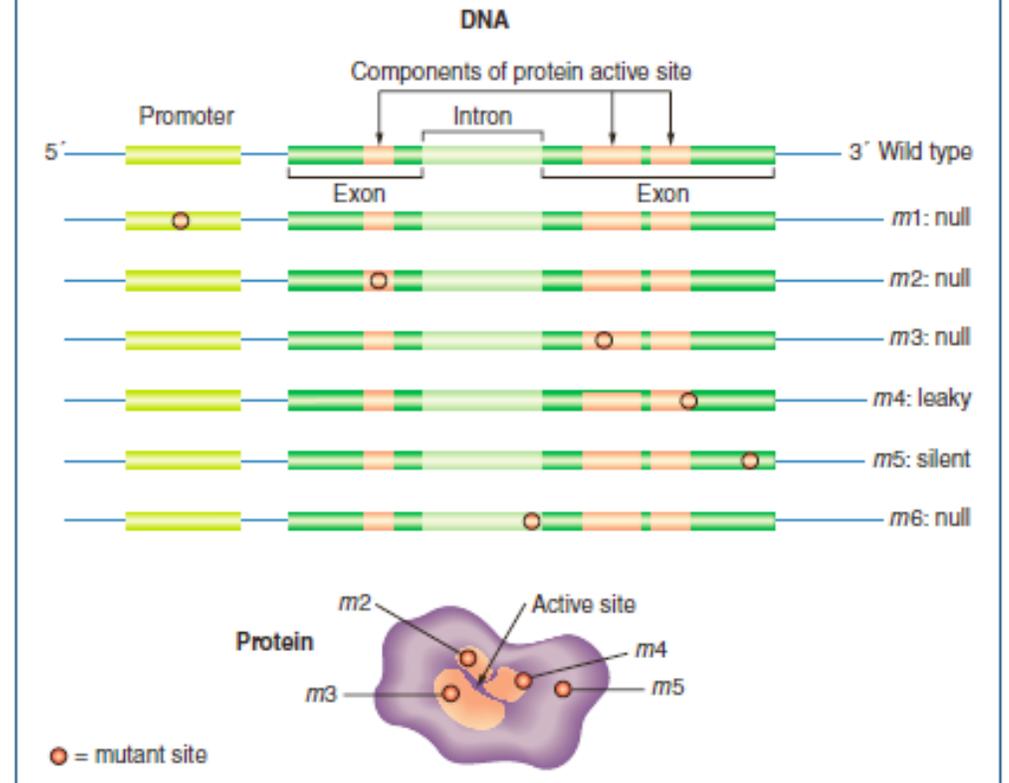
### Single-gene inheritance tracked at the DNA level

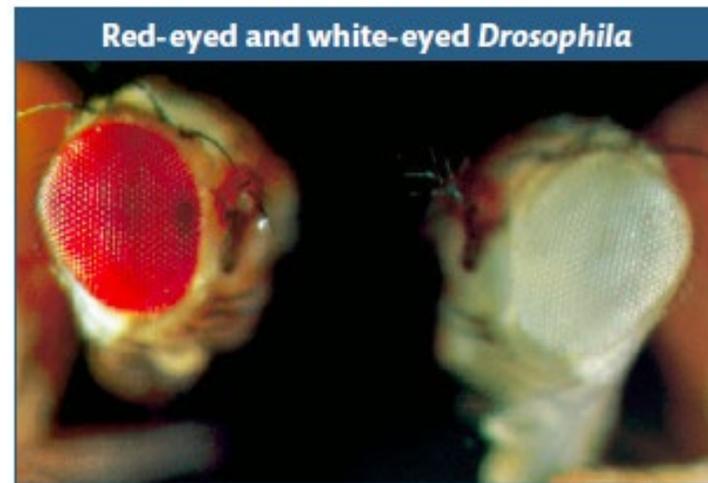
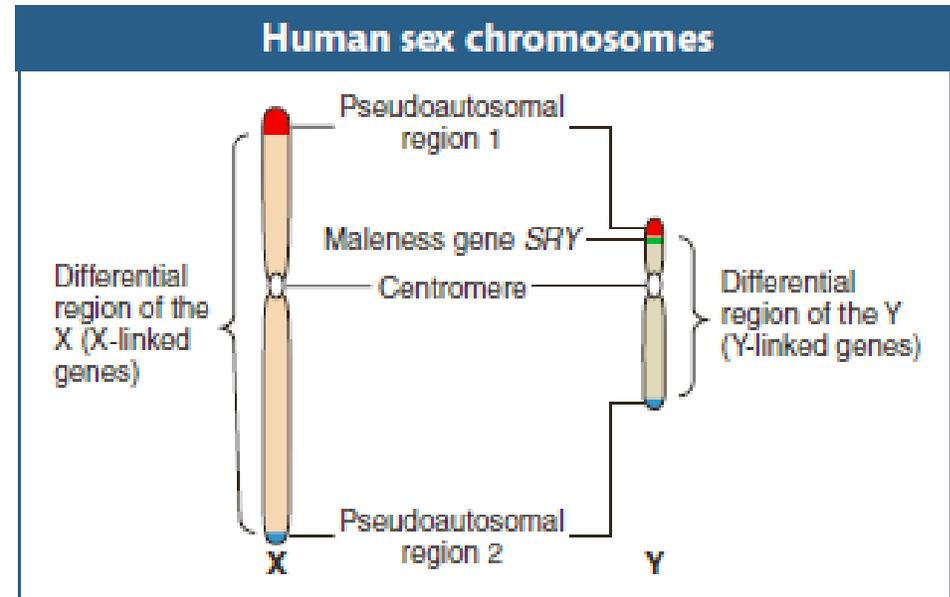
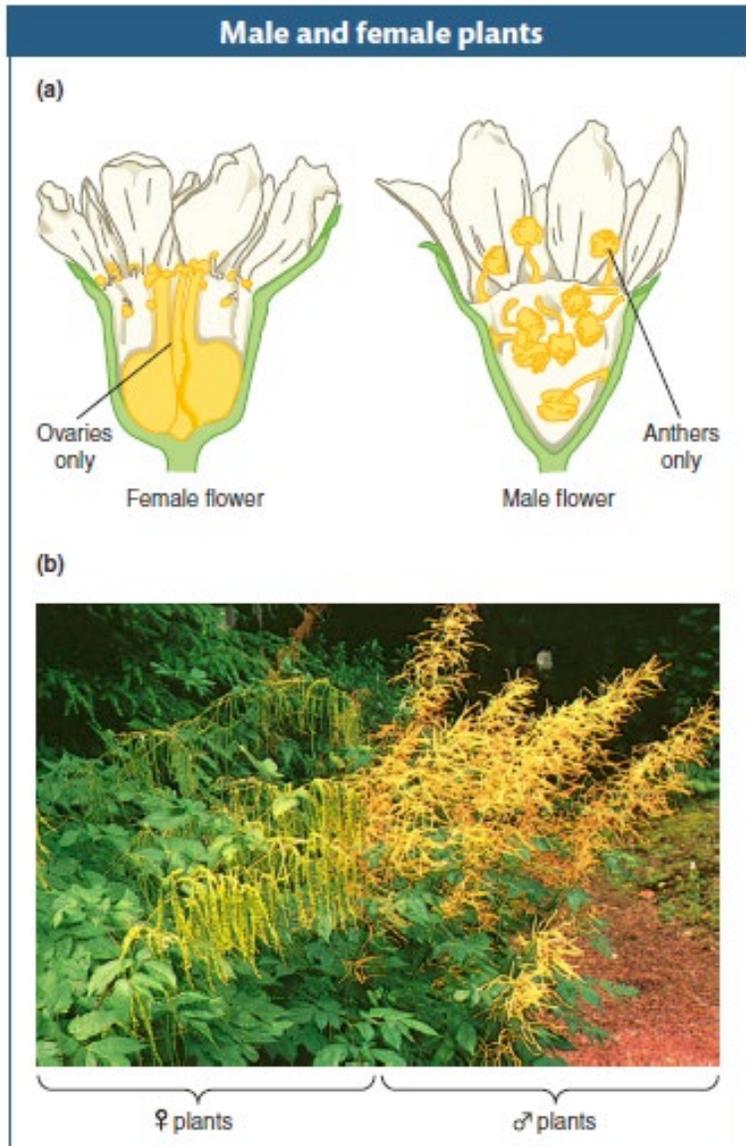


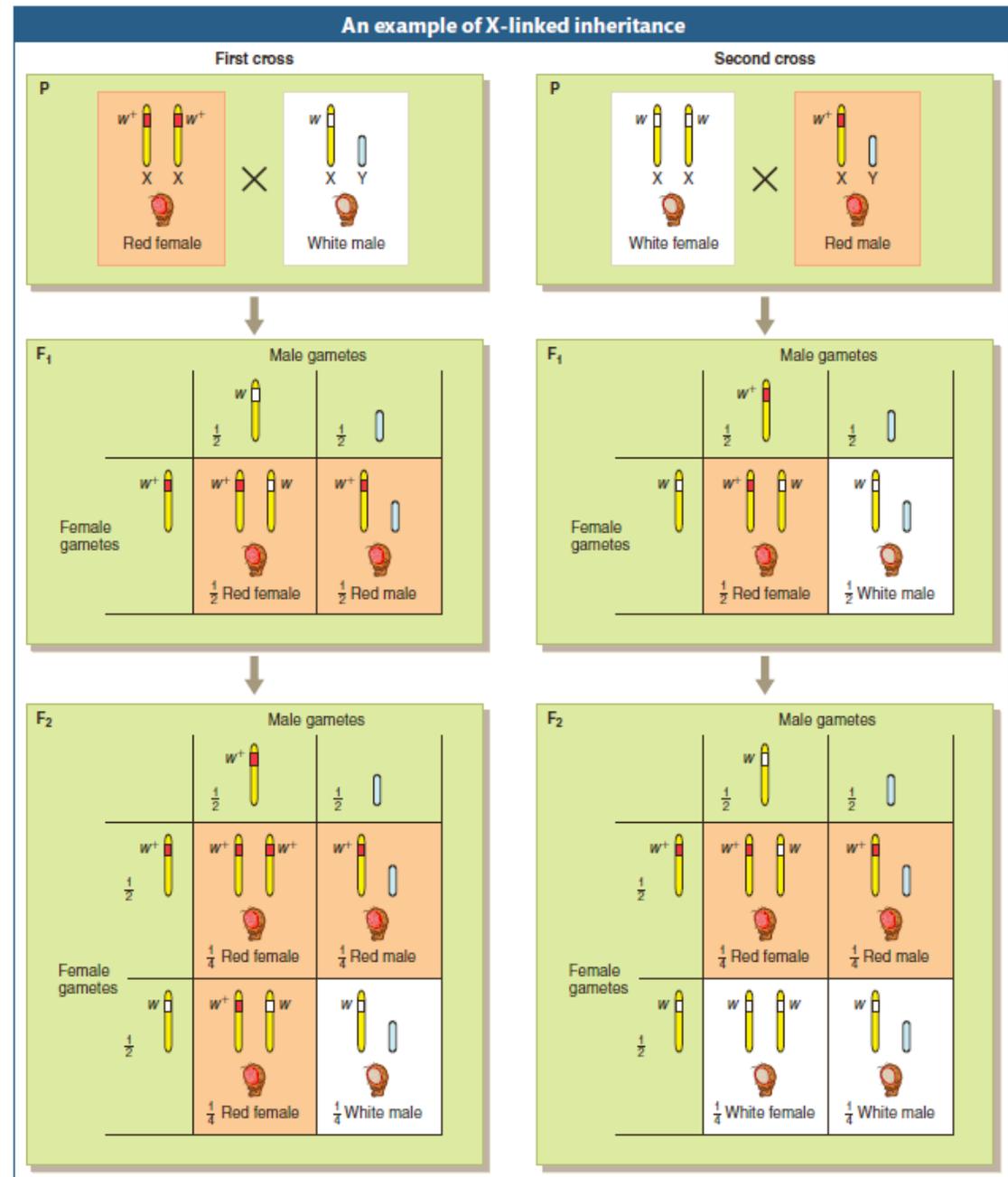
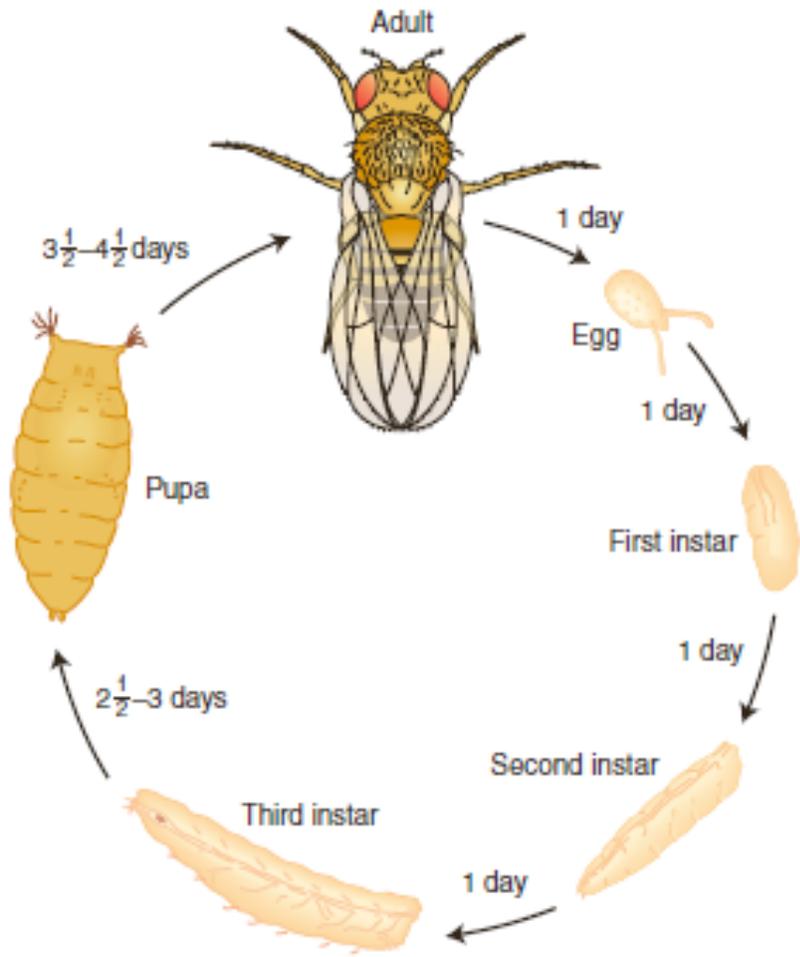
### Mutant sites in the PKU gene



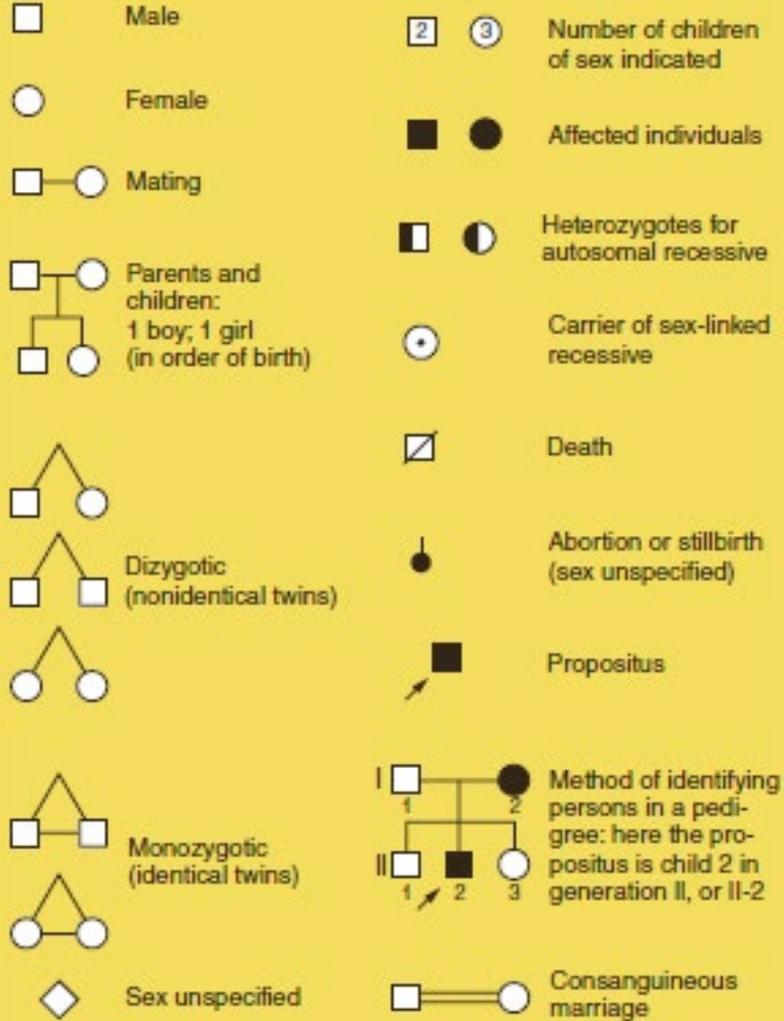
### Gene sites sensitive to mutation



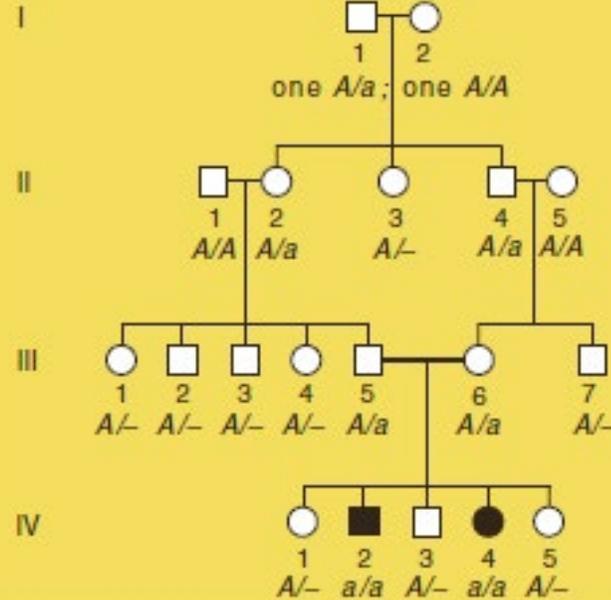




## Pedigree symbols



## Homozygous recessives from inbreeding



## Inheritance of an autosomal dominant disorder

