

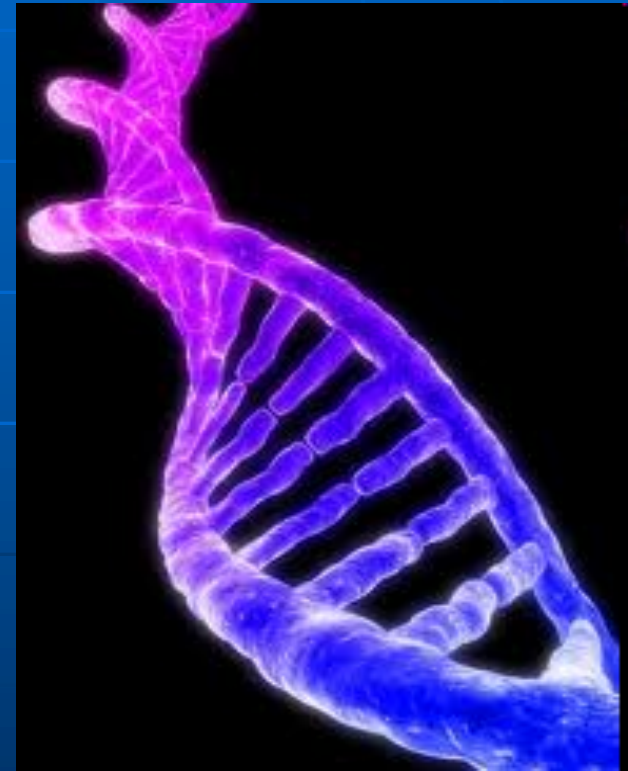
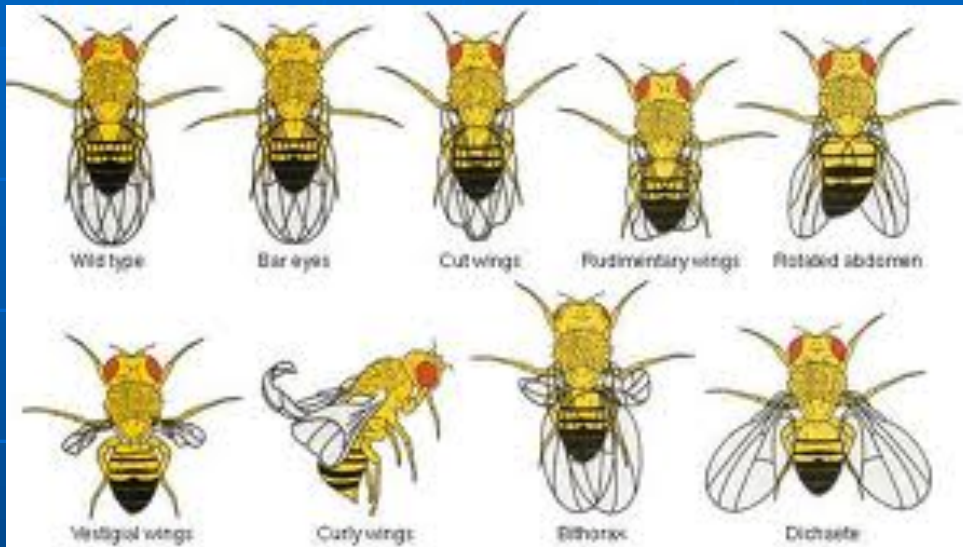
Ch 18.1: Genes & Variation

Essential Questions:

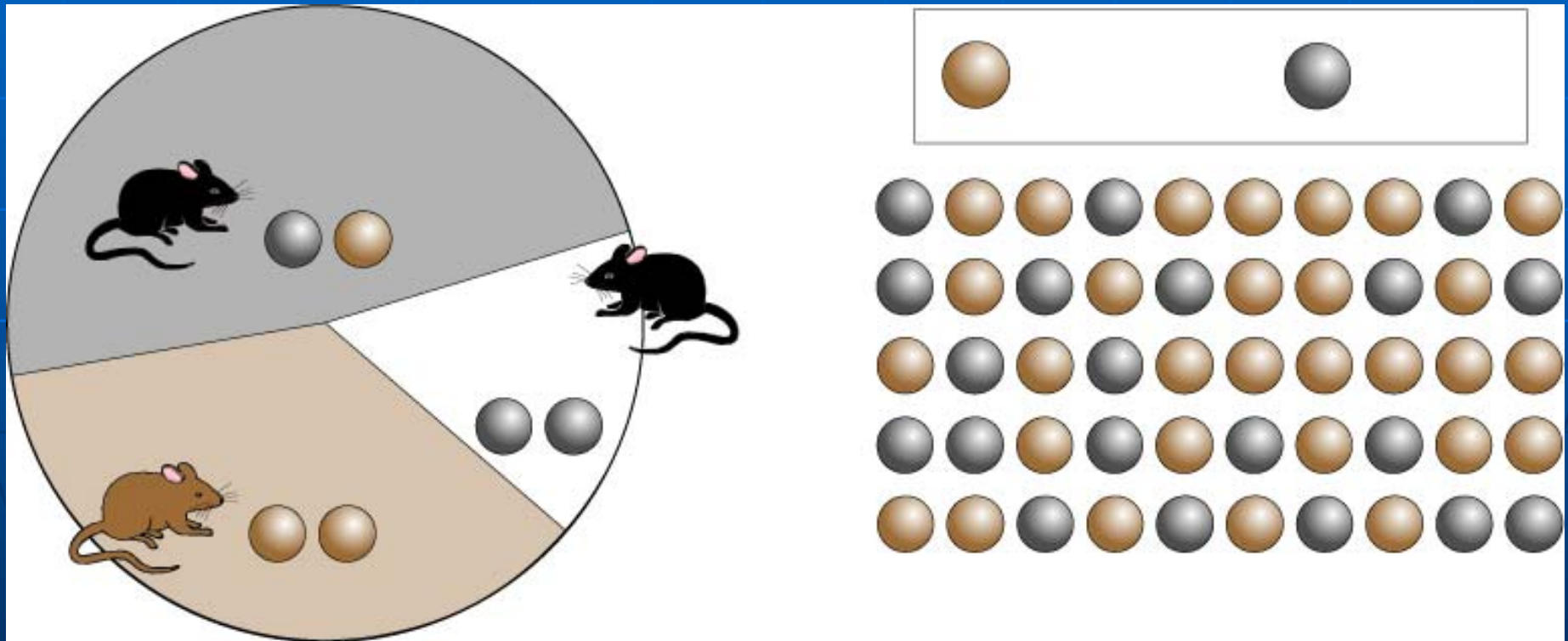
- How is evolution defined in genetic terms?
- What are the sources of genetic variation?
- What determines the number of phenotypes for a given gene?

■ Genetics Joins Evolutionary Theory

- Genes, populations, and species



- Populations & Gene pools
 - Gene pool
 - Allele frequency
- Genotype, phenotype & evolution



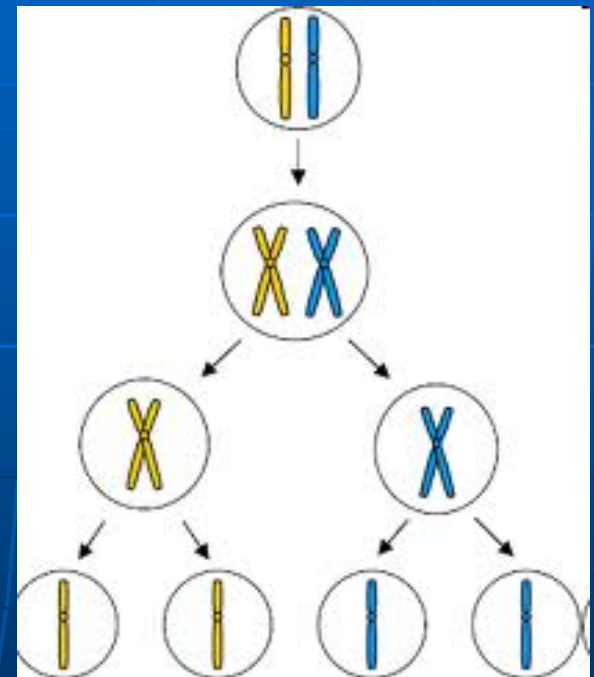
- Sources of genetic variation
 - Mutations
 - Gene recombination during sexual reproduction
 - Lateral gene transfer



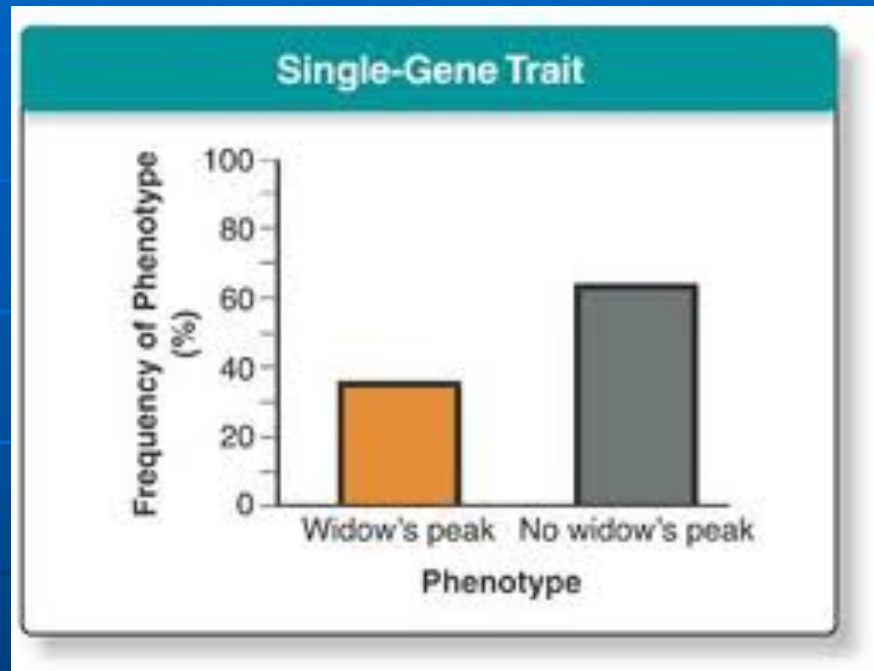
GRUESOME GENETIC MUTATIONS

Occasionally, they can be kinda cute.

motifake.com



- Single-gene & polygenic traits
 - Single-gene traits (w/ 2 alleles)
 - 2 phenotypes only



- Polygenic traits
- “bell curve” graph

