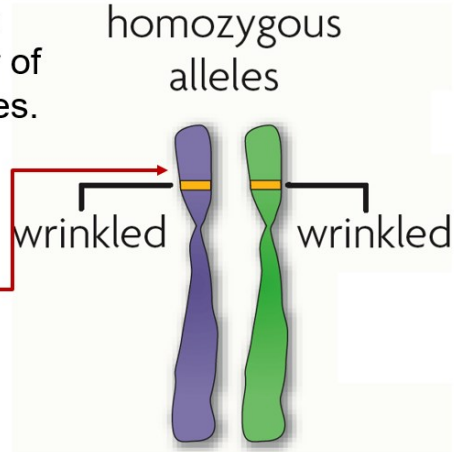


6.4 Traits, Genes, and Alleles

• The same gene can have many versions.

- A **gene** is a piece of DNA that directs a cell to make a certain **protein**.
- Each gene has a locus, a specific position on a pair of homologous chromosomes.



6.4 Traits, Genes, and Alleles

- An **allele** is any alternative form of a gene occurring at a specific **locus** on a chromosome.
 - There may be many different forms of the same gene in a population;
 - Each individual organism has only 2 forms of that gene, 1 from the mother and 1 from the father

