

Core Idea LS3 Vocab

LS3: Heredity: Inheritance and Variation of Traits

How are characteristics of one generation passed to the next?

How can individuals of the same species and even siblings have different characteristics?

- Heredity
- offspring
- parents
- unifying biological principle(s)
- characteristics
- traits
- genes
- proteins
- variants, called alleles
- code
- chromosomes
- cell
- organism
- identical set of chromosomes
- reproduce
- genetic information
- reproduce sexually
- mutation
- genetic variation
- relative dominance

LS3.A: INHERITANCE OF TRAITS

How are the characteristics of one generation related to the previous generation?

- organism
- genetic instructions
- species
- chromosome
- DNA molecule
- gene
- nucleotides
- protein
- transcription
- messenger RNA
-

- translation
- cellular machinery
- inheritance
- population.

Complex relationships between genes and interactions of genes with the environment determine how an organism will develop and function.

- traits of the individual (e.g., human skin color results from the actions of proteins that control the production of the pigment melanin)
- changes (mutations)
- organism
- traits
- sexual reproduction
- transmission of genetic information
- offspring
- egg
- sperm
- parent
- inherited trait
- (Boundary: The stress here is on the impact of gene transmission in reproduction, not the mechanism.)

LS3.B: VARIATION OF TRAITS

Why do individuals of the same species vary in how they look, function, and behave?

- Variation
- genetic and environmental factors
- sexual reproduction
- trait
- parent
- offspring
- set of chromosomes (and their respective multiple genes)
- inherit
- mutations
- genes
- external environmental factors
- development
- appearance
- behavior
- distribution of variation of traits in a population

- allele
- mutations
- meiosis (cell division)
- viable mutation