

Skills Worksheet

Fundamentals of Genetics

In the space provided, write the letter of the description that best matches the term or phrase.

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| _____ 1. heredity | a. the alleles of a particular gene are different |
| _____ 2. genetics | b. the two alleles for a trait separate when gametes are formed |
| _____ 3. monohybrid cross | c. the alleles of different genes separate independently of one another during gamete formation |
| _____ 4. true-breeding | d. not expressed when the dominant form of the trait is present |
| _____ 5. P generation | e. passing of traits from parents to offspring |
| _____ 6. F ₁ generation | f. all the offspring display only one form of a particular trait |
| _____ 7. F ₂ generation | g. factor that masks another form of a trait |
| _____ 8. alleles | h. first two individuals crossed in a breeding experiment |
| _____ 9. dominant | i. physical appearance of an organism |
| _____ 10. recessive | j. a cross that considers one pair of contrasting traits |
| _____ 11. homozygous | k. offspring of the F ₁ generation |
| _____ 12. heterozygous | l. when the two alleles of a particular gene are the same |
| _____ 13. genotype | m. branch of biology that studies heredity |
| _____ 14. phenotype | n. different versions of a gene |
| _____ 15. law of segregation | o. offspring of the P generation |
| _____ 16. law of independent assortment | p. set of alleles that an individual has |
| _____ 17. trait | q. a cross that considers two pairs of contrasting traits |
| _____ 18. dihybrid cross | r. genetically determined variant of a characteristic |

Fundamentals of Genetics *continued*

Write the correct term from the list below in the space next to its definition.

codominance	incomplete dominance	probability
complete dominance	molecular genetics	Punnett square
cross-pollination	phenotypic ratio	self-pollination
genotypic ratio	pollination	test cross

- _____ **19.** diagram that predicts the outcomes of a genetic cross
- _____ **20.** cross of a homozygous recessive individual with an individual with a dominant phenotype of unknown genotype
- _____ **21.** the likelihood that a specific event will occur
- _____ **22.** fraction of genotypes that appear in offspring
- _____ **23.** when heterozygous plants and homozygous dominant plants have the same phenotype
- _____ **24.** when pollen is transferred to a stigma from the same plant
- _____ **25.** when an individual displays a trait that is intermediate between the two parents
- _____ **26.** when both alleles for a trait are expressed in a heterozygous individual
- _____ **27.** fraction of phenotypes that appear in offspring
- _____ **28.** occurs between flowers of two different plants
- _____ **29.** study of the structure and function of chromosomes and genes
- _____ **30.** when pollen grains are transferred to the stigma