

Teacher's Basic Genetic Terms

Instructions: Use the available reference resources to complete the table below. After finding out the definition of each word, rewrite the definition using your own words (middle column), and provide an example of how you may use the word (right column).

Genetic Terms	Definitions in Your Own Words	An Example
Allele	<i>Different forms of a gene, which produce variations in a genetically inherited trait.</i>	<i>Different alleles produce different hair colors—brown, blond, red, black, etc.</i>
Genes	<i>Genes are parts of DNA and carry hereditary information passed from parents to children.</i>	<i>Genes contain a blueprint for each individual for her or his specific traits.</i>
Dominant	<i>Dominant version (allele) of a gene shows its specific trait even if only one parent passed the gene to the child.</i>	<i>When a child inherits a dominant brown-hair gene form (allele) from dad, the child will have brown hair.</i>
Recessive	<i>Recessive gene shows its specific trait when both parents pass the gene to the child.</i>	<i>When a child inherits a recessive blue-eye gene form (allele) from both mom and dad, the child will have blue eyes.</i>
Homozygous	<i>Two of the same form of a gene—one from mom and the other from dad.</i>	<i>Inheriting the same blue-eye gene form from both parents result in a homozygous gene.</i>
Heterozygous	<i>Two different forms of a gene—one from mom and the other from dad are different.</i>	<i>Inheriting different eye color gene forms from mom and dad result in a heterozygous gene.</i>
Genotype	<i>Internal heredity information that contain genetic code.</i>	<i>Blue eye and brown eye have different genotypes—one is coded for blue and the other for brown.</i>

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Phenotype	<i>Outwardly expressed traits or characteristics.</i>	<i>Both having or not having a widow's peak are phenotypes.</i>
Mendelian Inheritance	<i>A simple genetic rule where a gene only comes in dominant or recessive forms.</i>	<i>Some genetic traits follow Mendelian Inheritance, while other genetic traits follow different inheritance patterns or rules.</i>