

# Genetics Vocabulary Worksheet 1 Answers

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Score: \_\_\_\_\_

## Define these terms:

Allele This is an alternative form of a gene.

Carrier This is a person or animal that shows no symptoms of a disease but carries the disease-causing agent and is capable of passing it on to others.

Diploid This is an organism or cell with two sets of chromosomes.

Genetic Engineering The process of manipulating the DNA code of living organisms.

Haploid This is a cell or organism having half of the diploid chromosome number, symbolized by "n".

## Match the term on the left with its definition on the right:

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|------------------------|--|
| P Artificial Selection | A. This mapped all the genes in the human genome.  |
| V Chromosome           | B. This is one result of gamete formation through meiosis and fertilization during sexual reproduction that promotes biodiversity within a species.                      |
| U Clones               | C. This is an autosomal recessive heredity disease that affects the respiratory and digestive systems.   |
| K Codominance          | D. This is the insertion of genes into an individual's cells and tissues to treat a disease, hereditary diseases in particular.  |
| R Color Blindness      | E. This is the inheritance of alleles of two genes from two different parents.   |
| H Crossing Over        | F. This is an organism that has two different alleles for the same genetic trait.  |
| C Cystic Fibrosis      | G. This is an observable trait of an organism that can mask the recessive trait.   |
| Q Deletion             | H. This is the process in which two chromosomes exchange DNA during prophase of meiosis.   |
| E Dihybrid Cross       | I. These are inherited diseases that cause negative, abnormal physical effects in organisms.   |
| T DNA Fingerprinting   | J. This is a genetic disorder that impairs a blood's ability to clot.  |
| G Dominant             | K. This is a type of heredity where two dominant alleles are both fully expressed in a phenotype.  |
| X Electrophoresis      | L. This is the offspring of a genetic cross between parents with different traits.   |
| M Frameshift           | M. This is a genetic mutation caused by the insertion or deletion of one or more nucleotides that changes the amino acid sequence from the site of the mutation forward. |
| O Gene                 | N. The genetic makeup of an organism.  |
| D Gene Therapy         | O. This is a segment of DNA on the chromosome that is coded for a particular trait.  |
| I Genetic Disorders    | P. This is the process of intentionally interfering with the breeding process to encourage certain traits over others.   |
| B Genetic Variation    | Q. A genetic mutation caused by the loss of a chromosomal segment.   |
| N Genotype             | R. This is the inability to perceive differences between some or all hues that other people can distinguish, most of the time it is due to a genetic                     |

disorder but can have other causes.

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|---|----------------------|----|--|
| J | Hemophilia           | S. | This is an organism that has two identical alleles for the same genetic trait.                                   |
| W | Heredity             | T. | This is a technique used to distinguish between individuals of the same species using only samples of their DNA. |
| F | Heterozygous         | U. | These are organisms that come from the same cell and are genetically identical to one another.                   |
| S | Homozygous           | V. | This is the structure in the cell nucleus that houses a cell's genetic information.                              |
| A | Human Genome Project | W. | This is the transfer of characteristics from parent to offspring.  |
| L | Hybrid               | X. | This is the process of separating DNA fragments by size using an electric field and a fluorescent dye.           |