

	Word	Definition	Synonym
1	heredity	the passing of physical traits or characteristics from parents to their offspring	inherited
2	replication	the process of producing two identical copies from one original DNA molecule	copied
3	nitrogenous base	the building blocks of DNA (and RNA)	ATGC
4	chromosomes	strands of DNA that are twisted together; 2 sister chromatids after replication	double
5	chromatid	one-half of two identical threadlike strands of a replicated chromosome	1/2 chromosome
6	gene	a segment of DNA on a chromosome that codes for a specific trait	DNA
7	Gregor Mendel	founder of modern science of genetics; famous for his pea experiments	Mendel
8	purebred	an organism that always produces an offspring with the same form of a trait as the parent	homozygous
9	trait	a characteristic that an organism can pass on to its offspring through its genes	characteristic
10	allele	the different forms of a gene like smooth/wrinkled seeds or tall/short height	variation
11	Rosalind Franklin	famous woman scientist who used x-rays to photograph DNA molecules	woman scientist
12	James Watson & Francis Crick	with Franklin's photographs, created a 3D model of DNA molecule	Watson & Crick
13	sex cells	reproductive cells; mature male or female cells that unite with another of the opposite sex to produce a fertilized cell; each contains 1/2 of the genetic material needed by the offspring	gametes
14	dominant	an allele whose trait always shows up in the organism when the allele is present	primary
15	recessive	an allele that is masked when a dominant allele is present	secondary
16	genotype	an organism's genetic make up or allele combination	genetic
17	phenotype	an organism's physical appearance of a visible trait	physical
18	Punnett square	diagram designed to predict an outcome of a particular cross or breeding experiment	prediction square
19	homozygous	having 2 identical alleles for a trait	purebred
20	heterozygous	having two different alleles for a trait	hybrid
21	hybrid	an organism that has two different alleles for a trait	heterozygous
22	acquired trait	traits or characteristics that are the result of environmental factors cannot be inherited	learned
23	genetic engineering	the deliberate modification of the characteristics of an organism by manipulating its genetic material.	gene splicing