

	Word	Definition	Synonym
1	nitrogenous base	the building blocks of DNA (and RNA)	ATGC
2	nucleotide	a phosphate group, a sugar group, and a nitrogenous base that makes up part of DNA	base with spine
3	adenine	nitrogenous base in DNA that pairs with thymine	AT
4	thymine	nitrogenous base in DNA that pairs with adenine	AT
5	guanine	nitrogenous base in DNA that pairs with cytosine	GC
6	cytosine	nitrogenous base in DNA that pairs with guanine	GC
7	chromosomes	strands of DNA that are twisted together; 2 sister chromatids after replication	double
8	gene	a segment of DNA on a chromosome that codes for a specific trait	DNA
9	Gregor Mendel	founder of modern science of genetics; famous for his pea experiments	Mendel
10	purebred	an organism that always produces an offspring with the same form of a trait as the parent	homozygous
11	trait	a characteristic that an organism can pass on to its offspring through its genes	characteristic
12	allele	the different forms of a gene like smooth/wrinkled seeds or tall/short height	variation
13	Rosalind Franklin	famous woman scientist who used x-rays to photograph DNA molecules	woman scientist
14	James Watson & Francis Crick	famous scientists who, with Franklin's photographs, created a 3D model of DNA molecule	Watson & Crick
15	gamete	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
16	dominant	an allele whose trait always shows up in the organism when the allele is present	primary
17	recessive	an allele that is masked when a dominant allele is present	secondary
18	genotype	an organism's genetic make up or allele combination	genetic
19	phenotype	an organism's physical appearance of a visible trait	physical
20	Punnett square	diagram designed to predict an outcome of a particular cross or breeding experiment	prediction square
21	homozygous	having 2 identical alleles for a trait	purebred

22	heterozygous	having two different alleles for a trait	hybrid
23	hybrid	an organism that has two different alleles for a trait	heterozygous
24	genetic engineering	the deliberate modification of the characteristics of an organism by manipulating its genetic material.	gene splicing