

Unit 4: Information Vocab

Answer	Term	Definition
	1. Gene	A. The process of forming an RNA molecule from a DNA molecule
	2. DNA	B. Change of a single nucleotide in a sequence of DNA from one kind of base to another
	3. Nucleotide	C. Spiral shape of the two strands of DNA
	4. Double helix	D. Type of RNA that translates the mRNA into a sequence of amino acids
	5. Deoxyribose	E. A three nucleotide sequence in mRNA that codes for an amino acid
	6. DNA replication	F. An insertion or deletion of a nucleotide in DNA that changes the reading frame of codons
	7. RNA	G. A three nucleotide sequence in tRNA that is complementary to the mRNA codon
	8. Transcription	H. A segment of DNA on a chromosome that codes for an inherited trait
	9. Translation	I. Five-carbon sugar in DNA
	10. Codon	J. Process that takes place in the ribosome and uses mRNA and tRNA to make an amino acid sequence
	11. Anticodon	K. Deoxyribonucleic acid; the material that contains the genetic information
	12. Messenger RNA	L. Type of RNA that makes up the ribosome
	13. Transfer RNA	M. Ribonucleic acid; made from DNA and plays a role in protein synthesis
	14. Ribosomal RNA	N. Type of RNA that is produced from the DNA sequence of a gene
	15. Mutation	O. Subunit of nucleic acids that contain a sugar, phosphate, and a nitrogen base
	16. Point mutation	P. The process of making a copy of DNA
	17. Frameshift mutation	Q. The complete genetic material contained in an organism
	18. Genome	R. Change in the structure or amount of genetic material of an organism

Answer	Term	Definition
	19. Human Genome Project	A. DNA that has been recombined by genetic engineering
	20. Gene therapy	B. A cell that can divide repeatedly and can differentiate into specialized cell types
	21. DNA fingerprinting	C. An international cooperative effort to sequence the human genome
	22. Genetic engineering	D. Technique that is used to make many copies of selected segments of DNA
	23. Recombinant DNA	E. Cuts the DNA into fragments by recognizing specific nucleotide sequences and then cuts the DNA at those sequences
	24. Genetically modified organisms	F. The insertion of a functional gene into a person's cells by using a genetically engineered virus to treat certain disorders
	25. Clone	G. Organisms with recombinant genes
	26. Stem cell	H. Samples of DNA that are cut, sorted, and tagged to produce a specific pattern of banding
	27. Restriction enzyme	I. Process by an electric current moves fragments of DNA through a semisolid gel to separate the fragments
	28. Gel electrophoresis	J. An organism or piece of genetic material that is genetically identical to one that was preexisting; making a genetic duplicate
	29. Polymerase chain reaction	K. The deliberate alteration of the genetic material of an organism

Unit 4: Information Vocab Key

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