

it's science!

ADENINE: One of the "base" organic chemical compounds that make up the molecules of nucleic acids (DNA and RNA).

ALLELE: Any one of the possible variations of a specific gene. For example, of the gene that determines hair color, there's one allele for brown hair, another allele for black hair, etc.

CHROMOSOME: A threadlike body composed of genes, located in the nucleus of a cell. Human cells contain 46 chromosomes each.

CODON: In nucleic acids, a sequence of three nucleotides that controls the type and position of amino acids during protein synthesis.

CYTOSINE: A base compound in DNA and RNA molecules.

DIPLOID: A cell containing pairs of matching chromosomes, or an organism whose cells contain such pairs.

DNA: Short for deoxyribonucleic acid. DNA is crucial to cell reproduction, protein synthesis, and hereditary traits in living organisms.

DREAMLIFE: Part of the rapi-cloning process during which a growing clone is "programmed" with specific memories and experiences.

ENZYME: A protein that catalyzes biochemical reactions by building, breaking down, or transforming organic compounds. These reactions include digestion, salivation, and fermentation.

GAMETE: A reproductive cell containing only one set of chromosomes, which unites with a gamete of the opposite sex to form diploid cells that grow into a new organism.

GENENGINEER: A scientist specializing in the manipulation of DNA and RNA to change the char-

acteristics of living organisms.

GENOME: A complete, haploid set of all the single chromosomes that determine the physical makeup of an organism.

GUANINE: A base compound in DNA and RNA molecules.

HAPLOID: A cell containing a set of single chromosomes, or an organism composed of haploid cells. Gametes are haploid cells.

HEARTBREAKERS: The self-chosen name of Sorenson's Beta-series clones, engineered as bodyguards. Except for Queenie, the original Heartbreakers are dead; the current group was created with the Paracelsus Matrix.

HELIX: A spiral form. DNA is shaped like a double helix, with two spiraling nucleotide strands joined by pairs of base compounds.

LONE: The League of Ones, an underground organization of clones.

MEIOSIS: The process of cell division by which haploid gametes are produced from diploid cells.

MUTAGEN: An agent—such as a chemical, radioactive element, or ultraviolet light—that causes sudden, lasting change in genes or chromosomes.

MUTATE: To undergo a relatively abrupt alteration of genetic material. The only hereditary mutations are those in gametes.

NUCLEOTIDE: Some nucleotides are the building blocks of DNA and RNA. Nucleotide molecules contain strands of sugar and phosphate molecules. The strands can be linked by base compounds such as adenine.

PARACELSUS: Philippus Aureolus Paracelsus, 16th-century Swiss/German alchemist and physician. Sorenson gave his name to

the Paracelsus Matrix, a genetically programmable retrovirus she developed to "rewrite" living DNA.

PROTEIN: A complex organic compound containing amino acids and present in all living organisms. Proteins—which make up much of animal muscle tissue, blood, and enzymes—are continually broken down and rebuilt throughout an organism's life.

RAPICLONING: An accelerated cloning process, developed by Sorenson, that can grow functional adult clones in only six months.

RECESSIVE: An allele that, in the presence of a dominant allele of the same gene, does not affect the physical traits of an organism.

RECOMBINANT: An organism whose genome has been modified by the artificial insertion of another organism's genes, resulting in "recombinant DNA."

REPLICATION: In genetics, the process by which DNA copies itself and instructs RNA to build proteins. This process underlies all cell growth and enzyme activity.

RETROVIRUS: A virus containing RNA (but no DNA) that copies its genome into the host cell's DNA. Many cancers are caused by retroviruses.

RIBONUCLEIC: See RNA.

RNA: Ribonucleic acid (RNA) copies DNA's genetic sequence, carries it outside a cell's nucleus, and uses it to assemble amino acids into proteins.

THYMINE: A base compound found in DNA, but not in RNA.

URACIL: A base compound found in RNA, but not in DNA.

"Who's Who" on p. 104 gives info on *DELTA*, *QUEENIE*, *SORENSEN*, *VECTOR*, and other characters.