

STEAM Tech Teams

Glossary of Terms

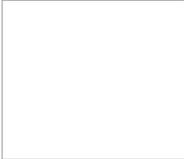
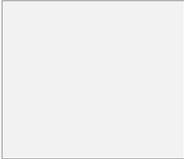
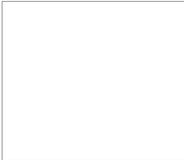
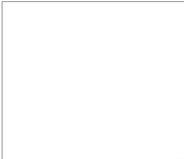
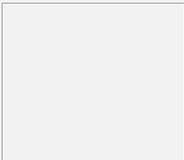
ID/Type/OLE	Word/Definition/Link
141	<p>Biomolecules</p> <p>Amino Sugar</p> <p>n. In chemistry an amino sugar (technically 2-amino-2-deoxysugar) is a sugar molecule (i.e. a glucose or a fructose) in which a hydroxyl (i.e. with an OH-) group has been replaced with an amine (contains a Nitrogen atom) group.</p> <p>https://en.wikipedia.org/wiki/Amino_sugar</p>
137	<p>Biomolecules</p> <p>Angstrom</p> <p>n. A unit of measurement in the metric system equal to one ten-billionth of a meter.</p> <p>https://en.wikipedia.org/wiki/%C3%85ngstr%C3%B6m</p>
145	<p>Biomolecules</p> <p>Anti-parallel</p> <p>adv. Biplolymers that run parallel to one another but with opposite alignments.</p> <p>https://en.wikipedia.org/wiki/Antiparallel_(biochemistry)</p>
130	<p>Biomolecules</p> <p>Atom</p> <p>n. The smallest unit of ordinary matter that has the properties of a chemical element.</p> <p>https://en.wikipedia.org/wiki/Atom</p>
146	<p>Biomolecules</p> <p>Cell Nucleus</p> <p>n. A membrane enclosed organelle found in eukaryotic cells. The cell nucleus contains most of the cell's genetic material.</p> <p>https://en.wikipedia.org/wiki/Cell_nucleus</p>
153	<p>Biomolecules</p> <p>Diploid</p> <p>adj. Types of cells that have two homologous copies of each chromosome.</p> <p>https://en.wikipedia.org/wiki/Ploidy_-_Diploid</p>

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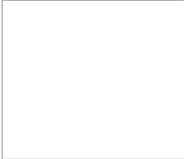
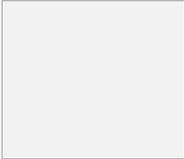
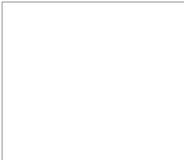
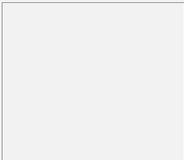
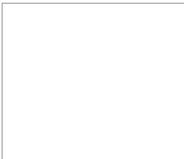
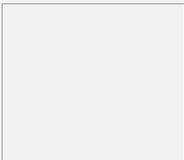
139	Biomolecules	DNA
		<p>n. Deoxyribonucleic acid. A molecule that carries the genetic instructions used in the growth, development, functioning and reproduction of all known living organisms and many viruses.</p> <p>https://en.wikipedia.org/wiki/DNA</p>
147	Biomolecules	DNA Transcription
		<p>v. The first step of gene expression in which a particular segment of DNA is copied into RNA by the enzyme RNA polymerase.</p> <p>https://en.wikipedia.org/wiki/Transcription_(biology)</p>
135	Biomolecules	Electron
		<p>n. A sub-atomic particle which when moving causes electricity.</p> <p>https://en.wikipedia.org/wiki/Electron</p>
136	Biomolecules	Electron Hole
		<p>n. The absence of an electron in a position where it otherwise could exist.</p> <p>https://en.wikipedia.org/wiki/Electron_hole</p>
176	Biomolecules	Eukaryote
		<p>n. Any organism whose cells contain a nucleus and other organelles enclosed with membranes.</p> <p>https://en.wikipedia.org/wiki/Eukaryote</p>
140	Biomolecules	Helix
		<p>n. A type of curve in three-dimensional space. It has the property that the curve's tangent line at any point makes a constant angle with the fixed line called the axis.</p> <p>https://en.wikipedia.org/wiki/Helix</p>

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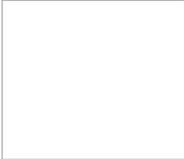
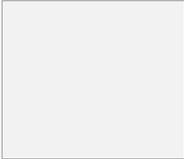
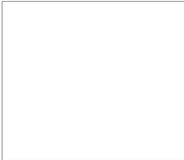
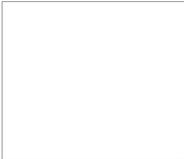
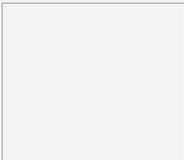
152	Biomolecules	Integrase
		<p>n. An enzyme produced by a retrovirus that enables genetic material to be integrated into a strand of DNA.</p>
		<p>https://en.wikipedia.org/wiki/Integrase</p>
151	Biomolecules	Invertase
		<p>n. An enzyme which: 1) cuts the subject DNA at specific points, 2) flips the released piece of DNA, and 3) rejoins the DNA. The result is a change in DNA sequence which prohibits the DNA polymerase from proceeding down the DNA strand (a "Stop" signal) or causes it proceed down the DNA strand (a "Start" signal).</p>
		<p>https://en.wikipedia.org/wiki/Invertase</p>
132	Biomolecules	Micrometer
		<p>n. A measure of distance equal to one-millionth of a meter.</p>
131	Biomolecules	Molecule
		<p>n. An electrically neutral group of two or more atoms held together with chemical bonds.</p>
		<p>https://en.wikipedia.org/wiki/Molecule</p>
144	Biomolecules	Monomer
		<p>n. A molecule that may bind to anohter molecule to form a polymer.</p>
		<p>https://en.wikipedia.org/wiki/Monomer</p>
133	Biomolecules	Nanometer
		<p>n. A measure of distance equal to one-billionth of a meter.</p>

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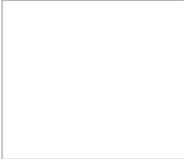
142	Biomolecules	Nucleobase (Base)
		n. One of four nucleic acids that express the information in DNA or RNA: adenine, thymine, cytosine and guanine.
		https://en.wikipedia.org/wiki/Nucleobase
143	Biomolecules	Polymer
		n. A large molecule or macromolecule composed of many repeated subunits such as plastics or natural biopolymers such as proteins and DNA/RNA.
		https://en.wikipedia.org/wiki/Polymer
154	Biomolecules	Polyploidy
		adj. A cell state where all cells have multiple sets of chromosomes beyond the basic set, usually 3 or more.
		https://en.wikipedia.org/wiki/Polyploid
177	Biomolecules	Retrovirus
		n. A single-stranded, positive-sense RNA virus with a DNA intermediate.
		https://en.wikipedia.org/wiki/Retrovirus
138	Biomolecules	Ribosome
		n. A simple molecular machine found in all living cells that serves as the site of biological protein synthesis, or translation.
		https://en.wikipedia.org/wiki/Ribosome
149	Biomolecules	RNA Polymerase (RNAP)
		n. An enzyme that produces primary transcription RNA and, thereby, promotes creation of proteins from the Messenger RNA (mRNA) template.
		https://en.wikipedia.org/wiki/RNA_polymerase

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148	Biomolecules	RNA Translation
		n. Translation is a process in which ribosomes in the cell's cytoplasm create proteins following "Transcription" of DNA to RNA.
		https://en.wikipedia.org/wiki/Translation_(biology)
150	Biomolecules	Transcriptor
		n. A transistor-like device composed of DNA and RNA rather than semi-conducting material such as silicon. Prior to its invention in 2013, the Transcriptor was considered an important component in building biological computers.
		https://en.wikipedia.org/wiki/Transcriptor