

|              |                |                           |
|--------------|----------------|---------------------------|
| Nucleic acid | Monomer        | Polymer                   |
| condensation | Complementary  | hydrolysis                |
| ATP          | Polynucleotide | Nucleotide                |
| Deoxyribose  | Ribose         | DNA                       |
| Purines      | Pyrimidines    | Organic nitrogenous bases |

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|--|---|--|
| <p>A large <u>molecule</u> made up of many/repeating similar smaller molecules (monomers) covalently bonded together</p>                             | <p>A small <u>molecule</u> that is one of the units bonded together to form a polymer</p>     | <p>A polymer of NUCLEOTIDES.</p>   |
| <p>A reaction in which a molecule is broken down into smaller molecules by the addition of a water molecule and the breaking of a covalent bond.</p> | <p>Refers to structures that fit together because their shapes and/or charges match up</p>    | <p>A type of chemical reaction in which 2 <u>molecules</u> are joined together by means of a covalent bond to form a larger <u>molecule</u> and at the same time a water molecule is released.</p> |
| <p>The monomer used to form nucleic acids. Made of a pentose sugar, a phosphate group and a nitrogenous base</p>                                     | <p>A polymer consisting of many nucleotide monomers covalently bonded together</p>            | <p>A molecule used to store energy temporarily in organisms</p>  |
| <p>Stable polynucleotide molecule that stores genetic information in the form of a sequence of bases.<br/>=Deoxyribonucleic acid</p>                 | <p>The 5-carbon (pentose) sugar found in RNA nucleotides</p>                                  | <p>The 5-carbon sugar in DNA nucleotides</p>   |
| <p>A, T, C, G, U</p>   | <p>Thymine, cytosine, and uracil- nitrogenous bases consisting of a single ring structure</p> | <p>Adenine and guanine - nitrogenous bases consisting of a double ring structure</p>   |

|                         |                        |                                  |
|-------------------------|------------------------|----------------------------------|
| Cytosine<br>(C)         | Adenine<br>(A)         | Uracil<br>(U)                    |
| Thymine<br>(T)          | Guanine<br>(G)         | Ribosomal RNA<br>(rRNA)          |
| Messenger RNA<br>(mRNA) | Transfer RNA<br>(tRNA) | Semi-conservative<br>replication |
|                         |                        |                                  |
|                         |                        |                                  |

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|--|---|--|
| <p>A nitrogen containing organic base found in RNA.</p>  | <p>A nitrogen containing organic base found in nucleic acids, It pairs with thymine in DNA and uracil in RNA.</p>   | <p>A nitrogen containing organic base found in nucleic acids, It pairs with guanine.</p>   |
| <p>RNA found in ribosomes</p>  | <p>A nitrogen containing organic base found in nucleic acids, It pairs with cytosine.</p>   | <p>A nitrogen containing organic base found in nucleic acids, It pairs with adenine in DNA</p>   |
| <p>The replication of a DNA strand where the two strands unzip and a new strand is assembled according to base pairing rules. The replicated double helix consists of one old strand and one new one</p> | <p>Type of RNA polynucleotide involved in protein synthesis. It transports amino acids to the ribosomes to be added to the growing polypeptide chain.</p> | <p>A type of RNA polynucleotide involved in protein synthesis. Carries the information coding for a polypeptide from the nucleus to the ribosomes in the cytoplasm</p> |
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