|  |  |  |
| --- | --- | --- |
| pH |  | Measure of H+ ions |
| Bases (pH 7-14) produce lots of |  | OH- Ions |
| Acids (pH 1-7) produce lots of |  | H+ Ions |
| Water on pH Scale |  | 7 |
| Water has unique properties due |  | **Hydrogen Bonds**  (Where one oxygen is attracted to the hydrogen in a neighboring molecule of water) |
| Oxygen is slightly negative due **electrons** being more attracted to it rather than hydrogen in water. |  | Water is POLAR  Covalent |
| http://ts1.mm.bing.net/th?&id=HN.608000011716267817&w=300&h=300&c=0&pid=1.9&rs=0&p=0 |  | Glucose  Structure |
| http://ts1.mm.bing.net/th?&id=HN.607998250776592528&w=300&h=300&c=0&pid=1.9&rs=0&p=0 |  | Amino Acid Structure |
| http://biology.clc.uc.edu/graphics/bio104/fat.jpg |  | Lipid  Structure |
| http://biologii.net/world/images/molb/dna2.jpg |  | Nucleotide  Structure |
| Methane  http://ts1.mm.bing.net/th?&id=HN.608013613873564029&w=300&h=300&c=0&pid=1.9&rs=0&p=0 |  | Simple Hydrocarbon |
| Building block-subunit for Carbohydrates |  | Monosaccharide |
| Building block-subunit for  Protein |  | Amino Acids |
| Building block-subunit for  Lipids |  | Glycerol and fatty acids |
| Building block-subunit for  Nucleic Acids |  | Nucleotides |
| Carboxyl Group |  | http://ts1.mm.bing.net/th?&id=HN.608004959517412886&w=300&h=300&c=0&pid=1.9&rs=0&p=0 |
| Amino group |  | http://ts1.mm.bing.net/th?&id=HN.608037055811421521&w=300&h=300&c=0&pid=1.9&rs=0&p=0 |
| Atomic Number |  | Number of Protons |
| Atomic Mass |  | Protons and Neutrons |
| Valence Number |  | Electrons in the last shell |
| Substrate |  | Reactants that an enzyme will act on |
| Active Site |  | Site Where an Enzyme will work on the substrate |
| Covalent Bonds |  | Electrons are shared |
| Ionic |  | Electrons are transferred |
| Ion |  | Atoms that have lost or gained electrons |
| Monosaccharide |  | Glucose  Fructose  Galactose |
| Isomer |  | Same formula but different arrangement such a glucose and fructose |
| Isotope |  | Same element  Different **Neutrons** |
| Enzymes |  | Lowers activation  Energy and speeds up reactions in Organic compounds |
| Organi**c** |  | Must contain the element **CARBON** |
| Two things that can destroy an enzyme |  | pH  Temperature |
| 4 Biomolecules |  | Carbohydrates  Proteins  Lipids  Nuclei Acids |
| Peptide bonds |  | Bond between 2 amino acids |
| Dehydration  Synthesis |  | Water is removed to link to biomolecule subunits |
| Hydrolysis |  | Water is added to break apart two organic molecules |
| -OSE |  | Many sugars end in this |
| -ASE |  | Many enzymes end in this |