Chemical Compounds pg. 74

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| What is an element?  What is a compound?  Why is water an important compound?  What is the difference between organic and inorganic compounds?  What are carbohydrates?  What are lipids?  What are proteins?  What is the structure of proteins?  What is the function of proteins?  What are nucleic acids?  What are the types of nucleic acids? | An element is any substance that cannot be broken down into simpler substances.  A compound is two or more elements that have been chemically combined.  Most chemical reactions within cells rely on water.  Organic compounds contain carbon.  Carbohydrates (carbs) are energy rich organic compounds made of carbon, hydrogen, and oxygen like starches and sugars. They make up cell parts.  Lipid are energy rich organic compounds make of carbon, hydrogen, and oxygen like fats, oils, and waxes. They store energy.  Proteins are large organic molecules made of carbon, hydrogen, oxygen, nitrogen, and sometimes sulfur.  Proteins are made up of amino acids.  1. Form cell parts  2. Perform chemical reactions  3. Enzymes speed up reactions  Nucleic acids are long organic molecules made of carbon, oxygen, hydrogen, nitrogen, and phosphorus. They contain instructions that cells need to carry out in order to function.  1. DNA- genetic material  2. RNA- produce proteins |