**Carbohydrates**

**Organic vs. Inorganic**

 Organic =

**Chemical Formulas**

* *Structural formulas* - show all the atoms *and* their bonds
* *Condensed structural formula* - often omit their bonds

CH3-CH2-CH2-CH3

**What Will We Be Looking At?**

* Macromolecules

**Why are Macromolecules Important?**

* involved in all of the structures and processes of cells and organisms.
* 4 different types of macromolecules

**CARBOHYDRATES**

* Contain:
* Ratio of Hydrogen to Oxygen (H:O) =
* Monomers =
* Examples:

Disaccharides

Monosaccharides

\*Disaccharides are joined by a:

**Big Sugars, Big Purposes**

**Macromolecules Factory**

* **Condensation/ Dehydration Synthesis**
	+ (Water is \_\_\_\_\_\_\_\_\_\_ as a part of this process)
* **Hydrolysis**
	+ (Water is \_\_\_\_\_\_\_\_\_ as a result of this process)

**Carbohydrates are…**

* **Glucose**
* **Starch**
* Animals store carbohydrates in their body as **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** in liver and cells
* When we need more sugar, the body breaks down glycogen using **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
* Stored Glycogen is used in a day, and need to be replenished.
* **Cellulose** –
	+ - Most abundant organic compound on Earth
		- *What are the building blocks of cellulose? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*
* **Chitin -**