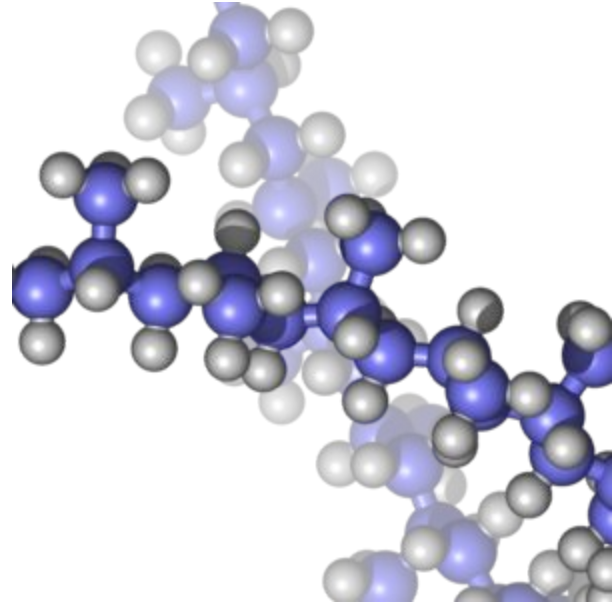


# Carbohydrates

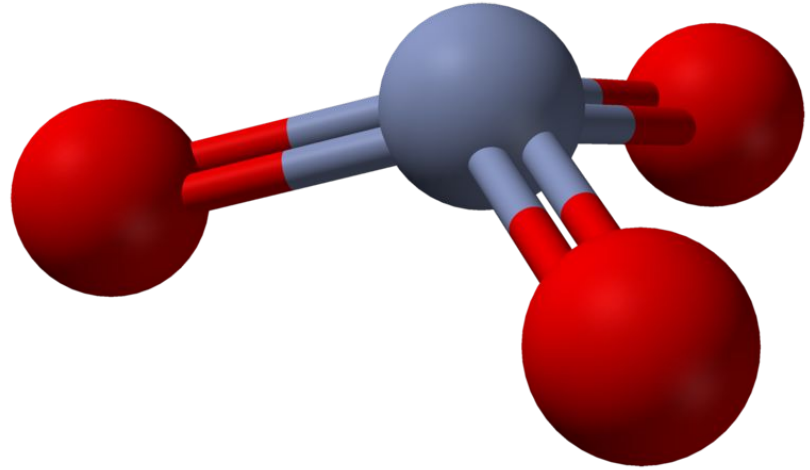
# Vocabulary

polymer = many units!



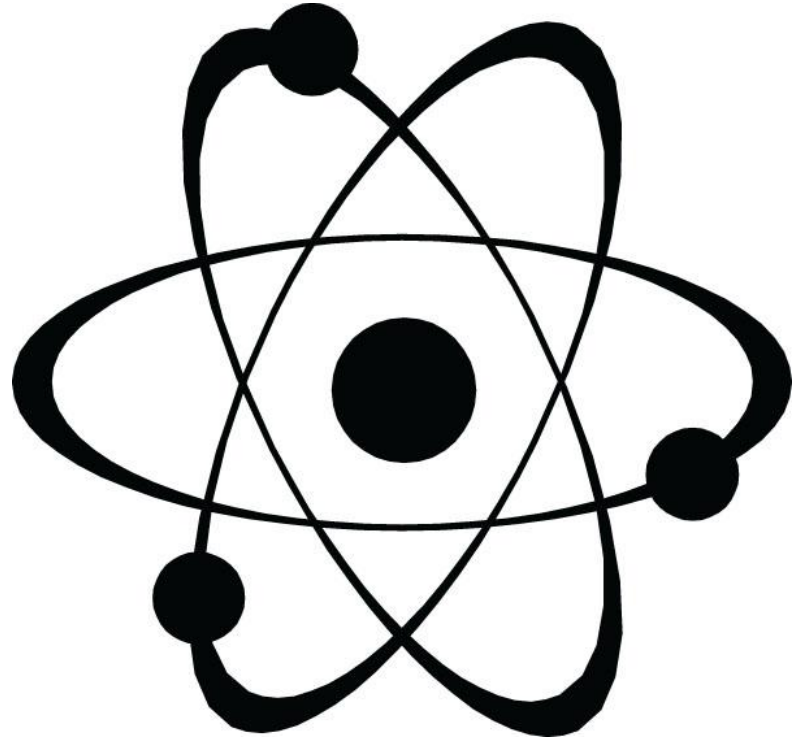
# Vocabulary

monomer = single unit



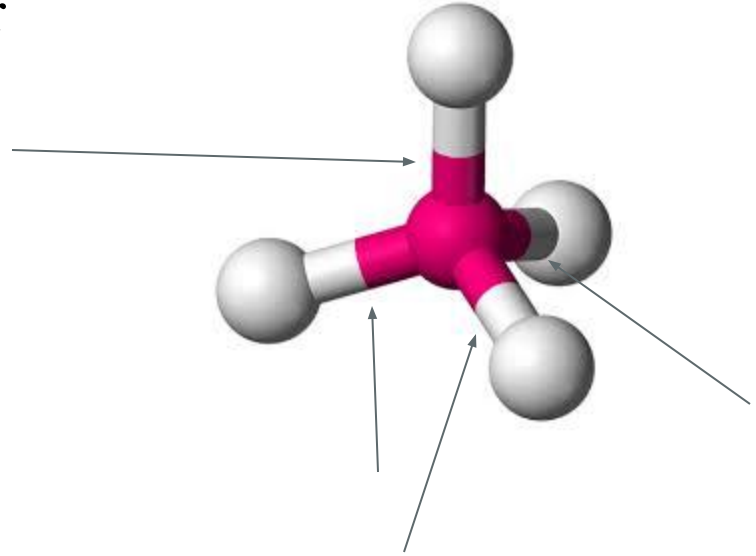
# Vocabulary

atom = smallest piece of matter



# Vocabulary

chemical bond = holds atoms together



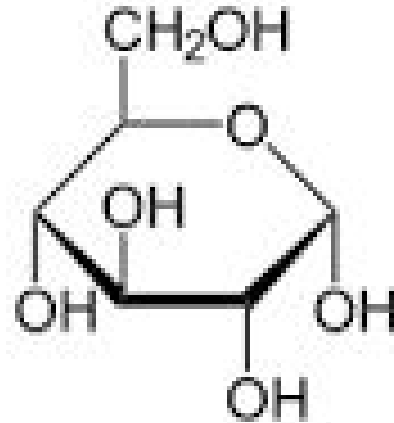
# Vocabulary

carbohydrate = nutrition that provides energy



# Vocabulary

monosaccharide= simplest form of carbohydrate



# Vocabulary

glucose = a simple sugar (monosaccharide)





# Vocabulary

starch = multiple units of glucose



# Vocabulary

cellulose = a very long chain of glucose



# Polymer

**Polymer: Train**

**Monomer: ??**



**Monomer**

**Polymer: Train**

**Monomer: Train car**



# Polymer

**Polymer:** Pearl Necklace

**Monomer:** ???



**Polymer**

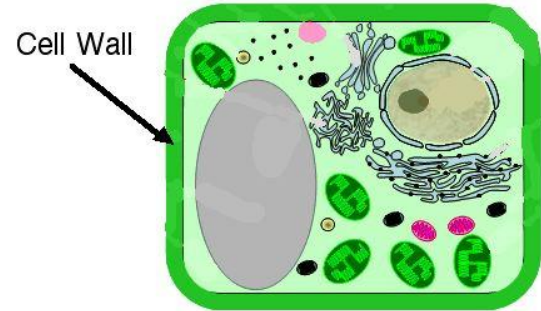
**Polymer: Pearl Necklace**

**Monomer: Pearl**



# Carbohydrates

- 1) The main source of energy for our bodies.
- 2) The cell wall in plants is made of carbohydrates
  - Allows plants to grow tall
  - This type of carbohydrate is called Cellulose.



# Carbohydrates

Where can we find carbohydrates?

- 1) In plant foods (fruits, vegetables, peas, beans)
  - a) SUGAR comes from a plant (candy, cookies)
  - b) FLOUR comes from a plant (pasta, potatoes, bread)
  
- 2) In animal products (milk)





# Carbohydrates are made of....

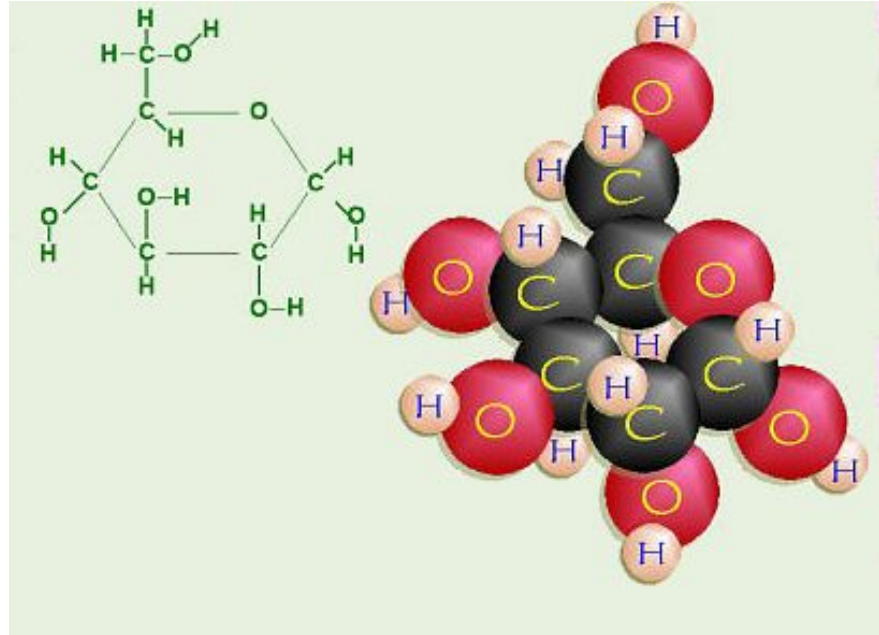
## GLUCOSE!

- Glucose is the most common monomer of carbohydrates



# Shape of Glucose

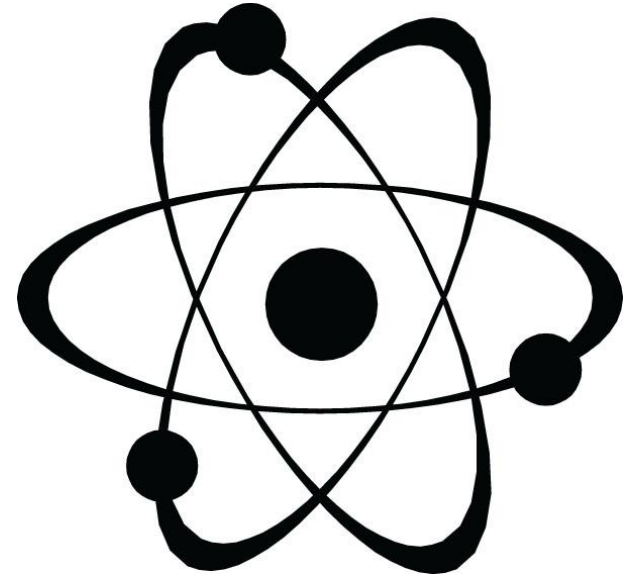
-A hexagonal ring



# Atomic Level

On the atomic level, carbohydrates are made of....

....carbon, hydrogen, and oxygen (CHO)



# Carbohydrates

Two types:

- 1) Simple
- 2) Complex

# Simple Carbohydrates

- Made of 1 or 2 monomers
- Fastest source of energy
- Digested easily
- Taste sweet



# Complex Carbohydrates

Polymers are made of many monomers

- Taste starchy

