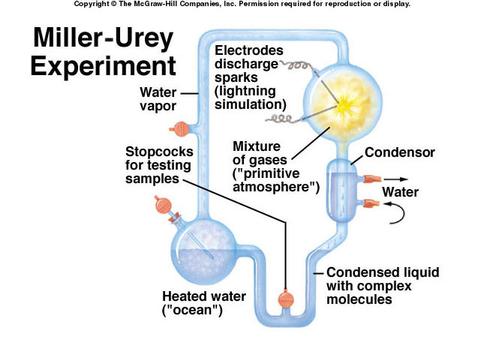
**CARBON BACKBONES**

**Organic Chemistry –**

**Origins of Life**

* 

**What did he find?**

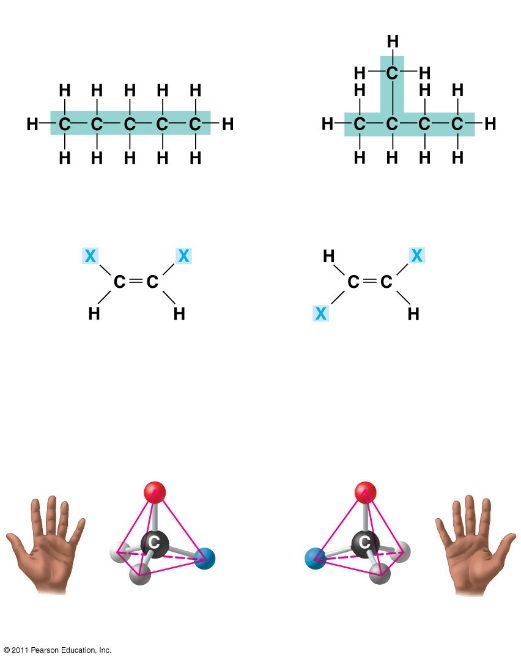
**Carbon bonding**

**Carbon Chains**



**Hydrocarbons**

**(a) Structural isomers**

 -

**Isomers**

**(b) *Cis-trans* isomers**

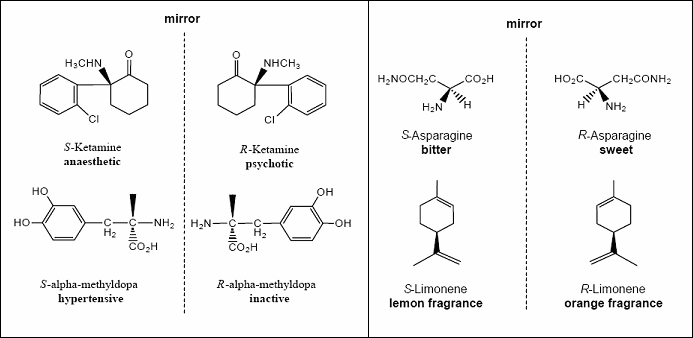
***trans* isomer: The two Xs  
are on opposite sides.**

***cis* isomer: The two Xs  
are on the same side.**

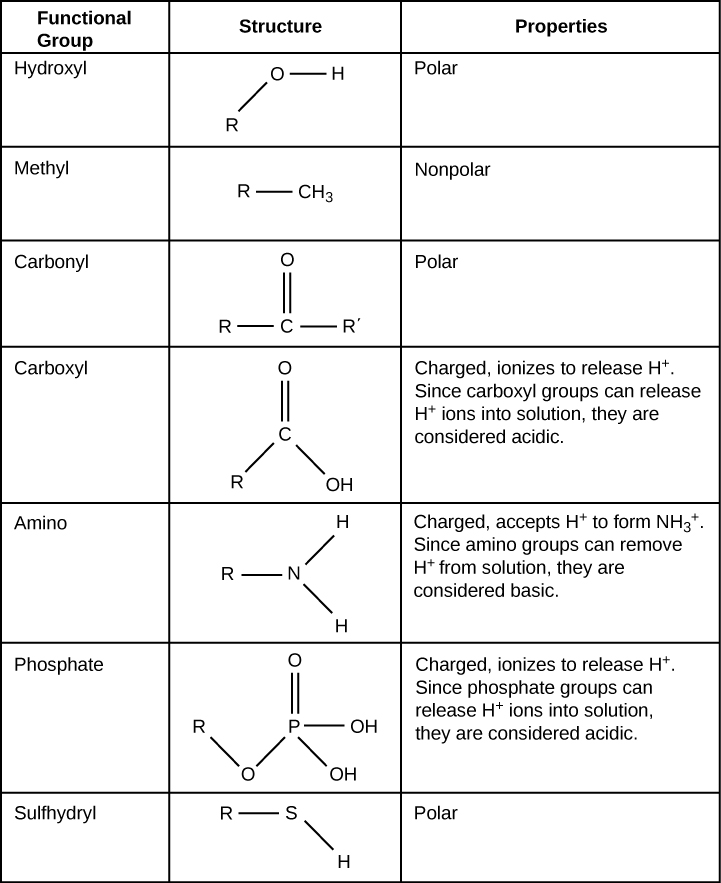
* + **Structural isomers**

**(c) Enantiomers**

* + ***Cis-trans* isomers**
  + **Enantiomers** - mirror images of each other

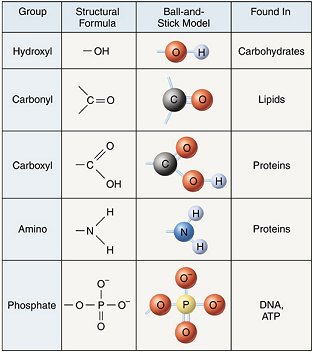
**Pharmaceutical Importance of enantiomers**

* Differing effects of enantiomers show that organisms are sensitive to even subtle variations in molecules

**Functional Groups**

**🡪**

* **The seven functional groups that are most important in the chemistry group:**

  + 

**ATP –**

🡪