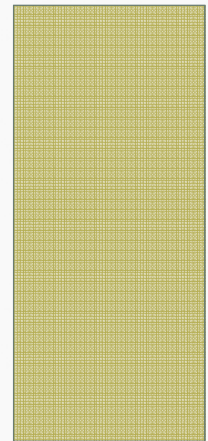


THE BUILDING BLOCKS OF LIFE

SECTION 6.4

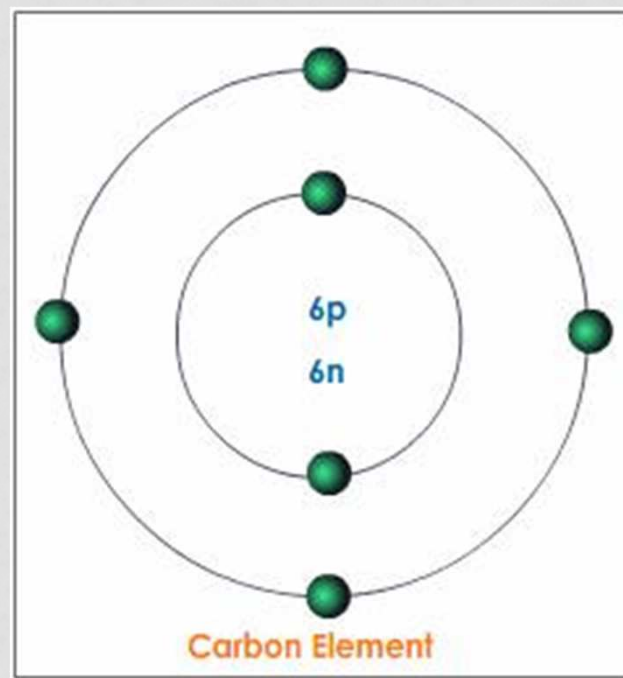


ORGANIC CHEMISTRY

- What does it mean to be organic?
 - In science, words can mean different things than every day life
- Organic – containing the element CARBON
- almost all biological molecules contain carbon
- Carbon is unique because of it's atomic structure

- Remember:

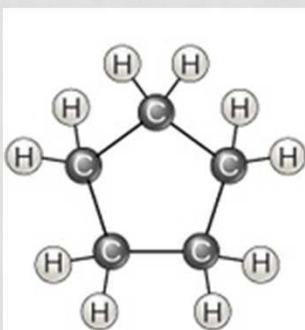
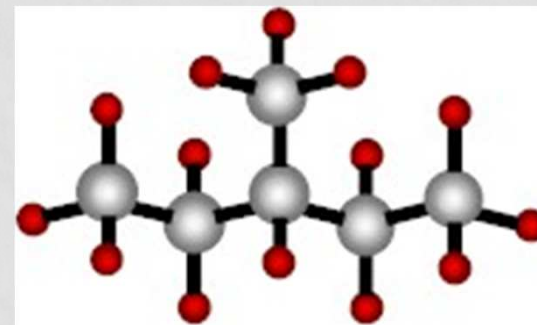
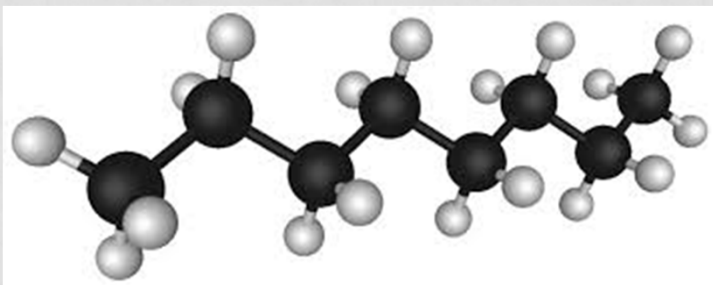
- 6 p+
- 6 e-



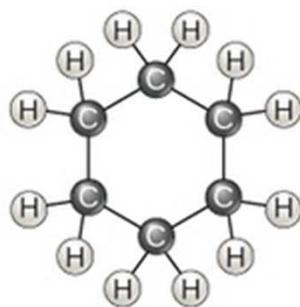
ORGANIC CHEMISTRY

- Carbon has FOUR e⁻ in outer energy level
 - How many e⁻ *could* this level hold?
 - It could hold 8 e⁻
- Carbon forms FOUR covalent bonds with other atoms
 - Remember: covalent = sharing e⁻
 - They can be other elements OR other carbon atoms
- The bonds can form chains, branched chains and rings

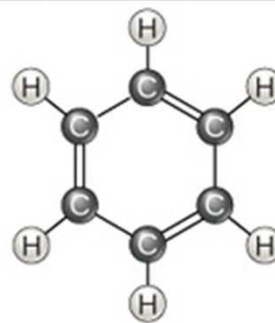
ORGANIC CHEMISTRY



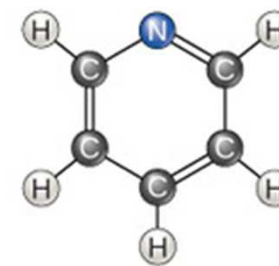
Cyclopentane



Cyclohexane

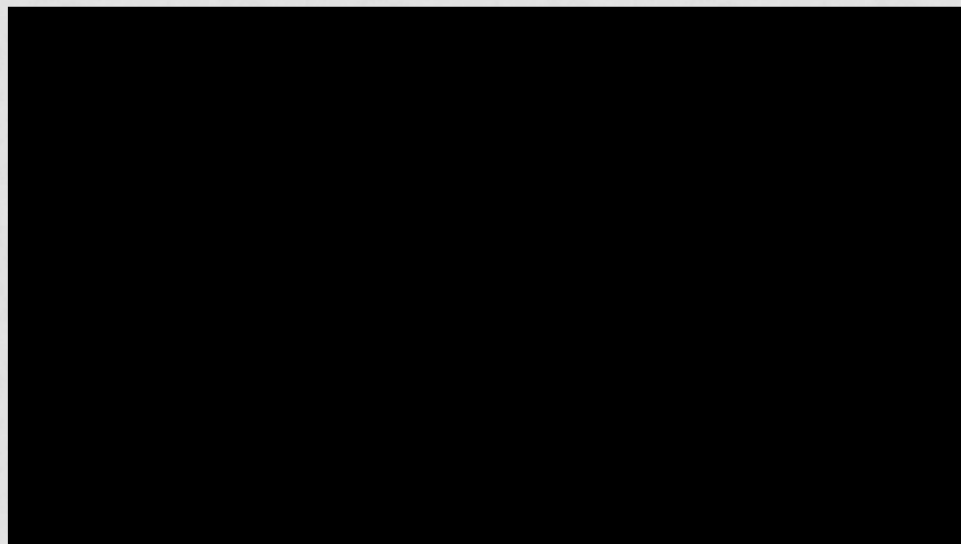


Benzene



Pyridine

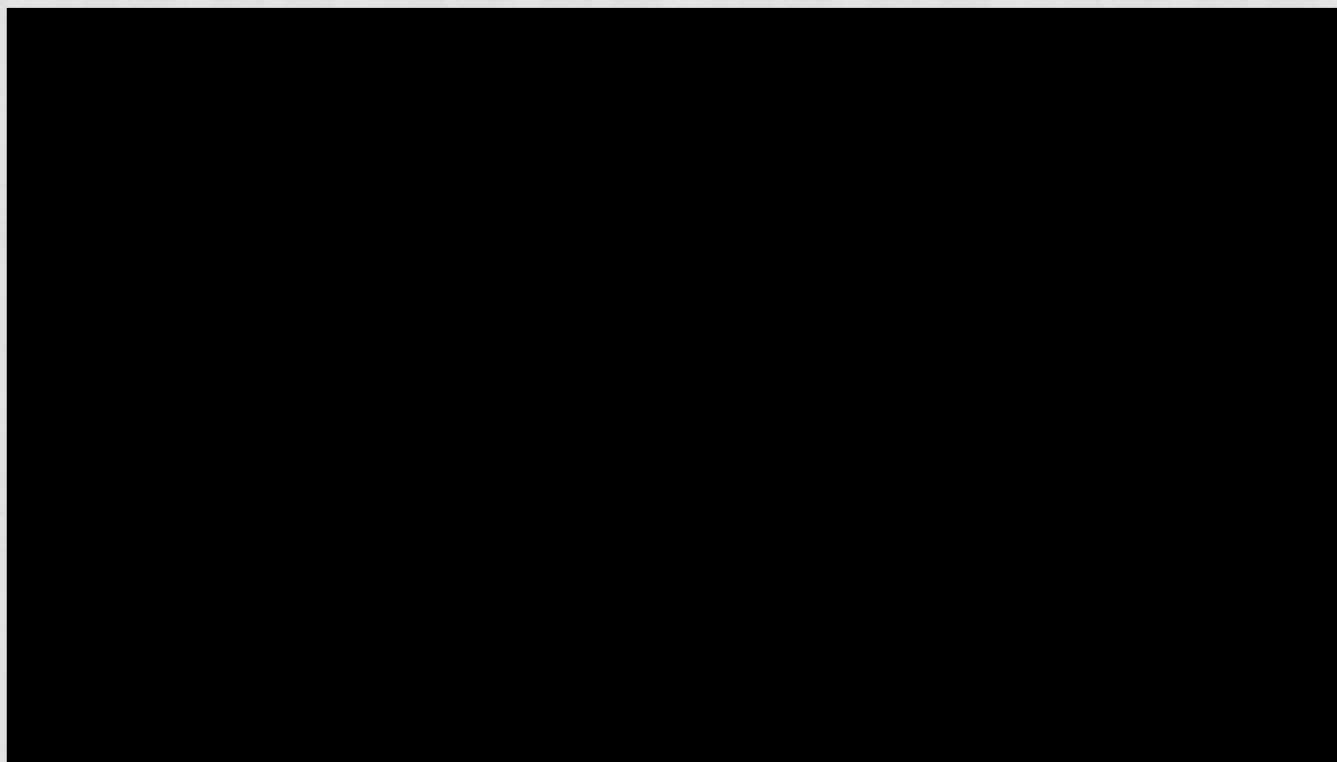
ORGANIC CHEMISTRY



MACROMOLECULES

- Four main biological macromolecules:
 - 1. Carbohydrates
 - 2. Lipids
 - 3. Proteins
 - 4. Nucleic Acids
- In your notes, leave room to take some notes on each of these types of molecules while watching the following short video

MACROMOLECULES



HOMework

- Bring in a food label for tomorrow
 - Make sure it has carbohydrates and/or sugars listed
 - Bring more than one if you can!
-
- Time to work on missing work and individual conversations with me about current grade
 - Report cards are done in 9 school days!

MACROMOLECULES

- Start with condensation and hydrolysis with carbs.....