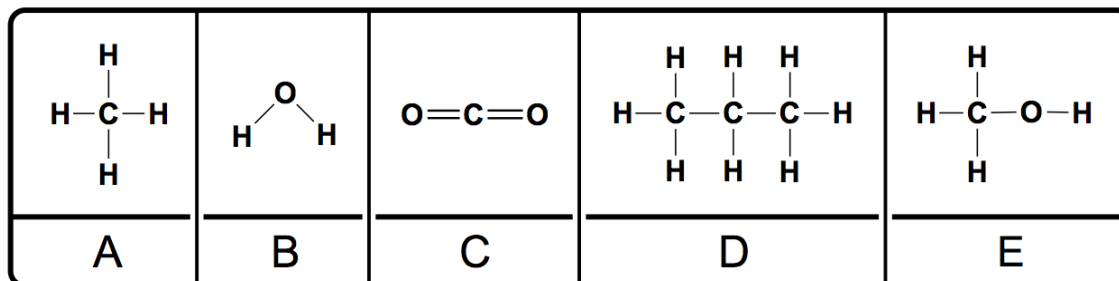


CONCEPT: CARBON

- Of the bulk elements **CHNOPS**, if we exclude water, _____ is the *most abundant* element in living systems.
 - **Carbon** is the main component of _____ molecules (*carbohydrates, proteins, nucleic acids & lipids*).
 - **Organic molecules**: any molecules with *covalently linked* _____ & _____ atoms.
 - **Hydrocarbons**: organic molecules made of _____ Carbon & Hydrogen atoms.

EXAMPLE: Circle the organic molecules in green and highlight the hydrocarbons in yellow.



PRACTICE: Organic molecules are defined as chemical compounds that contain:

- a) Carbon. b) Carbon & Oxygen. c) Carbon & Nitrogen. d) Carbon & Hydrogen.

Carbon is an Excellent Building Block

- Carbon's ability to form _____ bonds makes it a flexible "*atomic building block*" for a variety of molecules.
 - Carbon "backbones" of *organic molecules* can vary in _____ ways:
 - ① Length. ② Position of double bonds. ③ Branch points. ④ Linear vs. Ring forms.

EXAMPLE: Variations of Carbon Backbones.

