Chapter 8 Review Sheet

Carbon Atomic Structure

|  |  |  |
| --- | --- | --- |
| Number of Protons \_\_\_\_\_Number of Electrons \_\_\_\_\_Number of Neutrons \_\_\_\_\_ | # of Energy Shells \_\_\_\_\_# of Valence e- \_\_\_\_\_# of Bonding Sites \_\_\_\_\_# of e- to feel complete \_\_\_\_\_ | Draw Bohr’s Model |

Pure Forms of Carbon

|  |  |  |
| --- | --- | --- |
| Form | Describe Molecular Arrangement (shape) | How is it used? |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Carbon Compounds

Compounds that contain carbon are also called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Hydrocarbons only contain these 2 elements \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Hydrocarbons are used as fuel because they are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Draw

|  |  |  |
| --- | --- | --- |
| Methane CH4 | Ethane C2H6 | Methyl Alcohol CH3OH |

How many bonds can carbon make? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Label the following hydrocarbon structures (straight, branched, ring)

|  |  |  |
| --- | --- | --- |
|  |  |  |

Saturated hydrocarbons only have \_\_\_\_\_\_\_\_\_ bonds. Their chemical name ends in \_\_\_\_\_.

Unsaturated hydrocarbons contain a \_\_\_\_\_\_\_\_\_ bond. Their chemical name ends in \_\_\_\_\_.

Polymers

Definition:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Examples of naturally occurring polymers: \_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_.

Examples of synthetic polymers: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_.

Proteins are \_\_\_\_\_\_\_\_\_\_\_\_\_ made of monomers called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

DNA is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ made of monomers called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Draw 2 examples of each

|  |  |
| --- | --- |
| Monomer Model | Polymer Model |

Organic Compounds in Living Things

Organic compounds all contain \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

|  |  |  |
| --- | --- | --- |
| 4 Classes of Organic Compounds  | Monomers these compounds are composed of:  | Characteristics  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

The most abundant elements in the human body are \_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_.

The simplest carbohydrates are made of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.