Sci 10 **Organic Compound Notes**  Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Organic compounds contain \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Organic compounds have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ bonds
	+ Every living thing contains \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and it therefore organic but **not all** organic compounds are from living things.
	+ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_compounds are compounds that \_\_\_\_\_\_\_\_\_\_\_\_ have carbon.

**Not all compounds that contain carbon are organic:**

* **CaCO3 and NaCO3 (carbonates)**
* **Al4C and SiC ( Carbides)**
* **CO, CO2 (oxides)**
* Organic molecules always have **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** in their formulas.
* This differentiates organic compounds from \_\_\_\_\_\_\_\_\_\_\_\_, which almost always start with \_\_\_.

**Carbon is unique**

* Carbon has **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** in its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ shell, which allows for \_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **than any other element.**
* **Long chains** of carbons form **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**.

**Examples of Carbon:**

Diamond, Graphite, nanotubes

**Hydrocarbons**

* The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of organic compounds contain only carbon and hydrogen are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (alkanes)
	+ The simplest hydrocarbon is methane (CH4), followed by
	+ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (C2H6),
	+ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (C3H8),
	+ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(C4H10), and
	+ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (C5H12).
	+ All hydrocarbons are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	+ most are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_at room temperature.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are the most common natural source of hydrocarbons

**Alcohols**

Alcohols are organic compounds with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The simplest alcohols are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (CH4O),

* + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(C2H6O), and
	+ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (C3H8O).

Alcohols are very good \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(they dissolve other substances).

Alcohols are generally very \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Methanol is a good \_\_\_\_\_\_\_\_\_\_\_\_\_\_ (dissolves many substances water cannot)

Ethanol found in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* + Isopropyl alcohol (rubbing alcohol) – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	+ Methanol, ethanol and isopropanol are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_