**Activity: Chemistry of Life Exploration**

**Part 2: rearranging molecules**

Make **two different types of molecules: one methane** **molecule** and **two oxygen molecules.**

1. Break apart all the bonds holding the molecules together, but **do no put away any of the atoms.**
2. Using **ONLY** **the atoms sitting in front of you** (HINT: there should be 9 atoms total), build **2** **new** types of molecules.
   1. Reminder: these **must be real molecules,** but not **CH4** or **O2!**

|  |  |
| --- | --- |
| 1. **Draw a picture** of your models. Use colors and labels in your drawing! | 1. Convert your drawings into **structural formulas** using letters to represent each atom. |
|  | Get both of your drawings stamped off by your teacher! |

1. What **molecules did you build?**
2. Could you have built any other molecules using **all of these 9 atoms**?
3. What are the **reactants** in this chemical reaction?
4. What are the **products** in this chemical reaction?
5. Write out the **full chemical equation** of this reaction?