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| **Carbon dixoide**This is a **carbon dioxide** molecule. When you breathe out, you usually breathe out carbon dioxide. With the formula **CO2** that means there are two oxygen (O) atoms and one carbon (C) atom. If you look closely at the dot structure, you'll see that they share four electrons each. If a bond shares two electrons that means it is a single bond. If a bond is made up of four electrons it is a double bond. That means that the carbon atom has two double bonds, one with each oxygen atom.  |  |
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| **Cyanogen Chloride**Here's something new. We have three different elements here, carbon (C), nitrogen (N), and chlorine (Cl). That's not special, but the way they combine is! Look at the carbon and the nitrogen, they are sharing six electrons.When two atoms share two electrons, that's a single bond. If they share four it's a double bond. Well these two are sharing six, that's a triple bond. It's extremely strong and powerful. It would take a lot of work to separate the **C** and the **N**! One more thing! Because the bond between carbon and nitrogen is so strong, scientists call them "**cyanogen**" instead of carbon-nitrogen. Scientists know that **cyanogen** is always **CN**.  |  |