**Properties of Metals & Non-Metals** Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_#\_\_\_\_\_

Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Class\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| The majority of our universe is comprised of metals. We (and all other organic life) are primarily comprised of non-metals. On the periodic table these elements can be found: | | | | | | | | |
| **Metals and Non-metals have unique physical properties such as:** | | | | | | | | |
| **Luster** | | | | Is it shiny? | | | | |
| Metals- | | | | Non-metals- | | | | |
| **Magnetism** | | | | Is it magnetic? | | | | |
| Metals- | | | | Non-Metals- | | | | |
| **Conductivity** | | | | Does electricity or heat travel through it? | | | | |
| Metals- | | | | Non-metals- | | | | |
| **Malleability** | | | | Can it be hammered into thin sheets**?** | | | | |
| Metals- | | | | Non-metals- | | | | |
| **Ductility** | | | | Can it be drawn out into thin wires? | | | | |
| Metals- | | | | Non-metals- | | | | |
| **Reactivity (this is a chemical property)** | | | | Does it react well with other elements? | | | | |
| Metals- | | | | Non-metals- | | | | |
| **Normal state** | | | | Is it a solid, liquid or gas at room temperature? | | | | |
| Metals- | | | | Non-metals- | | | | |
| **Now we will evaluate some metals & non-metals to see for ourselves what these properties look like.** | | | | | | | | |
| *There are 4 lab stations you will need to visit, one at 2, 3, 5 & 6. Write yes/no, shiny/dull, or solid/liquid/gas for each element.* | | | | | | | | |
| **Property** | **Sulfur** | **Carbon** | **Copper** | | **Aluminum** | **Gold** | **Oxygen** | **Iron** |
| Luster |  |  |  | |  |  |  |  |
| Magnetism |  |  |  | |  |  |  |  |
| Conductivity |  |  |  | |  |  |  |  |
| Malleability |  |  |  | |  |  |  |  |
| Ductility |  |  |  | |  |  |  |  |
| Normal State |  |  |  | |  |  |  |  |