**Atmospheric Pollution Chart** Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_

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| **NAME** | **CHEMICAL SYMBOL(S)** | **CAUSES** | **CONCERNS** | **SOLUTIONS** |
| Ozone  (Ambient Air) |  |  |  |  |
| Nitrogen Oxides |  |  |  |  |
| Sulfur Dioxides |  |  |  |  |
| Lead |  |  |  |  |
| Carbon Monoxide |  |  |  |  |
| Formaldehyde |  |  |  |  |

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| **NAME** | **CHEMICAL SYMBOL(S)** | **CAUSES** | **CONCERNS** | **SOLUTIONS** |
| VOCs (Volatile Organic Compounds) |  |  |  |  |
| Carbon Dioxide |  |  |  |  |
| Radon |  |  |  |  |
| PM (Particulate Matter) |  |  |  |  |
| CFCs  (Chlorofluoro-carbons) |  |  |  |  |
| Mercury |  |  |  |  |

**Atmospheric Pollution Chart KEY** Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_

* Use your cell phone, laptops, notes, and/or the text book to fill in the chart.

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| **NAME** | **CHEMICAL SYMBOL/S** | **CAUSES** | **CONCERNS** | **SOLUTIONS** |
| Ozone  (Ambient Air) | **O3** | Vehicle exhaust  Forms when other air pollutants react with sunlight.  Forest fires | Lung damage  -          Eye irritation  -          Respiratory tract problems  -          Damages vegetation  -          Causes smog | -          Reduce car emissions  -          Add pollutant filter to smoke stacks. |
| Nitrogen Oxides | **NOx** | Vehicles  Power plants burning fossil fuels  Coal burning stoves | Lung damage  -          Acid rain forms  -          Deteriorate buildings and statues  -          Damages forests  -          Forms ozone | -      Reduce the use of fossil burning power plants  -      Replace old coal burning stoves  -       Reduce car emissions |
| Sulfur Dioxides | **SOx** | Coal burning power plants and industries  Coal burning stoves  Refineries  Volcanoes | Eye irritation  -          Lung damage  -          Kills aquatic life  -          Forms acid rain  -          Acid rain that forms damages buildings and forests. | -     Reduce reliance on coal  -     Recycle metals so less needs to be refined. |
| Lead | **Pb** | Leaded fuel  Metal refineries  Power plants burning fossil fuels | Brain and kidney damage  -      Contaminated crops and livestock | -          Use only unleaded fuel  -          Reduce reliance on fossil fuel burning power plants. |
| Carbon Monoxide | **CO** | Motor vehicles  Power plants burning fossil fuels.  Kerosene or wood burning stoves. | Headaches  -      Reduced mental alertness  -      Death  -      Heart damage | -          Reduce car emissions  -          Utilize nuclear energy.  -          Stop or slow the use of wood burning stoves or kerosene. |
| Formaldehyde | **H2CO or**  **CH2O** | Found in all kinds of products including wood floors, glues, permanent press materials | Eye irritant  Cancer | Remove from home  Ventilate areas with it |

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| **NAME** | **CHEMICAL SYMBOL/S** | **CAUSES** | **CONCERNS** | **SOLUTIONS** |
| VOCs (Volatile Organic Compounds) | **VOC** | Paint  Perfumes  Nail polish  CFCs (in refridgerants and cleaning supplies)  Car exhaust | Respiratory problems  May lead to cancer.  Deplete the ozone layer | Reduce exposure to items that release VOC’s  Reduce the use products containing CFCs |
| Carbon Dioxide | **CO2** | Volcanoes  Motor vehicles  Power plants burning fossil fuels  Forest fires | Produces smog when reacts with light.  -     Increases the greenhouse effect | -          Reduce car emissions  -          Utilize nuclear energy  -          Prevent unnatural forest fires |
| Radon | **Rn** | Radioactive decay in soil and rocks under homes and other buildings. Basements | Lung cancer – 2nd leading cause | -          Seal up basements, have proper ventilation |
| PM (Particulate Matter) | **PMx** | Diesel engines  Power plants  Industries  Windblown dust  Wood stoves | Lung damage  -     Eye irritation  -     Damage to crops  -     Reduces visibility  -     Discolors buildings and statues | -          Reduce the use of diesel engines  -          Filter smokestacks  -          Reduce use of wood stoves |
| CFCs  (Chlorofluoro-carbons) | **CFC** | Motor vehicles  Refrigerants  Cleaning products | Deplete ozone layer | -      Reduce the use of items that contain CFCs |
| Mercury | **Hg** | Burning fossil fuels | Contaminate fish | -          Reduce the use of fossil fuels. |