# Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Hour: \_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_

# Chemistry: *Classifying Matter*

Classify each of the materials below. In the center column, state whether the material is a **pure substance** or a **mixture**. If the material is a pure substance, further classify it as either an **element** or **compound** in the right column. Similarly, if the material is a mixture, further classify it as **homogeneous** or **heterogeneous** in the right column. Write the entire word in each space to earn full credit.

|  |  |  |  |
| --- | --- | --- | --- |
| Material | Pure Substance ***or Mixture*** | ***Element, Compound,***  ***Homogeneous, or Heterogeneous*** | ***If a Mixture:***  ***Solution, Colloid, or Suspension*** |
| concrete |  |  |  |
| sugar + pure water  (C12H22O11 + H2O) |  |  |  |
| iron filings (Fe) |  |  |  |
| limestone (CaCO3) |  |  |  |
| orange juice (w/pulp) |  |  |  |
| Pacific Ocean |  |  |  |
| air inside a balloon |  |  |  |
| aluminum (Al) |  |  |  |
| magnesium (Mg) |  |  |  |
| acetylene (C2H2) |  |  |  |
| tap water in a glass |  |  |  |
| soil |  |  |  |
| pure water (H2O) |  |  |  |
| chromium (Cr) |  |  |  |
| pizza |  |  |  |
| salt + pure water  (NaCl + H2O) |  |  |  |
| benzene (C6H6) |  |  |  |
| muddy water |  |  |  |
| brass  (Cu mixed with Zn) |  |  |  |
| baking soda (NaHCO3) |  |  |  |

# Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Hour: \_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_

# Chemistry: *Classifying Matter*

Classify each of the materials below. In the center column, state whether the material is a **pure substance** or a **mixture**. If the material is a pure substance, further classify it as either an **element** or **compound** in the right column. Similarly, if the material is a mixture, further classify it as **homogeneous** or **heterogeneous** in the right column. Write the entire word in each space to earn full credit.

|  |  |  |
| --- | --- | --- |
| Material | Pure Substance ***or Mixture*** | ***Element, Compound,***  ***Homogeneous, Heterogeneous*** |
| concrete | Mixture | ***Heterogeneous*** |
| sugar + pure water  (C12H22O11 + H2O) | Mixture | ***Compound*** |
| iron filings (Fe) | Pure Substance | ***Element*** |
| limestone (CaCO3) | Pure Substance | ***Element*** |
| orange juice (w/pulp) | Mixture | ***Heterogeneous*** |
| Pacific Ocean | Mixture | ***Heterogeneous*** |
| air inside a balloon | Mixture | ***Homogeneous*** |
| aluminum (Al) | Pure Substance | ***Element*** |
| magnesium (Mg) | Pure Substance | ***Element*** |
| acetylene (C2H2) | Pure Substance | ***Compound*** |
| tap water in a glass | Mixture | ***Homogeneous*** |
| soil | Mixture | ***Heterogeneous*** |
| pure water (H2O) | Pure Substance | ***Compound,*** |
| chromium (Cr) | Pure Substance | ***Element,*** |
| Pizza | Mixture | ***Heterogeneous*** |
| salt + pure water  (NaCl + H2O) | Mixture | ***Homogeneous*** |
| benzene (C6H6) | Pure Substance | ***Compound*** |
| muddy water | Mixture | ***Heterogeneous*** |
| brass  (Cu mixed with Zn) | Mixture | ***Homogeneous*** |
| baking soda (NaHCO3) | Pure Substance | ***Compound*** |