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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.
* 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.

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| --- | --- | --- |
| Material | **Pure Substance** | **Element or Compound** |
| **Mixture** | **Solution(Homogeneous) or**  **Mechanical mixture (Heterogeneous)** |
| Laundry detergent (contains white and blue crystals) |  |  |
| sugar + pure water  (C12H22O11 + H2O) |  |  |
| iron filings (Fe) |  |  |
| limestone (CaCO3) |  |  |
| orange juice  (water and pulp) |  |  |
| Pacific Ocean  (Water and Salt) |  |  |
| air |  |  |
| aluminum (Al) |  |  |
| magnesium (Mg) |  |  |
| acetylene (C2H2) |  |  |
| tap water in a glass |  |  |
| pure water (H2O) |  |  |
| soil |  |  |
| chromium (Cr) |  |  |
| baking soda (NaHCO3) |  |  |
| salt + pure water  (NaCl + H2O) |  |  |
| benzene (C6H6) |  |  |
| muddy water |  |  |
| brass  (Cu mixed with Zn) |  |  |
| Pizza |  |  |