1. Classify the following substances as **homogeneous** or **heterogeneous**.
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ A glass of soy milk
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ A bowl of beef noodles
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Mud water
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Perfume
6. Classify the following substances as **homogeneous mixture**, **pure substance**, or **mechanical mixture**.
7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ A bottle of isopropanol (type of alcohol)
8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Cereal in milk
9. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Air (be careful, air contains more than just oxygen)
10. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Soy sauce
11. Classify the following substances as an **element**, or **compound**.

|  |  |
| --- | --- |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ H2 | 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ N2 |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ H2O2 | 1. ­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ C6H12O6 |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Na | 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Ag |

1. Classify each of the following observations as qualitative or quantitative, and physical or chemical property.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Qualitative | Quantitative | Physical Property | Chemical Property |
| 1. The density of water is 1.0 g/mL |  |  |  |  |
| 1. CuSO4 is blue |  |  |  |  |
| 1. The melting point of ice is 0°C |  |  |  |  |
| 1. CO2 boils at -78.5°C |  |  |  |  |
| 1. Fe turns brown in the presence of oxygen and water |  |  |  |  |