Elements and compounds

Classify each of the diagrams below as one of the following:

|  |  |  |  |
| --- | --- | --- | --- |
| 1. Element | C) Molecular compound | E) Mixture of compounds | H) Mixture of molecular elements & compounds |
| 1. Molecular element | D) Mixture of elements and molecular elements | F) Mixture of elements and compounds | G) Mixture of elements |

Diagram, table

Description automatically generated

**Compound Formulae**

A picture containing diagram

Description automatically generatedElements combine in predictable ways to make compounds. For example, a **water** molecule is always formed when **one oxygen** atom combines with **two hydrogen** atoms. The chemical formula for water is \_\_\_\_\_\_\_\_\_.

For each of the compounds below, state which elements the compound contains and how many there are of each.

|  |  |  |
| --- | --- | --- |
| **Name of Compound** | **Formula of Compound** | **Number of Atoms of Each Element** |
| Carbon Dioxide | CO2 | 1 x Carbon  2 x Oxygen |
| Methane | CH4 |  |
| Calcium Chloride | CaCℓ2 |  |
| Copper Sulphate | CuSO4 |  |
| Sodium Carbonate | NaCO3 |  |
| Hydrogen Peroxide | H2O2 |  |
| Potassium Permanganate | KMnO4 |  |
| Aluminium Silicate | Al2SiO5 |  |
| Chloroform | CHCℓ3 |  |
| Copper thiocyanate | CuSCN |  |