

Classifying Matter

- ① Has mass
- ② Takes up space

Pure Substances

Definition:
A sample of matter that has definite chemical & physical properties.

Element

Definition:
Pure substance that cannot be broken down into simpler substances

Examples:

H (Hydrogen)
Zn (Zinc)
Mn (Manganese)
Fe (Iron)
K (Potassium)

Compound

Definition:
Pure substance composed of 2 or more elements joined by chemical bonds in a ratio

Examples:

H_2O (water)
 CO_2 (carbon dioxide)
 $NaCl$ (salt)
 CO (carbon monoxide)
 $C_{12}H_{22}O_{11}$ (sugar)

↑
Known chemical formulas

Mixtures

Definition:
Combination of 2 or more pure substances that are NOT chemically combined & can be separated

Homogenous

Definition:
A mixture that is the same throughout or uniform

Examples:

Gatorade
Milk
Sweet tea

Heterogeneous

Definition:
A mixture that is NOT the same throughout. It can have different parts.

Examples:

Veggie Soup
Chex Mix
Chicken Pot Pie
Salad