

Elements

Elements, the Simplest Substances:

Element – A _____ substance that cannot be separated or broken down into _____ substances by physical or chemical means.

➤ **Elements are pure substances.**

Pure substance – A substance in which there is only _____ type of particle.

➤ **Each element contains only one type of particle (or atom).**

➤ **The particles of a pure substance are all _____ (i.e. all gold atoms are the same as all other gold atoms).**

Properties of Elements:

➤ **Each element can be identified by its unique set of characteristic _____.**

Characteristic property – A property that does not depend on the _____ of the substance

EX: color, density, flammability

➤ **An element may share a property with another element, but other properties can help you tell the elements apart**

EX: magnesium and platinum are both silver metals, but they have very different densities.

Classifying Elements by Their Properties:

- **Elements are grouped into categories by the _____ they share.**
- **There are three major categories of elements: _____, _____, and _____.**

❖ **METALS -**

❖ **NONMETALS -**

❖ **METALLOIDS - also called _____**