Metals, Nonmetals, Metalloids

Picture Vocabulary

Matter and Energy
A table in which all the known elements are arranged by properties and are represented by one- or two-letter chemical symbols.
Physical Property

A characteristic that can be observed or measured without changing the substance; for example, color, melting point, and conductivity.
Most elements are metals; they are typically solid, shiny, malleable, and good conductors of heat and electricity.
Nonmetals

Elements that are typically not shiny, not malleable, and poor conductors of heat and electricity; usually gases or brittle solids.
Metalloids

Elements that have properties of both metals and nonmetals; sometimes referred to as semiconductors.
Luster

Metallic

Nonmetallic

A physical property; the way the surface of a substance shines or reflects light; most general classification is between metallic (shiny) and nonmetallic (dull or glassy).
Conductivity

A physical property; the ability or power to easily transfer heat, electricity, or sound.
Malleability

A physical property; able to be shaped or formed into thin sheets by hammering or pressure.
Brittle

A physical property; tendency to break, snap, or crack without first bending or changing shape as a result of application of little force; an example is glass, which shatters easily.
Insulator

A substance that resists electric current, or a material that resists the flow of heat.
Conductor

A substance that allows the flow of electric charge or transfers thermal energy through matter.
A substance that displays the property of electrical conductivity between that of a conductor and that of an insulator; the foundation of modern electronics.
Matter is anything that has volume and mass. Matter occurs as elements, compounds, and mixtures.
Classify/Classification

Sort or group together based on shared characteristics, physical properties, or chemical properties.
Element

A pure substance composed of the same type of atom throughout.