

# Physical property

Definition – characteristic that can be observed, using the five senses, without changing or trying to change the composition of a substance

Characteristics – physical properties of a nail, mass, length, bend ability, magnetic, cut it into pieces, or melt it, its still a nail!

Example – color

Picture -

# Physical Change

Definition - a change from one form to another form without turning into a new substance

Characteristics The size or shape of matter may be changed, but no chemical reaction occurs. Physical changes are usually reversible

Example – change

Picture -

# metal

Definition – matter with a shiny surface  
which conduct heat and electricity well

Characteristics – metals can be easily  
formed into shapes

Example – gold, silver, copper, aluminum,  
iron

Picture -

# nonmetal

Definition – matter that is not shiny, and does not conduct heat or electricity

Characteristics – properties that are the opposite of metal,

Example – carbon, oxygen

Picture -

# metalloids

Definition – matter that shares some properties with metals and nonmetals.

Characteristics - silicon and germanium, are semi-conductors, or they can carry an electrical charge under special conditions

Example – silicon

Picture -

# conductivity

Definition - The ability to transmit heat, electricity, or sound

Characteristics – if matter can conduct heat, electricity or sound it has the physical property of conductivity, or is a good conductor

Example – wire

Picture -

# malleability

Definition - property of matter that describes the ease with which it can be hammered, forged, pressed, or rolled into thin sheets

Characteristics – matter has malleability if it can be easily formed into different shapes without breaking

Example – copper hammered into a thin sheet

Picture -

# Brittle

Definition - easily broken, cracked, or snapped

Characteristics – if an object breaks easily when stressed, makes a snapping sound, like glass breaking

Example – fragile

Picture -



# Ductility

Definition - capable of being drawn out into wire or thread

Characteristics – when a metal is pulled it does not break or fall apart, not every metal is able to be stretched

Example – elasticity

Picture -

# luster

Definition – a property of a mineral that describes how light is reflected from its surface

Characteristics – luster is either metallic or nonmetallic, metallic is shiny like metal and nonmetallic can be dull, pearly, silky, glassy or brilliant

Example – gold

Picture -

# density

Definition – the amount of mass in a known volume of an object or substance; mass per unit of volume ( $D=M\div V$ )

Characteristics – rocks are more dense than wood, rocks have more stuff packed into them than wood

Example – crowdedness

Picture -

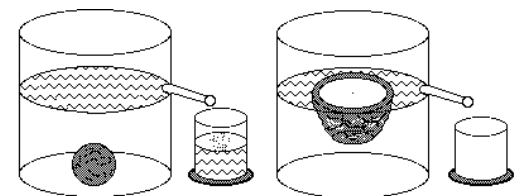
# Overflow Can

Definition - a container used for holding water during a water displacement activity; used for measuring the volume of an object by putting it in the water in the water

Characteristics – water displaced by irregular object runs out the spout on the side, is collected and measured.

Example – bucket with a spout

Picture -



# Displacement

Definition - A way to measure the volume of a solid by placing it in a known amount of liquid

Characteristics – use a graduated cylinder or overflow can to measure the volume of the object

Example – replace

Picture -

# Quantitative

Definition – a measurement based on numbers

Characteristics – how much, how fast, how deep, how many? If this is an observation it must include a number

Example – 20 centimeters red, cherry candle

Picture -

# Qualitative

Definition – descriptions that do not use numbers

Characteristics – colors, smells, textures, or sounds. These observations do not use numbers but are detailed descriptions

Example – red, cherry candle

Picture -

# disposal

Definition – The process of correctly throwing away or getting rid of something

Characteristics – some items for disposal are hazardous to the environment and need special instructions for disposal, listen for disposal rules during each lab

Example – waste bucket

Picture -