

5.2 Properties of Matter

_____ : those properties that you can observe with your senses, measure, or calculate.

Many of these are directly observable (_____, _____, etc) but some are detected through an extension of senses (_____, _____).

Some (like _____ or _____) must be measured or calculated.

Check out p. ____ for a list of physical properties. We will take a closer look at a few.

The main 3 states of matter are _____, _____, and _____. Moving from one state to another is a _____ and can be used to identify matter.

_____ : the temperature at which a solid becomes a liquid.

_____ : the temperature at which a liquid becomes a gas

Examples: gold: melting point: 1065 °C
boiling point: 2710 °C

chlorine: melting point: -101 °C
boiling point: -34 °C

You can use these physical properties to determine what a substance is made of. You can also use it to _____ a mixture into pure substances.

_____ : ability to be beaten into thin sheets (metals)

_____ : ability to be drawn into a wire (metals)

_____ : the degree to which a substance will dissolve in a given amount of another substance (usually water)

_____ : ability to conduct electricity or heat.

_____ : mass per unit volume. Usually measured in g/cm^3

What is the density of a 20g piece of aluminum with a volume of 7.4 cm^3

A _____ property describes the behavior of a substance as it changes into a new substance.

_____ : the rapid reaction of some substances with oxygen resulting in the release of a great deal of energy

Flammable, inflammable and combustible all mean the same!

_____ : the slow reaction of certain metals with oxygen to form metal oxides

_____ : will a substance react with an acid? Ex: zinc, magnesium