## Table of Elements

Question: Why does recycling my cell phone help gorillas?

Read article on page 214 and create 4-5 point form statements to explain. An uncommon element is part of this story!

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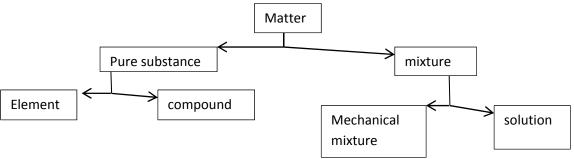
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**Element** – an element is a pure substance that cannot be broken down into a simpler chemical form (elements are the building blocks of matter)

Let's revisit 'matter' and add in 'element'.



If it's an element, it will be found on the periodic table.

**Periodic Table** – organizes and lists all the known elements.

**Compound** – is a pure substance made up of 2 or more different elements bound together.

## What is it?

C = carbon (find it on the periodic table – very back of textbook) It is an element.

O = oxygen (on periodic table) It is an element.

 $CO_2$  = is not on periodic table. It is NOT an element. It is made of 2 different elements. It is a compound. It is, in fact, carbon dioxide.

The small number below the 'O' means there is 2 oxygens. There is no number below the 'C' so there is just 1 carbon.

Na = sodium - element

CI = chloride - element

\*Some elements have a symbol with 2 letters. Only the 1<sup>st</sup> letter is capitalized. The 2<sup>nd</sup> is not. This helps avoid confusion.

NaCl – is a compound. This is table salt!

## Metals & Non-Metals

Look at the periodic table at the back of your textbook. Read the legend and you will find that over half of the elements are METALS. These are found in the middle and to the right of the periodic table. NON-METALS are found on the left side of the chart. A very few inbetween are SEMI-METALS (also called METALLOIDS).

Properties of metals (true for most)

shinyductile / malleableconduct heat & electricity

Properties of non-metals (true for most)

- Not shiny - not ductile/malleable (brittle instead) - don't conduct heat/electricity

Properties of semi-metals

- Have some metal properties and some non-metal properties.