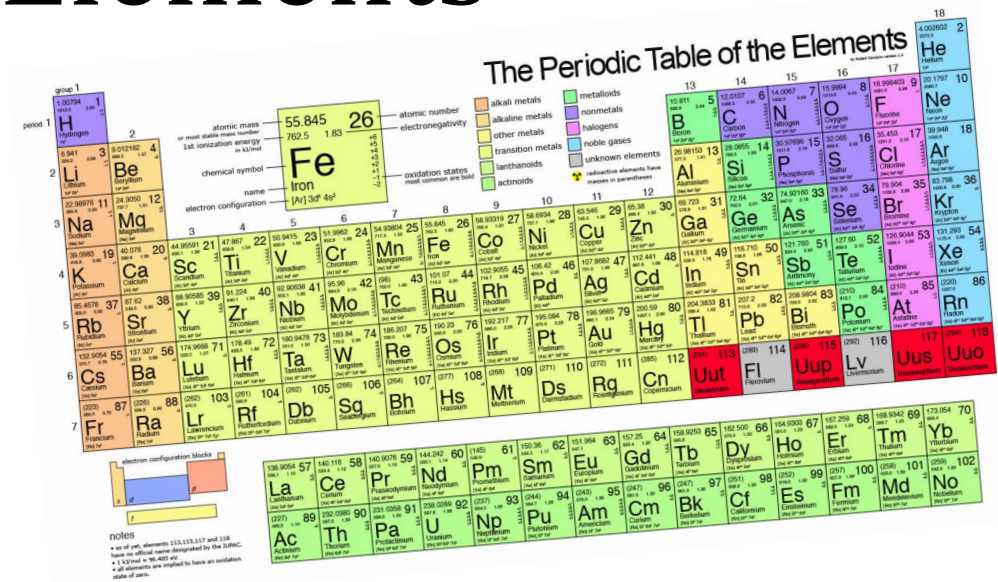


Periodic Table of Elements



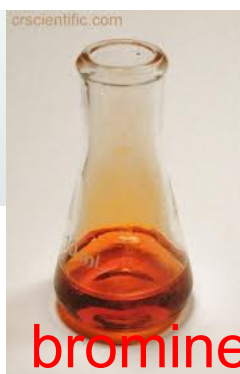
What is an element ?

ELEMENT: A pure substance that cannot be broken down into new substances. Each different element has its own unique kind of atom.

Examples of ELEMENTS ...



sulfur



bromine



carbon



mercury



gold



phosphorus



sodium



copper

Everyone should get a copy of the
Periodic Table.

Put your name at the top!

Element Song



Iodine

Change the symbol for iodine on the periodic table from

I → I

Find and write down the element symbol or element name for each of these. Put up and hold up your hand when finished.

1. Tl - thallium
2. Sr - strontium
3. Er - Erbium
4. Silver - Ag
5. Molybdenum - Mo
6. Gold - Au

Read pg. 58 (all) and pg. 59 (first paragraph) to help answer the following questions ...

1. Define a "chemical symbol".

An abbreviation of an element name.

2. Why would chemists want to create symbols for elements? (2 reasons)

- convenient (faster) - universal (same for every language)

3. Why do you think we no longer use earlier symbols created by Dalton and Alchemists?

- too difficult - not quick to draw - some are similar

4. What do you notice about the upper/lower case of a letter(s) in symbols?

1st letter → always CAPITAL 2nd, 3rd - always lower case.

5. Most of the time the letter(s) of the symbol match the letters in the name. Why do some not match (ex: sodium = Na)?

*- come from other languages
(often Latin)*

1. Define a "chemical symbol".

An abbreviation of the name of an element

2. Why would chemists want to create symbols for elements? (2 reasons)

- quicker

- the same symbol is used in different languages

3. Why do you think we no longer use earlier symbols created by Dalton and Alchemists?

Too hard to remember/difficult to use

4. What do you notice about the upper/lower case of a letter(s) in symbols?

- First letter is always capital

- Second letter (if there is one) is always lower case

5. Most of the time the letter(s) of the symbol match the letters in the name. Why do some not match (ex: sodium = Na)?

Symbols were often based on the elements Latin or Greek name

A. Using your periodic table, determine the name or symbol for the following elements.
These are the most common elements used.

	P		Cu
nickel		lead	
magnesium			Be
	B		Cr
chlorine		aluminum	
	Br		Hg
hydrogen			Zn
silver		carbon	
	Ne		Si
argon		helium	
sodium		tin	
	Mn		F
nitrogen		iodine	
	Li	iron	
cobalt			Au
	S	oxygen	
potassium			Ca
barium			

Ar **Ba** **Si** Pb **Zn** **As** **Ne** **Rn**

1. We brought everything but the kitchen _____.
2. When your pet has died you dig a hole in the backyard and _____.
3. Are the baby birds still in the nest? No, they _____.
4. Doctors amputated the bottom half of his leg but they left his _____.
5. A prisoner who acts in a silly manner is called a _____.
6. The crossing guard took the child by the hand and _____ them across the street.
7. The makers of Raid insect repellent came up with the advertising slogan "Don't go out without your _____".
8. News reporter Nic asked the fire chief what was the cause of the fire. The fire chief said "It was _____".