

	atomic number	atomic mass	number p^+	number n°	number e^-	symbol of element	GROUND STATE electron configuration
1	9			10			
2							2-8-3
3			14	14			
4		48		26			
5							2-8-1
6		75	33				
7	8						
8						Zn	
9			56				
10						In	
11							2-8-18-32-18-2

12. Define Metalloid: How many are there? What is the “trick” to remembering them? What is the “DOG FOOD” exception to this “trick”? Hint: Read the BASICS about Metalloids.

What is the name you need to memorize for

Group 1 _____ Group 2 _____

Group 17 _____ Group 18 _____

Groups 3-12 + “the triangle of metals from Al - Tl - Po” _____

The 2 long lines of elements at the bottom of the table (all in group 3) _____

9 Atoms touch the “staircase” on the table, but only 7 are metalloids.

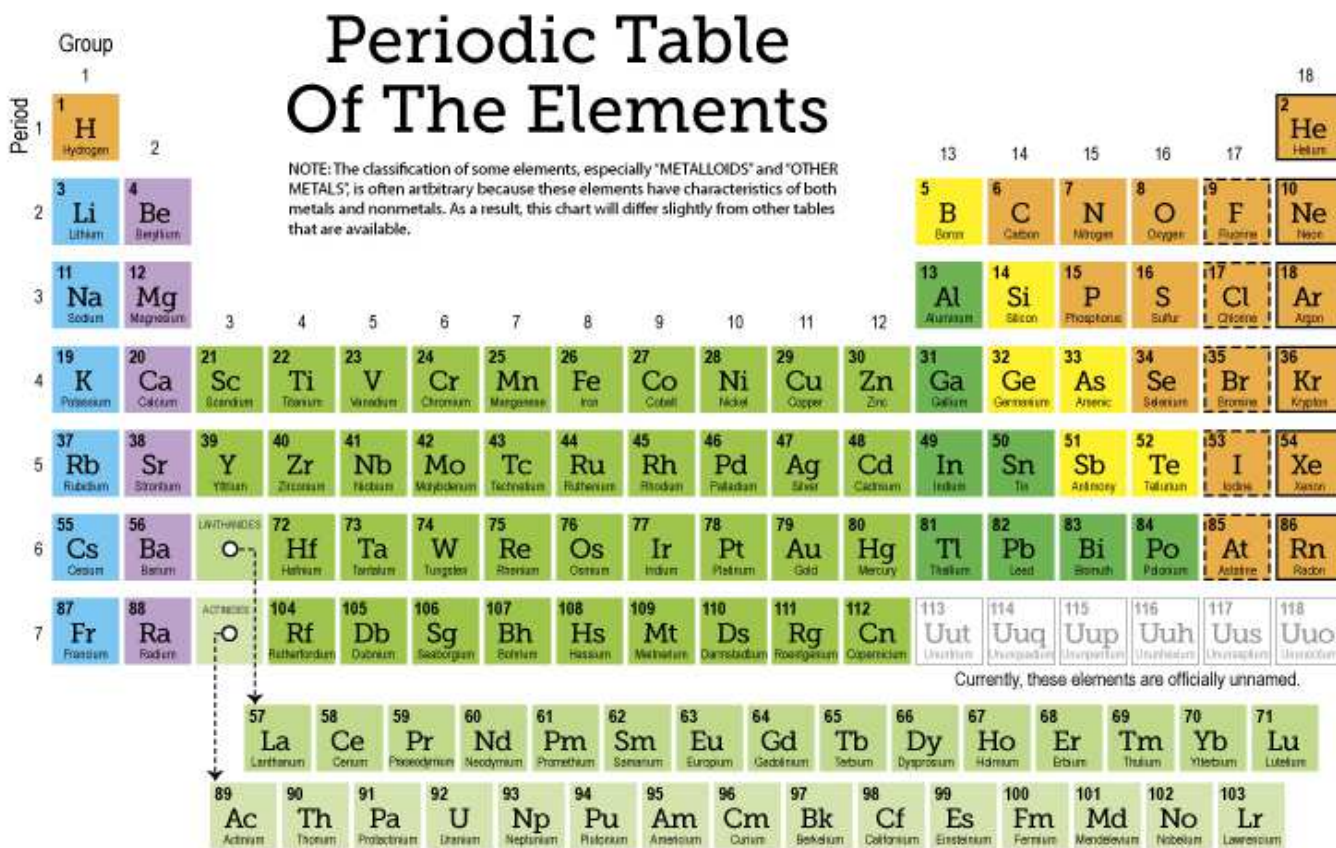
List the symbols of the Metalloids: _____

What is the “DOG FOOD” exception to the rule if you touch the stairs, you are a metalloid? _____

On the table, the periods “go” _____ but the

groups “go” _____

There are _____ groups, and there are _____ periods (how many?)



1. Define Isotope: _____
2. The accepted values for atomic mass and abundance for the naturally occurring isotopes of silicon are below.
Calculate the average weighted atomic mass for silicon.
Use the “isotope mass”, not the “symbol” for the math.

Isotope Symbol	Isotope Mass	Natural Abundance
Si-28	27.98 amu	92.22%
Si-29	20.32 amu	4.69%
Si-30	30.41 amu	3.09%

3. Isotopes-Я-U.s.
How many... neutrons in an atom of Si-29 _____ electrons in Si-30 _____ electrons in Si-28 _____

4. How many protons, neutrons and what is the electron configuration for the isotope Mn-57?

5. If the mass is different for each isotope of an element, why are they all CHEMICALLY IDENTICAL?

6. Fill in this chart:

Parts of an Atom	Mass in AMU	LOCATION in atom	Charge
Neutrons			
Electrons			
Protons			