

ChemThink: Isotopes

Atoms of the same element that have different numbers of neutrons:

The only way to tell isotopes apart is by their:

Two isotopes will react the same way in chemical reactions because:

An example of an isotope symbol:

The bottom number in the symbol represents:

The top number represents:

The top number is called:

The bottom number on the periodic table is called:

We can calculate this if we know the actual mass of each isotope and what percent of the atoms are made up of that isotope:

Example 1:

	%	Mass (amu)	
$^{11}_5\text{B}$	80	11.01	
$^{10}_5\text{B}$	20	10.01	
Average Atomic Mass=			

Example 2:

	%	Mass (amu)	
$^{24}_{12}\text{Mg}$	79	23.99	
$^{25}_{12}\text{Mg}$	10	24.99	
$^{26}_{12}\text{Mg}$	11	25.98	
Average Atomic Mass=			