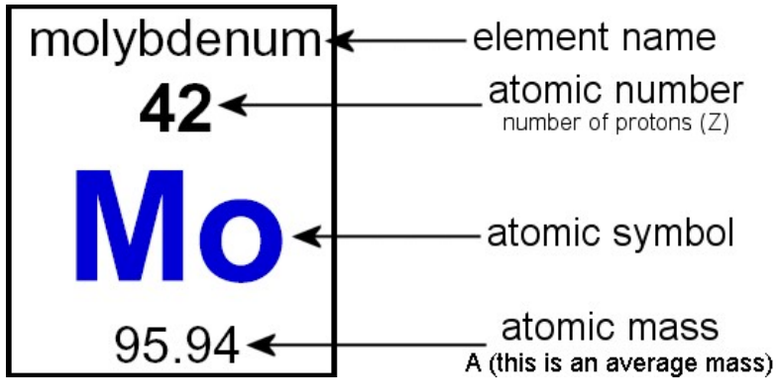
Periodic Table of Elements

Mendeleev (1834 - 1907)

created the modern version of the periodic table

Periodic = Recurring

Sep 8-8:26 AM



*Atomic mass is equal to the number of protons and neutrons

Sep 8-8:31 AM

Protons - define the element
symbol: p^+

Neutrons - add mass
symbol: n^0

Electrons - responsible for chemical reactions
symbol: e^-

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	Location	Mass	Charge
Proton	nucleus	1 amu	positive
Neutron	nucleus	1 amu	none
Electron	around the nucleus	1/1837 amu	negative

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Determining Sub-atomic Particles

ELEMENT	PROTONS	ELECTRONS	NEUTRONS	MASS #
Ex. Lithium				

In an atom, p^+ will always equal e^-.

The mass is the p^+ + the n^0.

The mass number is the rounded is the rounded mass from the periodic table

Isotope - same element different mass

In order to determine how many neutrons an isotope has, subtract the protons from the mass.

Sep 8-8:42 AM

Isotopes as Student ages.

Student names and ages:

Juan, 14	George, 14
Carlos, 15	Amanda, 15
Jack, 15	Susan, 15
Gissell, 15	Gustavo, 15
Rick, 15	Sherri, 16

What's the average?

Calculate the average age plus height:

Student names and ages and height:

Juan, 15 yrs, 163 cm	George, 15 yrs, 163 cm
Carlos, 15 yrs, 164 cm	Amanda, 15 yrs, 164 cm
Jack, 15 yrs, 164 cm	Susan, 15 yrs, 164 cm
Gissell, 15 yrs, 164 cm	Gustavo, 15 yrs, 164 cm
Rick, 15 yrs, 164 cm	Sherri, 15 yrs, 165 cm

Carbon-12 versus Carbon-13

Complete the worksheets in Google Classroom