

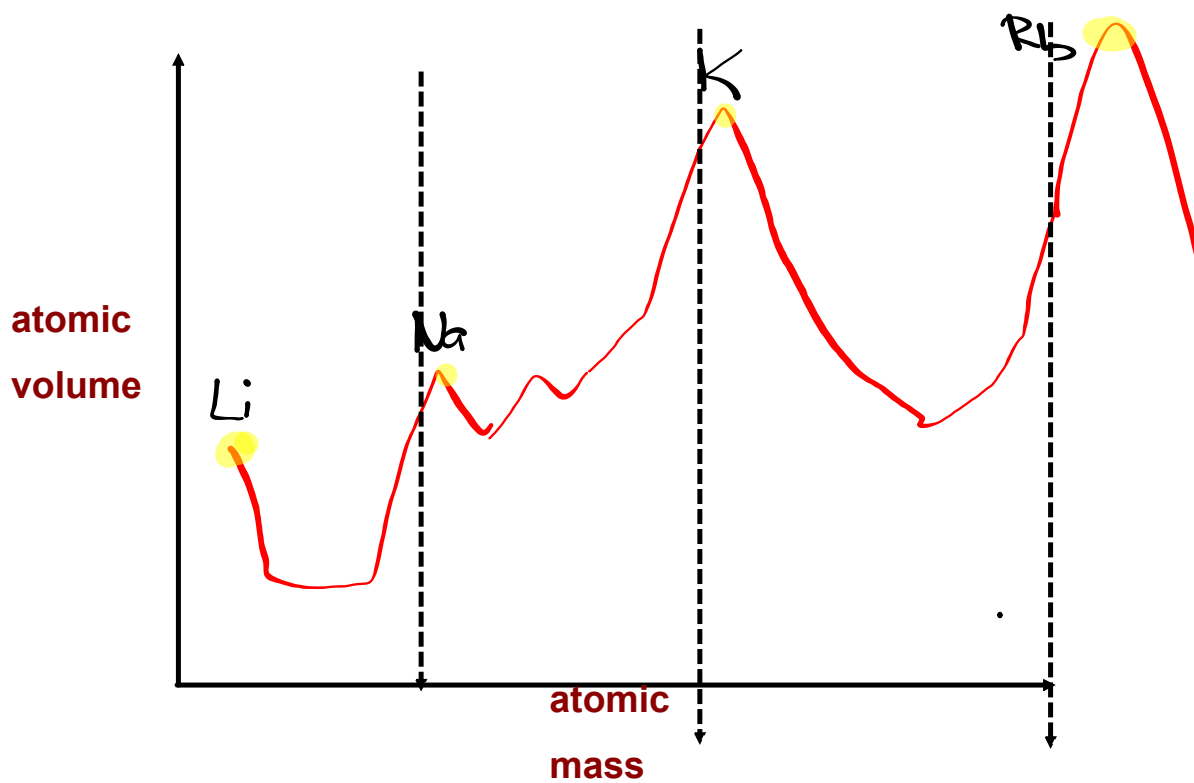
Lab - Discussion

INDEX

LAB

PAGES

Testing the Periodic Law



Parts of an Atom

Atom - is electrically neutral.

- is composed of a nucleus containing protons and neutrons, and electrons that surround the nucleus.

Atomic Number - is the number of protons found in the nucleus of an atom.

Protons - are subatomic particles possessing a positive charge.

Neutrons - are subatomic particles possessing a neutral charge.

Electrons - are subatomic particles possessing a negative charge.
For an atom, the electrons are equal to the atomic number.

Isotope - is a form of an element in which the atoms have the same number of protons as all other forms of that element, but it has **different number of neutrons and therefore a different atomic mass**

Mass Number - is the sum of the number of protons and neutrons.

Carbon - 6 protons and 6 neutrons has a mass number of 12.

Another isotope of ^{12}C is ^{13}C , which has 6 protons and 7 neutrons.

Isotope Notation:

MAIN SUBATOMIC PARTICLES

Particle	Location	Relative Mass	Charge
proton	nucleus	1 a.m.u.	+
neutron	nucleus	1 a.m.u.	none
electron	outside nucleus	small	-

SUB-ATOMIC PARTICLES	LOCATION	CHARGE	RELATIVE SIZE
Protons	Nucleus	+ive	1 a.m.u.
Neutrons	Nucleus	neutral	1 a.m.u.
Electrons	Outside Nucleus	-ive	"massless" 0 a.m.u.

