

Name: _____

Atoms and Molecules

ATOMS activity: Ions & Isotopes

Refer to a Periodic Table and the Key below to fill out this table for each element.

1. Assemble the nucleus using the proper number of large colored and white marshmallows. Stick them together with toothpicks.
2. Select the proper number of small colored marshmallows (all one color) as your electrons. Attach them one at a time to the nucleus with toothpicks.
3. Turn the lithium atom into an ion and note the information on the table.
4. Turn either the lithium atom or the beryllium atom into an isotope. Note the information on the table.

ATOM	ATOMIC SYMBOL	ATOMIC NUMBER	# PROTONS	ATOMIC MASS	# NEUTRONS	# ELECTRONS
Lithium						
Beryllium						
Lithium Ion						
Isotope: _____						

Atomic Number

3

Atomic Symbol

Li

Name

Lithium

Atomic Mass

7

4

Be

Beryllium

9

KEY

Number of Protons = Atomic Number

Number of Neutrons = Atomic Mass – Atomic Number

Number of Electrons = Number of Protons

Ions: Add or subtract an electron from the element

Isotope: Add or subtract a neutron from the element