

Isotopes of an Element:

Objective: _____

Key Concepts:

Atomic Mass:

Atomic Mass: _____

Unit for Atomic Mass: _____

On the modern periodic table, are the atomic masses for the elements written as whole numbers?

Yes No

What does the atomic mass tell us about atoms of an element? _____

The atomic mass is an _____ of all the _____ of an
_____ for an _____.

Isotopes:

_____ are the different and _____ of an element.

All forms of an element have the same number of _____ and _____.

Isotopes _____ in the number of _____ in the _____ of an atom.

Isotopes can have _____ than the most common form of an atom.

Isotopes of an Element: Processing

1. Use your periodic table to fill in the atomic mass for each of the following elements.
2. Using the atomic mass and the atomic number, calculate the amount of neutrons an atom has in the most common form for the elements.

Element	Elements Atomic Number	Elements Atomic Mass	Number of Neutrons in Most Common Form
Hydrogen (H)	1		
Helium (He)	2		
Lithium (Li)	3		
Boron (B)	5		
Carbon (C)	6		
Nitrogen (N)	7		
Oxygen (O)	8		

3. After figuring out the number of neutrons an atom of element has in its most common form, determine how many neutrons each atom for following elements have. The number next to the name of the element is the atomic mass for that specific atom/isotope.
4. State whether that atom type is the common form or isotope form for the element.

Element	Elements Atomic Number	Number of Neutrons	Isotope of Common Form
Hydrogen – 1			
Hydrogen – 2			
Hydrogen – 3			
Helium – 4			
Helium – 5			
Lithium – 6			
Lithium – 7			
Boron – 10			
Boron - 11			
Carbon – 12			
Carbon – 13			
Nitrogen – 13			
Nitrogen – 14			
Nitrogen – 15			
Oxygen – 16			
Oxygen – 18			