

Unit 2 Study Guide - Atomic Structure and Nuclear Chem - Honors

By the end of this unit, you should achieve these learning targets:

Learning Target	How am I doing with this? Write down evidence!
I can identify what makes elements different from one another and how they are distinguished.	
I can identify how the periodic table is organized and explain why this is the method used.	
I can recall the numerical relationships between metric units (milli, centi, etc.)	
I can describe the parts of an atom and identify the subatomic particles found in each area.	
I can describe the symbol, charge, location, and relative mass of all three subatomic particles.	
I can explain what valence electrons are and why they are used for bonding.	
I can explain the difference between atoms and isotopes.	
I can explain why the mass of an atom is focused in the nucleus but most of the atom's size comes from the electrons.	
I know how to read the periodic table to determine electrons, protons, and neutrons of an element.	
I can calculate average atomic mass (AAM) when given mass numbers and % abundance.	
I can explain why % abundance must be included when calculating AAM but not mass #.	

I can use the isotopic symbol to determine information about an atom.	
I can explain why the charge of an atom should be neutral unless it has gained/lost electrons.	
I can explain the difference between a cation and an anion.	
I know the four types of radioactive decay and can identify them in an equation.	
I can predict products in nuclear decay equations when given necessary information.	
I can identify real life situations where fission and fusion are used on Earth and in our Solar System.	
I can identify fission and fusion equations.	
I can use the necessary formula to calculate half-life, amount of substance remaining, etc.	

Write down any information you struggled with in the space below to review again:

Remember, 10-15% of this exam may consist of questions and topics from Unit 1 - Fundamentals of Chemistry. Write down anything you struggled with from Unit 1 below: