



BARTLETT HIGH SCHOOL

Learning Targets

Goals for Bartlett High School:

1. Raise the Academic Performance of Every Student
2. Build a First Class Student Activities Program
3. Provide a Safe and Respectful Learning Environment
4. Foster a Professional Learning Community Based on Creativity, Collaboration, and Collegiality



The purpose of learning targets and their quarterly assessment is to provide tangible data benchmarks to stakeholders facilitating communication leading to student mastery. This process will align curriculum, learning, and assessment improving the academic success of students.

BHS Learning Targets for Chemistry 1-2 (2nd Quarter)



1. I can identify the 3 subatomic particles, their place in the atom, their charge, and their relative mass and size.
2. I can discuss the size of the atom versus the size of the nucleus.
3. I can recognize the contributions to atomic theory made by the following scientists: Aristotle, Democritus, Lavoisier, Becquerel, Curie, Thompson, Rutherford, Bohr, and Chadwick.
4. I can calculate an element's average atomic mass, given the mass and abundance of its isotopes.
5. I can state the number of protons, electrons, and neutrons in an atom, given the identity of its isotope (for example, ¹⁴C or carbon-14).
6. I can identify the composition of alpha, beta, and positron particles and explain how each type of decay helps to stabilize the nucleus.
7. I can balance nuclear equations.
8. I can solve half-life problems.
9. I can create an energy diagram for elements.
10. I can write an electron configuration for a given element.
11. I can identify an element, given its configuration.
12. I can identify the s-, p-, d-, and f-blocks of the periodic table.
13. I can identify the number of valence electrons for an element in the s- and p-blocks.
14. I can write the abbreviated (noble gas) configuration using a periodic table.
15. I can explain how electrons can be excited to higher energy levels.
16. Given an element, I can identify it as a metal, nonmetal, or metalloid/semimetal, and infer its properties.
17. I can identify an element as an alkali metal, alkaline earth metal, halogen, noble gas, or transition metal using a periodic table.
18. I can identify the trends for electronegativity, reactivity of metals and nonmetals, atomic radius, and ionization energy.
19. Using the octet rule, I can determine the common ion charge (oxidation number) of an element.

Quarter [2] District Academic Vocabulary:

Atom, Isotope, Ion

Quarter [2] Content Area Vocabulary:

Electronegativity, Ionization energy, Atomic radius, Octet rule, Valence electrons, Cation, Anion

