Syllabus

PLAR Prep – Chemistry Applied Pathway

2 Units: 6 lessons, 1 website, 2 videos **Estimated time:** 8-12 hours

OALCF Levels: A1.2, A1.3, A2.2, A2.3 A3

Suggested Milestones: 3, 4, 5, 6 or 7, 10, 11, 12 or 13, 14

Course Overview

In this course, you will study the Periodic Table and chemical reactions. You will learn how to classify matter, interpret the periodic table, properties of chemical reactions, acids and bases, and how to balance simple chemical equations.

Unit 1: The Periodic Table (2 lessons, 1 website)

Classifying Matter

(23 slide tutorial and mastery test)

In this lesson, you will distinguish between different forms and states of matter.

The Periodic Table

(47 slide tutorial and mastery test)

In this lesson, you will describe the structure of an atom of a given element on the basis of the element's position in the periodic table.

Atomic Size

(1 website)

After reading this website lesson, you will identify trends of atomic size in the periodic table.

Unit 2: Chemical Reactions (4 lessons, 2 videos)

Matter Around Us

(38 slide tutorial and mastery test)

In this lesson, you will classify matter by its composition and properties.

Properties and Chemical Reactions

(39 slide tutorial and mastery test)

In this lesson, you will determine whether a chemical reaction has occurred by comparing properties of reactants and products.

Balancing Chemical Equations
(29 slide tutorial and mastery test)
In this lesson, you will learn to balance chemical equations.

Properties of Acids and Bases
(28 slide tutorial and mastery test)
In this lesson, you will identify properties of acids and bases.

Video: What is the pH scale?
(3:10 minutes)
In this video, you will learn the basics of the pH scale, universal indicator and litmus paper.

Video: Neutralization Reactions
(2:00 minutes)
In this video, you will learn about neutralization reactions in chemistry.