

BioChemistry Lesson Plans

Welcome to the BioChemistry Lesson Plans page for Mezzacello Urban Farms Summer Camp.

Design Challenge: Build a Stomach

In this Design Challenge we will explore how living animals digest food and create energy and wastes by creating a stomach.

Lesson: Understanding pH

In this lesson we explore the pH scale to understand the basic chemistry of life in terms of acids and bases. Water is neutral.

Lesson: The Circle Of Life

A core lesson on the way nature uses simple ideas, deep math, and repeating patterns to create life. We explore these patterns.

Lesson: Solar Water Purifier

This is a fun way to better understand the water cycle AND learn how nature purifies water in the atmosphere. This is energy too.

Lesson: Micro Hydroponics Systems

Students will repurpose takeout container to start growing seedlings in a small hydroponic container with a heat map to promote germination and growth,

Lesson: Creating Perfect Fertilizer

Students will explore the molecular nature of fertilizer and its relationship to NHCOPS, the water cycle and the sun.

Lesson: Food From Waste and Ash

Students will learn to make soap from waste products and ash as well as fire starter kits from lint, wax and soap.

Lesson: NHCOPS and the Ladder of Life

Students will become familiar with both the periodic table of the elements, periodicity, and the DNA composition of life.