

Lesson: Molecular Machines in Nature

In this lesson we will be discussing how nature knows how to use the six simple machines to make atoms and molecules work.

Design Challenge: Interview for Your Future Job

In this design challenge we will play a word association game to create a road map for a future career.

Design Challenge: Mastering Fear

In this design challenge we explore the intersections of time, biology, emotion, and courage by creating an emotion hourglass.

Design Challenge: Prepare a Microscope Slide

In this Design Challenge we present students with the opportunity to see material on a slide and how to see it.

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.

The First Chick of 2022

Eight random eggs fertilized by a rooster and set into an automated incubator. The trick was a bath matte. I had to keep the eggs warm!

The Long Tail of Life

When a bowl of eggs are more than a bowl of eggs! Automated robotic coops and the long tail of life. The future of food.

Fall Spa Day For The Ducks on the Farm

The ducks enjoying a spa day on the engineered pond that works to keep the ducks healthy and alive.

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.