

## Env Sci 11.1

### Goals

- \* Characterize the water cycle
- \* Describe the carbon, water, nitrogen, and phosphorus cycles

### Plan

The story of water (10 min)

Activity: Water molecules in the room will move and change based on conditions (20 min)

Carbon cycle (10 min)

Video: The global carbon cycle (10 min)

Nitrogen cycle (10 min)

Video: Nitrogen and phosphorus cycle (10 min)

Phosphorus cycle (10 min)

Video: The ghost town that collapsed the poop industry (10 min)

HW: Coney et al 2009. Questions 1) How does an increase in nitrogen and phosphorus affect ecosystems? 2) According to the paper, how can this be controlled or managed?

## Env Sci 11.2

### Goals

- \* Review the geochemical cycles (kahoot)

Students will be able to identify the four main geochemical cycles

Students will describe how each of them cycles the materials through the environment

HW: Illustrate the cycle of your choice, including pictures

## Env Sci 11.3

Quiz: Geochemical cycles

Reading: feedback loops in nature