



# Life Science: Teacher Tips & Helpful Hints

**N.C.S.S:** 8.L.3 Understand how organisms interact with and respond to the biotic and abiotic components of their environment.

8.L.1 Understand the structure and hazards caused by agents of disease that affect living organisms.

- The activity is broken up into three different parts:
  - **Part 1: Virus** (8.L.1.1)
  - **Part 2: Ecosystems** (8.L.3.1)
  - **Part 3: Food Chains and Food Webs** (8.L.3.2, 8.L.3.3)

## Part 1: Virus

- Students will get their hands messy during this activity.
- The butter needs to be soft to allow students to manipulate it.
- It is ok if the tape doesn't cover the aluminum ball completely.
- Warm water works better for the activity, but colder water will still work.
- Seeds can be stored on the plate if students are not doing all parts of the activity in one day.
- There is a *Virus: Student Activity Sheet* available.

## Part 2: Ecosystems

- The soil initially takes about 10 minutes to absorb the 30mL of water.
- The plants will take about 2-5 days to start to sprout.
- For part 1 & part 3, students should sketch and take measurements of their plant for at least 14 days
- There is a *Ecosystems: Student Activity Sheet* available.
- There is a real science literacy connection available: *PFAS in Ecosystems*

## Part 3: Food Chains and Food Webs

- Students may take a photo of their food chains and/or food webs and submit them digitally.
- There is a *Food Chains and Food Webs: Student Activity Sheet* available.
- There is a real science literacy connection available: *PFAS in Food Chains and Food Webs*

## N.C.S.S Clarifying Objectives

- 8.L.1.1 Summarize the basic characteristics of viruses, bacteria, fungi, and parasites relating to the spread, treatment, and prevention of disease
- 8.L.3.1 Explain how factors such as food, water, shelter, and space affect populations in an ecosystem.
- 8.L.3.2 Summarize the relationships among producers, consumers, and decomposers including the positive and negative consequences of such interactions.
- 8.L.3.3 Explain how the flow of energy within food webs is interconnected with the cycling of matter