

Lesson: Impacts of Plastic on Ecosystems
Bonus Experiment: How Does Plastic Impact Plants?



Do you know that plastic can also impact plants? Plastic in water or on land can block the sun and inhibit the growth of the plants. This is called the suffocation of plants.

Let's do an experiment to understand the impact of plastic of plants.

Materials

For this experiment you will need:

- 2 pots (can be repurposed or reused pots), each containing a small seedling (the choice of plant is up to you!).
- Black or solid-colour plastic sheeting.

Instructions

- Brainstorm what the two seedling plants need to grow (sunlight, air).
- Cover one plant completely with black/solid-coloured plastic.
- Leave both plants in a sunny spot (have participants help choose a spot) and take care of them as usual (lift up and replace plastic to water covered plant).
- Have participants hypothesize the impacts on the covered plant and why.
 - **Suggested prompts: What do you think will happen with the covered plant? And the other plant? Why?**
- Keep notes to document height, colour and other notable characteristics over time so participants can observe changes to their plants and impact of plastic covering.

Observation journal suggestion:

<u>Covered plant with plastic</u>	Characteristics		
	<i>Height</i>	<i>Colour</i>	<i>Additional Notes</i>
Day 1			
Day 3			
Day 6			
Day 9			
Day 12			
Day 15			
Day 18			

<u>Plant without plastic</u>	Characteristics		
	<i>Height</i>	<i>Colour</i>	<i>Additional Notes</i>
Day 1			
Day 3			
Day 6			
Day 9			
Day 12			
Day 15			
Day 18			

Questions for the last day of experiment:

- **Did the covered plant grow more or less than the plant without plastic? Why do you think this happened?**

- **Did the colour of each plant change? If so, are both plants the same colour?**

- **From this experiment, how do you think plastic impacted this plant?**
