

## SDG 13: Climate Action

Middle School (5-8)

Description: Students conduct a transpiration experiment using a plant in their schoolyard. They will set up the experiment, make a hypothesis and observe and explain the results.

Lesson Plan: <https://www.jpl.nasa.gov/edu/teach/activity/transpiration-demo/>

Highlights:



- The image above represents part of the hypothesis stage of the activity, where students are asked to identify which plant is healthy and hydrated and which one is suffering from dehydration
- The activity provides a background reading regarding the water cycle and the impacts of climate change upon this cycle
- The activity also introduces students to NASA's ECOSTRESS program, including what it is and what they measure using that data
- Procedure questions prior to the activity include:
  - What phases of the water cycle are easily observable?
  - What impacts does the sun have on plant life?
    - How does the sun help plants grow?
  - What do plants need to grow besides sunlight?
  - How do plants absorb water and nutrients?

