

Growing Lettuce from the Core

Hydroponics for Lunch



Materials Needed

- Head of Lettuce
- A Cup of Water
- 3 Toothpicks
- A cup

Grade Range

K-2
3-5

Topics/Skills

Science: Hydroponics, Plant Biology, Reuse, Conservation

Learning Standards

NGSS: From Molecules to Organisms [3](#)
Ecosystems: Interactions, Energy, and Dynamics [2](#)

Duration

3 minutes every other day for
5-7 weeks

Prep Time

3 minutes

Observing plant life regrow with water and sunlight is a phenomenal process. Every day small and noticeable growth may inspire the next George Washington Carver.

Activity Challenge

Regrow lettuce leaves from the core of a peeled head of lettuce.

Preparation

1. Collect all materials needed.
2. Peel the lettuce leaves from the core and make salad for lunch.
3. Keep the lettuce core.

To Do

1. Fill cup with enough water to have the bottom of the core rest in the water. (A cup of water should be enough depending on size of cup)
2. Take lettuce core and insert toothpicks equally distant around the core.
3. Place lettuce core in the cup. The toothpicks should rest on the lip of the cup and support the lettuce core.
4. Place the cup of water and lettuce core near a window. Direct or indirect sun will allow lettuce to regrow.

Observations

- Note how much sun the lettuce core gets in your Science Journal.
- Take notes or draw a picture of the lettuce every 3rd day or so.
- Estimate how long the lettuce will be in the cup before it begins to grow roots.

Extensions

Transplant the lettuce into soil and try to grow enough lettuce to make a small salad.

The Science behind the Activity

Hydroponics is growing plants in a water-based solution instead of in earth or soil. Many hydroponic growth set-ups use different substrates for roots to take hold as the leaves of the plant continue to grow. Many hydroponic grow systems use artificial light and nutrients to speed up the production process.