



FROM EYES TO FRIES

Overview

The lesson will give the students a view of where their french fries come from. They will plant a seed potato, measure, and record its growth over ten days.

Objectives

1. Students will learn how plants grow from tubers.
2. Students will list products made from potatoes based on research and background information in required reading.
3. Students will learn the process from seed potato (tuber) to french fry.
4. Students will record the growth of their potato plant.

Background Information

White potatoes are grown underground. It is not a root but a stem. Potatoes are tubers, or swollen underground stems. Tubers are often dug up to eat. They also can be cut into pieces and planted. Each piece of potato that has a bud, or “eye” can make a new plant. Bring a potato with visible buds to class to illustrate tubers. Emphasize that tubers are swollen underground stems and not roots.

The book, *What’s for Lunch?* By Claire Llewellyn presents facts about the potato, including where and how it is grown, harvested, and marketed and what other products are made from potatoes. The book depicts planting seed potatoes, potato growth, fields of potatoes (growing and harvested), harvesting, storage, packing and processing of potatoes. It also includes photos below the soil, which shows tuber information and growth. The book concludes with familiar and non-familiar foods made from potatoes. It is available at most major retailers online.

**Suggested
Grade Level:**
4th

Time:
45 minutes + 5 minutes
per day for 10 days

Subjects:
Science
Language Arts

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Vocabulary:

Chitting: The hardening off or sealing over of the cut skin of a seed potato. A practice necessary to ensure the potato does not rot in the soil

Emergence: When the stem and leaves can be seen as they come out of the soil or emerge from the soil

Eye of Potato: The bud or growing part of a new potato plant

Seed Potatoes: Small whole potatoes or potato pieces cut from a harvested potato containing at least one eye

Stem Tuber: Potatoes are a tuber crop. A tuber is a swollen underground plant part that stores food (the potato). Tubers form an oblong rounded shape that grows vertically with vegetative buds on the top and fibrous roots on the underside

Sun Scald: When the skin on growing potatoes is exposed to sunlight; the skin turns a greenish color and is slightly poisonous with an alkaloid called solanine

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Materials

- Book: What's for Lunch? Potatoes Author: Claire Llewellyn Potato
- Sharp knife (To only be used with the teacher's help)
- Cutting board
- Small pots
- Soil
- Water
- A warm, sunny place

Procedures

1. Cut the seed potato into small pieces. Make sure there is at least one eye on each piece.
2. Fill the pots with soil.
3. Plant one chunk of potato in each pot, 2"-3" deep.
4. Water the pots well and set them in a warm, sunny place.
5. Dampen the soil one to two times each week, but be careful not to over water.
6. Wait for the potato plants to grow.
7. Have the students record the plant's growth as well as the physical appearance of the plant as it's growing.

Conclusion Questions

1. Did the new plant grow from a seed?
2. Where does a potato grow?
3. Is the new potato a root, stem, or flower?
4. Name three products made from potatoes.

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Potato Growth Chart

Name: _____

Potato Growth after plant emerges from the ground observations

	Plant Height	Physical Changes of the Plant
Day 1		
Day 2		
Day 3		
Day 4		
Day 5		
Day 6		
Day 7		
Day 8		
Day 9		
Day 10		

