

Why People Need Plants

Purpose

The purpose of this lesson is to teach students that plants provide people with food, clothing, shelter, and many other things that we use in our daily lives.

Time

Teacher preparation: 45 minutes

Student activities: 50 minutes

Materials

For the class:

▶ Space to write on the board, chart paper, or butcher paper

For each group of 3-4 students:

- ▶ Cotton fabric or cotton ball
- Flower
- ▶ Fruit
- ▶ Maple syrup
- ▶ Granulated sugar packet
- ▶ Perfumed vegetable soap
- ▶ Vegetable
- ▶ Paper
- ▶ Wooden object.

Background Information

Everything we eat and most of the things we use in our daily lives come directly or indirectly from plants. In addition to growing plants that we eat every day, farmers and ranchers grow plants that produce material we need, like fiber for clothing and wood for paper, pencils, and the homes we live in. California has a rich history in agriculture and continues to play a large role in feeding the people of our country. In fact, California is the largest food and agricultural economy in the nation.

Farming has changed a lot over the past one hundred years. Your grandparents or great-grandparents might have grown up on farms where their families raised much of their own food, but today most of us rely upon the 2% of people who live on farms in the United States to grow and produce food for the rest of us.

food for all of us who don't live on farms.

Modern technology, like tractors and irrigation systems, have made it possible for farmers to produce more food for more people on less land. In 1940, one U.S. farmer could produce enough food to feed 19 people and now, one U.S. farmer produces enough food to feed 155 people. One thing that has stayed the same, however, is that family farmers are still working hard to grow healthy and affordable

Procedure

Part 1

- 1. Make space on the board or hang a piece of chart paper in front of the room. Ask students to help you make a list of things that people get from plants. List and discuss each item. Below is an example.
 - ▶ Food: vegetables, fruit, meat, eggs, dairy, etc.
 - Oxygen: plants make this through photosynthesis
 - ▶ Clothing: cotton jeans, flax, and rayon fabric



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For each student:

- ▶ People Need Plants worksheet
- ▶ Plants Around the Classroom worksheet

Content Standards

Grade 2

Science 3e

Next Generation Science 2-LS2.A

Health 1.1N, 1.2N, 1.4N, 1.7N, 1.9N

History Social-Science 2.4.1

English Language Arts

- Writing 8
- Speaking and Listening 1a, 1b, 1c

Grade 3

History Social-Science 3.5.1

English Language Arts

- Writing 8
- Speaking and Listening 1a, 1b, 1c

- ▶ Medicine: herbal teas, cancer treatment medicines developed from bark of the Yew tree, active ingredient in aspirin was developed from bark of willow tree, etc.
- ▶ Paper: from wood pulp
- Furniture: lumber from trees
- Cosmetics: plant dyes, plant oil fragrances, nut shell exfoliants in facial wash, etc.
- ▶ Energy sources: biofuel, firewood, etc.
- ▶ Shelter: lumber from trees and straw bales for homes
- 2. Review the list with students and emphasize that plants make up the base of the food chain by gathering sunlight energy and turning it into food for themselves and other living organisms. Ask students if we could go a day without plants. Refer to the list to reinforce the importance of plants. Instruct students to use their *Plants Around the Classroom* worksheet to make a list of everything they see that comes from a plant.

Part 2

- 1. Organize students into groups of three or four.
- 2. Without telling the students the purpose of the lesson, distribute the following plant products to each group. To make the lesson more interesting, vary the items in each group.
 - ▶ Cotton fabric or cotton ball
 - ▶ Flower
 - Fruit
 - ▶ Maple syrup
 - ▶ Granulated sugar packet
 - Perfumed vegetable soap
 - Vegetable
 - Paper
 - Wooden object



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- 3. Have the groups discuss the origin of each product. For example, the piece of wood came from a tree. Have the students discuss where each item would fit on their *People Need Plants* worksheet, and fill out the appropriate spaces.
- 4. After groups are finished, ask one group where they placed the vegetable soap on the chart and ask them where they think the soap came from. Continue in this fashion until you have called on each group and have discussed the origin and category for each item.

Conclusion

Humans depend on plants for survival.

Variation

Instead of doing the worksheet in groups, fill it out as a class while the teacher holds up an example of each item on the list.

Extensions

- ▶ Identify farmers in your community and have students write thank-you letters to them for providing the food that we eat. Ask the farmer to write back every month with a description of a few activities they are working on to produce their crops.
- Make a collage of things that come from plants.
- ▶ Have each student think of a plant from which we get at least three products, then share their information with a partner.
- ▶ Incorporate Agricultural Fact and Activity Sheets from CFAITC. www.LearnAboutAg.org/factsheets

ELL Adaptations

- ▶ Model *Think, Pair, Share* by showing students what to do when you ask them to turn to a neighbor or group member and *Pair Share* by having one student say something like, "What part of the carrot do we eat?" and the other student would respond, "We eat the root of the carrot."
- ▶ When introducing new vocabulary words, show students an example of the object.

People Need Plants

Name:	

We Use Plants For...

Shelter	Food	Clothing	Other Things

Plants Around the Classroom

Name:			

Instructions

Look around the classroom or your house. What objects come from plants? Make a list.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.