IING WHERE OUR OM IS AN IMPOR' LESSON IN LIFE.

> Learn how much land is used to grow food for the world's population

What percentage of the land do you think it takes to grow all of the food that we need to feed the world?

IMAGINE THE EARTH AS AN ORANGE...

- Approximately 75% of the earth is covered in water.
- 22% of the earth is deserts, swamps, mountains, polar regions, or land that is too rocky, wet, or hot to grow food.
- This 3% of the earth is acceptable for farming and represents what humans depend on for growing food.

3% Available Farmland

Knowing the importance of keeping farmland healthy by participating in recycling programs, water conservation, and not littering can help keep the land healthy to produce the food that feeds the world. We can all become custodians of the land by accepting the following challenges:

- Learn the difference between lands that are good for farming and the type of lands that are good for shopping malls and homes.
- Practice caring for the land by conserving water, not littering, and recycling.

jou glad we have

- Support the land by eating California grown foods.
- Learn about conservation easements that allow landowners to protect their farmland forever. When farmland is protected, we all benefit by having food to eat and natural resources, like wildlife, that farmland provides.

Visit California Farmland Trust's website CAFARMTRUST.ORG







HOW WILL WE ENOUGH FOOD FOR **POPULATION?**



ORANGE YOU GLAD WE HAVE FARMLAND?

OBJECTIVE:

Learn the importance of protecting and keeping land healthy to produce our food and fiber for current and future generations.

ACTIVITY:

Look at the front of the poster. Make note that the orange represents the earth's entire surface area. Think about how much land is available to use for food and fiber production.

- 1. Collect an orange, a plastic knife, paper towels, and a cutting board or plate.
- 2. Slice the orange into four equal pieces. Set aside three of the four pieces. These three pieces represent the water covering the earth's surface. How many slices are remaining?
 - a. If you are struggling with this concept find four quarters. Four quarters equals one dollar. If we take three quarters away, how much change do you have left?
- 3. With the one remaining quarter slice of orange, slice it into four equal pieces. Set aside three of the four pieces. These three quarters represent deserts, swamps, mountains, polar regions, or land that is too rocky, wet, hot or that has soil conditions that cannot be used to grow food.
- 4. With the one remaining slice of orange, remove the peel off of the orange piece.
- 5. Calculate how much land is still available with the leftover orange piece. After calculating, check your answers with the percentages on the front of the poster. This small section of orange that is left is what land we currently grow our food on!

How can we use this available land to grow food for current and future populations? By becoming a good custodian of the land and accepting the four challenges listed on the front.

DISCUSSION TOPICS:

- What is the key message about the amount of available land?
- What would a piece of land look like that is good for growing food?
- How can you be more like a farmer, and care for the land and keep it viable for the future?
- Learn about the benefits of adding a conservation easement to farmland by visiting: cafarmtrust.org

MATERIALS:

GRADE 3-5

ENOUGH FOR Each Participant:

- Orange
- Plastic knife
- Cutting board or plate
- Paper towels

CALIFORNIA STANDARDS:

GRADE 3 NGSS: 3-LS4-4

GRADE 4 Math CC: 4.NF.3a 3b NGSS: 4-ESS3-1

GRADE 5 Math CC: 5.NF.2 NGSS: 5-ESS3-1



EXTENSION ACTIVITIES:

ENGLISH / LANGUAGE ARTS / HISTORY

- Journal about this farmland activity and the different ways you can take care of the land.
- Write a fiction or non-fiction story about conserving land to submit to California Foundation for Agriculture in the Classroom's *Imagine this*... Story Writing Contest
- Farmland provides a home for various types of wildlife such as hawks and rodents. Research the other positive benefits farmland provides. Research different farming methods and create a chart with pros and cons of each one. Share your findings with your peers.

VISUAL AND PERFORMING ARTS

- Create an orange peel garland. Collect the remaining orange peels from your activity, let orange peels dry in order to create a bright addition to your home.
- Use the activity as an example to produce a game, puzzle, poster, or other means of delivering a similar message of conserving farmland.
- Watch Featured Videos on **LearnAboutAg.org** to learn the Five F's of agriculture. Create your own visual illustrations of each industry represented.

MATHEMATICS

• Convert percentages of land to fractions of land.

This is an educational poster composed by the California Foundation for Agriculture in the Classroom (CFAITC). For additional educational materials: CFAITC, 2600 River Plaza Drive, Suite 220, Sacramento, CA 95833-3293 (916) 561-5625 (800) 700-AITC Fax: (916) 561-5697 Email: info@learnaboutag.org Website: LearnAboutAg.org ©2020 California Foundation for Agriculture in the Classroom. All rights reserved.



GLOSSARY

Conservation: The act of protecting natural resources for current and future generations.

Conservation Easement: A voluntary legal agreement that permanently limits uses of the land in order to protect its conservation values.

Custodian: One that guards and protects or maintains.

Natural Resources: Something that is found in nature and can be used by people. Examples include light, air, water, plants, animals, soil, stones, minerals, and fossil fuels.

For more information on conservation easements visit:

CAFARMTRUST.ORG

