

National Agriculture in the Classroom

Relevancy and Engagement: agclassroom.org

Where Did Your Hamburger Come From?

Grade Level(s)

K - 2

Estimated Time

45 minutes

Purpose

In this lesson students will learn about the variety of agricultural products they consume in a hamburger and will trace the ingredients back to their source. This lesson contains information specifically for California students.

Materials

For the teacher:

- *Fun with The Plant Nutrient Team* student activity book
- *California Grows* Map

For each student:

- *Where Did Your Hamburger Come From?* handouts
- *Fun with The Plant Nutrient Team* student activity book
- Scissors
- Pencils, crayons, colored pencils, or markers
- Glue
- Paper plate

Essential Files (maps, charts, pictures, or documents)

- MyPlate Graphic
[<https://naitc-api.usu.edu/media/uploads/2015/09/08/myPlate.png>]
- Answer Key-Where Did Your Hamburger Come From?
[https://naitc-api.usu.edu/media/uploads/2015/09/04/Answer_Key-Where_Did_Your_Hamburger_Come_From.pdf]
- Where Did Your Hamburger Come From? handout
[https://naitc-api.usu.edu/media/uploads/2015/09/04/Where_Did_Your_Hamburger_Come_From_handout.pdf]

Vocabulary

MyPlate: nutrition guide published by the United States Department of Agriculture

commodity: a raw material or primary agricultural product that can be bought and sold

Interest Approach – Engagement

1. Ask students if they like to eat hamburgers and have them help you make a list on the board of their favorite hamburger ingredients and toppings.
2. Once you have your list, ask students which of the items came from a farm or ranch and then make a check mark by those items. Explain that the class will be doing an activity to learn more about the ingredients of the hamburger and where they come from.

Background - Agricultural Connections

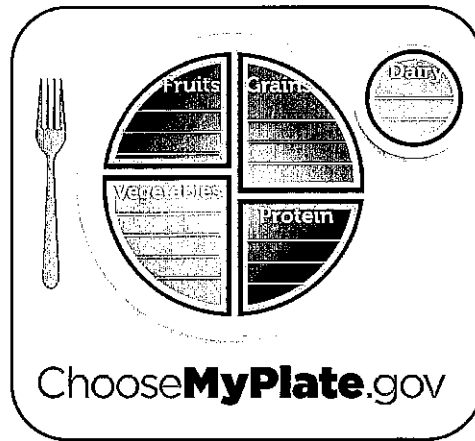
This lesson is part of the *Fun with the Plant Nutrient Team* series which were written to help children better understand what the soil needs to be healthy in order to provide us with healthy foods. The lessons encourage students to think for themselves, ask questions, and learn problem-solving skills while learning the specific content needed to better understand the world in which they live. The lessons include:

- *People and Plants Need Nutrients*
- *The Soil We Grow In*
- *Photosynthesis and You*
- *Weather on the Farm*
- *Where Did Your Hamburger Come From?*



Many students don't think about the source of their food beyond the grocery store or the importance of agriculture in their daily lives. Students may be surprised to learn about all the different **commodities** in the ingredients of something as familiar as a hamburger. Mustard is just one example. Mustard is made from the seeds of a mustard plant and spices such as garlic powder and turmeric. Mustard is likely a plant that most students have not seen, but there are farmers in California who grow mustard plants to harvest seeds for spice blends and mustard condiments. Emphasize to students that from growing a crop to harvesting, processing, and transportation, it takes many different people and steps to provide the ingredients for a simple meal.

MyPlate recommends that we fill half of our plates with fruits and vegetables at each meal.



A hamburger will often contain a food from each of the food groups. The food groups and recommended servings for children ages four to eight years old are:

| Food Group | Recommended Daily Servings for Children 4-6 Years Old | Example of One Serving |
|------------|---|---|
| Grains | 4-5 | 1 slice of bread, 1 cup of cereal, ½ cup cooked rice or pasta |
| Vegetables | 1 1/2 | 1 cup of raw or cooked vegetables, or 2 cups |

| | | |
|------------|------|--|
| vegetables | 1-1½ | of raw leafy greens |
| Fruits | 1-1½ | 1 cup of fruit or 100% fruit juice, or ½ cup of dried fruit |
| Dairy | 2-2½ | 1 cup of milk or yogurt, 1½ oz of cheese |
| Protein | 3-4 | 1 oz of meat, ¼ cup cooked dry beans, 1 egg, 1 tablespoon of peanut butter, or ½ oz of nuts or seeds |
| Oils | 3-4 | 1 teaspoon unsaturated vegetable oil |

Procedures

1. Provide students with the handout of the hamburger parts located in the attached *Where Did Your Hamburger Come From?* handout and have students color them and cut them out according to directions.
2. After students have colored, cut out, and pasted their hamburger parts on their plate, discuss each part as you draw the hamburger components on the board.
3. Show students the *California Grows Map* by projecting it on a screen or have them refer to their own handout. Next to each hamburger part on their plate, instruct students to write down the source of the main ingredient and use the map to locate a county where it is produced. Label the food group for each part of the hamburger.
 - For items like pickles and onions, remind students that these are vegetables and they should look on the map for counties that have vegetable crops listed.
 - Note: Many different commodities are produced throughout the state. A listing of a commodity in one or several counties on the map does not mean that is the only county that produces that commodity. The listed county simply produces the listed commodities as one of their top commodities.
4. Display or draw the MyPlate graphic on the board. An electronic version of this graphic is attached.
 - Ask students if the hamburger meal contains a serving of each of the food groups represented on MyPlate. Ask students to help you make a list of foods that could be added to make this a balanced meal.

Concept Elaboration and Evaluation

After conducting these activities, review and summarize the following key concepts:

- MyPlate outlines the the food groups and nutrients we should consume through the five food groups.
- Many of the agricultural products needed to make a hamburger can be produced in California.
- Farms produce our food, such as the ingredients in a hamburger.

Suggested Companion Resources

- Beef Cattle in the Story of Agriculture (Book)
[<https://www.agclassroom.org/teacher/matrix/resources.cfm?rid=263>]
- Cattle Kids: A Year On the Western Trail (Book)
[<https://www.agclassroom.org/teacher/matrix/resources.cfm?rid=187>]
- How Food gets from Farms to Store Shelves (Book)
[<https://www.agclassroom.org/teacher/matrix/resources.cfm?rid=360>]
- Who Makes the Best Burger? (Poster, Map, Infographic)
[<https://www.agclassroom.org/teacher/matrix/resources.cfm?rid=722>]

Sources/Credits

The Educator's Guide was funded by California Department of Food and Agriculture's Fertilizer, Research, and Education Program (FREP) and developed by California Foundation for Agriculture in the Classroom.



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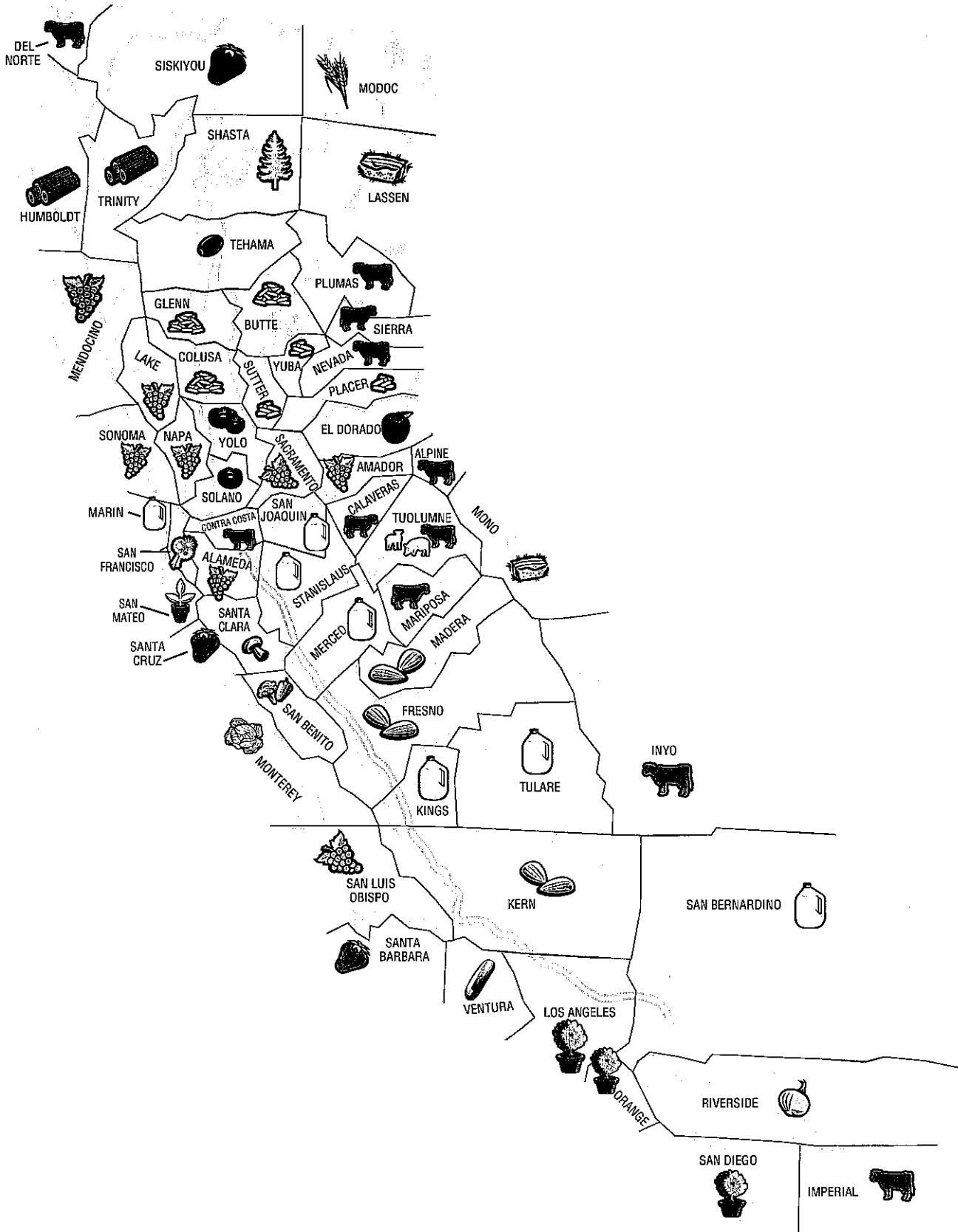
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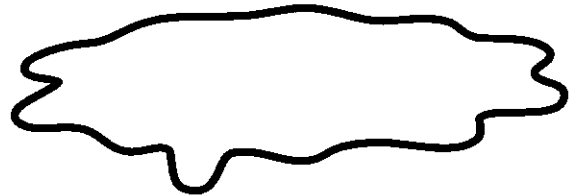
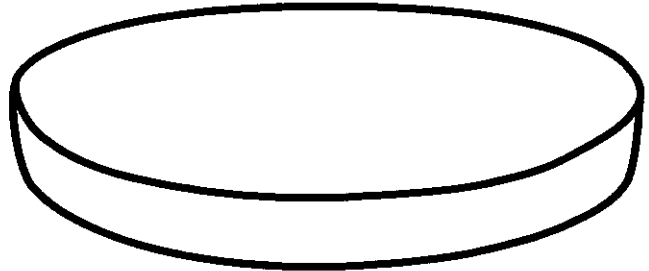
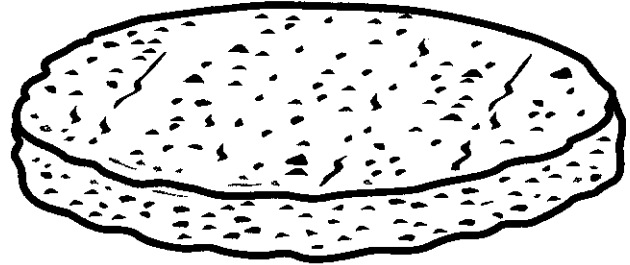
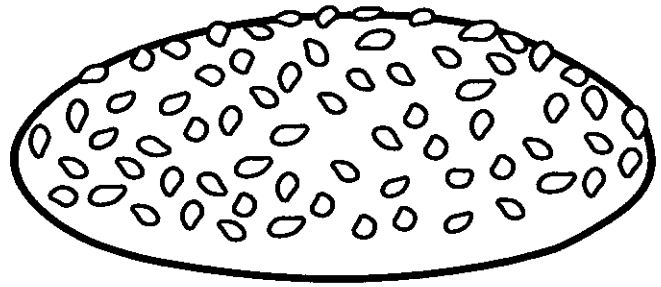
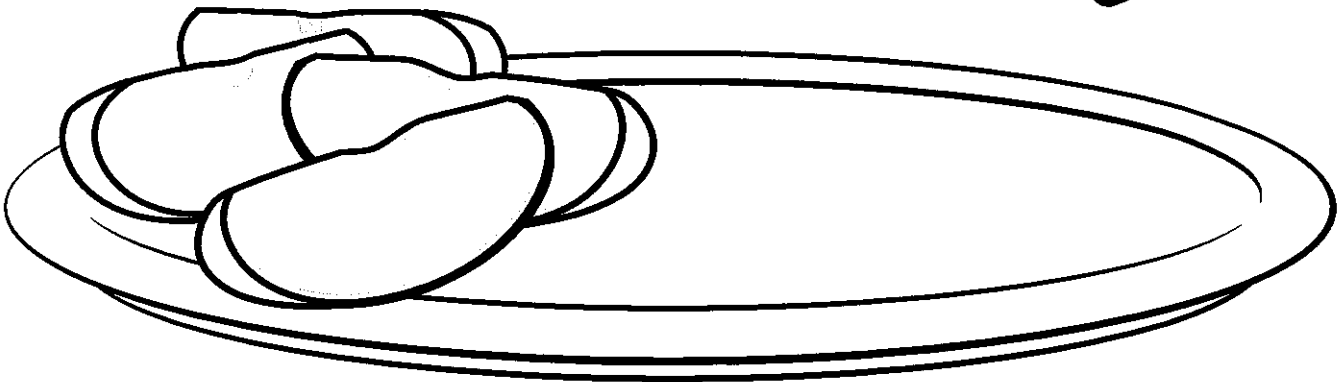
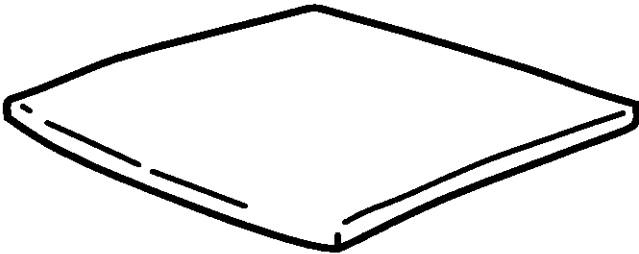
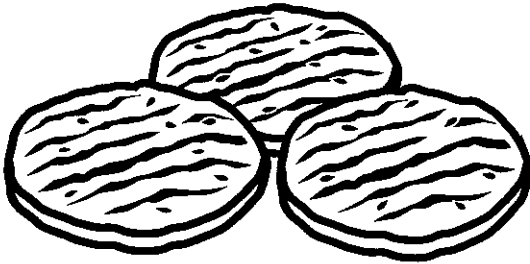
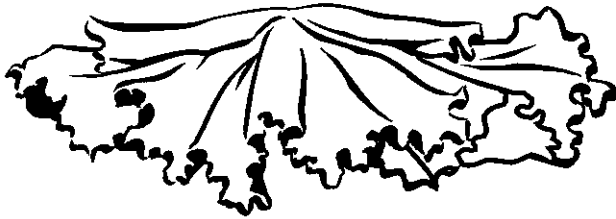
Curriculum Matrix: agclassroom.org/teacher/matrix

California Grows Map



Build your own burger!

Cut out the hamburger parts and put them together just the way you like...



Where Did Your Hamburger Come From?

Name _____

Introduction

Have you ever taken a bite of a hamburger and wondered where all of the ingredients came from? Depending on what you put on your burger, it may contain foods from every food group. Who are the people who grew the ingredients? A rancher probably raised the beef cattle for the beef patty and a tomato farmer grew the tomatoes for the ketchup and tomato slice, but what about the bun, cheese, onions, mayonnaise, pickles and other ingredients you like on your burger?

In this activity, you will put together your own hamburger and learn about some of the different products farmers and ranchers produce for your dinner. You will also learn about the different food groups that go into this meal.

Directions

1. Color the different parts of the hamburger.
2. Cut out each part and glue them onto a paper plate.
3. Your teacher will provide a map of California that shows some of the top crops grown in each county. As a class, find the county where the source of each of your hamburger ingredients was produced. Next to each of your hamburger ingredients write down the source of the ingredient and the county where it could have been grown.
4. Write down the food groups that are represented in your hamburger ingredients. Health guidelines recommend that we fill half of our plate with fruits and vegetables at each meal. As a class, discuss ways to make this a balanced meal.

Where Did Your Hamburger Come From?

ANSWER KEY

| Hamburger Part | Source | Who Produced It? | Food Group |
|-----------------------|----------------|---|-------------------|
| Beef patty | Beef cattle | <i>Rancher in Alpine, Calaveras, Contra Costa, Del Norte, Imperial, Inyo, Nevada, Mariposa, Plumas, Sierra and other counties</i> | Protein |
| Bun | Wheat kernel | <i>Wheat farmer in Modoc and other counties</i> | Grain |
| Ketchup | Tomato plant | <i>Tomato farmer in Solano, Yolo, and other counties</i> | Vegetable |
| Cheese | Dairy cow | <i>Dairy farmer in Marin, Merced, San Bernardino, San Joaquin, Stanislaus, Tulare, and other counties</i> | Dairy |
| Mayonnaise | Olive tree | <i>Olive orchard in Tehama and other counties</i> | Oils |
| Lettuce | Lettuce plant | <i>Lettuce farmer in Monterey, and other counties</i> | Vegetable |
| Tomato slice | Tomato plant | <i>Tomato farmer in Solano, Yolo, and other counties</i> | Vegetable |
| Pickle | Cucumber plant | <i>Vegetable farmer in Ventura and other counties</i> | Vegetable |
| Onion slice | Onion bulb | <i>Vegetable farmer in Riverside and other counties</i> | Vegetable |
| Apple slices | Apple tree | <i>Apple orchard in El Dorado and other counties</i> | Fruit |

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| Hamburger Part | Source | Who Produced It? | Food Group |
|-----------------------|----------------|-------------------------|-------------------|
| Beef patty | Beef cattle | | Protein |
| Bun | Wheat kernel | | Grain |
| Ketchup | Tomatoes | | Vegetable |
| Cheese | Dairy cow | | Dairy |
| Mayonnaise | Olive tree | | Oils and Fat |
| Lettuce | Lettuce plant | | Vegetable |
| Tomato slice | Tomato plant | | Vegetable |
| Pickle | Cucumber plant | | Vegetable |
| Onion slice | Onion bulb | | Vegetable |
| Apple slices | Apple tree | | Fruit |