What’s Growin’ On?
Your Link to California Agriculture

A NEWSPAPERS IN EDUCATION SUPPLEMENT

For an accompanying Teacher’s Supplement, visit www.cfaitec.org/wgo or call (800) 700-AITC.

California Foundation for Agriculture in the Classroom
Hey kids! I’m Gus, and yes, you guessed it, I’m a stalk of asparagus! You’ll see me often as you work and play your way through this awesome agricultural adventure, so keep an eye out for me! Have you ever stopped to think about where your lunch comes from? Not the cafeteria or your refrigerator at home, but where it really comes from? Your apples and grapes? Your chicken nuggets and string cheese? Have you ever wondered where the clothes that you are wearing came from before they were bought at the store? What is your t-shirt made of? Your sweater? Your favorite pair of jeans? What about the paper you write on, the books you read, and the room you’re sitting in?

All of these things are linked together, and linked to you through the amazing and diverse agriculture industry. Agriculture is the work of farmers and ranchers who are responsible for producing the supply of food, clothing and shelter that we need daily.

But it’s much more than that! Agriculture is using some of the most progressive technology around to make sure agriculture products are getting to you fast, fresh, and safe! GPS devices and other computers, digital advances, biotechnology and cutting-edge communication methods all play a role in improving the quality and production of our food and fiber. Inside, you’ll see tons of ways that agriculture is a part of your life and you’ll learn about all of the amazing advances and opportunities that will inspire you to learn more about California agriculture. Have fun!
Sheep nutrition is important because it influences the quality of sheep products we enjoy on a daily basis. Similar to humans, sheep need a carefully balanced diet to keep them healthy and productive.

A sheep farmer feeds 3 pounds of grain to each sheep each day. The feed contains 8% crude protein, 3.5% crude fat, and 13% crude fiber. Represent these numbers in percent, decimal, and fraction form.

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
<th>Decimal</th>
<th>Fraction</th>
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</thead>
<tbody>
<tr>
<td>Crude Protein</td>
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<td></td>
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<tr>
<td>Crude Fat</td>
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<td></td>
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<tr>
<td>Crude Fiber</td>
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</table>

More than 100 years ago, Basque immigrants from the Pyrenees Mountains of Spain and France came to the Western United States to herd sheep. Since then generations of shepherders have been managing flocks of sheep through the Tehachapi Mountains and the Mojave Desert outside Bakersfield, California. Basque shepherders today use modern technology, such as cell phones and computers, but often travel alone with their flock throughout the summer months. Why do you think it is important for shepherders to move their sheep and why do they keep them together in a flock?

Standards: History/Social Science Grade 3: 3.5; Grade 4: 4.4; Grade 5: 5.2
Source: California Country Magazine "Basquing in Tradition"

Look through your local newspaper ads and find five products that come from sheep. Add up the costs. What would the total cost be if all sheep products were 12% off the original price?

Standards: Math Grade 6: NS 1.0, 2.0; Grade 7: NS 1.0, 2.0; Grade 8: NS 1.0, 2.0; ELA Grade 5: Reading 3.1
Source: aitc.oregonstate.edu
**Is Your Lunch LOCAL?**

**Why Buy California Grown Products?**

**Add Variety to Your Diet**
California grows nearly half of all fruits, nuts and vegetables produced in the United States. With over 400 different crops, we have an abundance of choices when it comes to buying California grown products.

**Preserve California’s Environment**
Transportation vehicles emit gases that can decrease California air quality. By buying local products we often decrease transportation pollution that can improve the air we breathe.

**Strengthen California’s Economy**
Buying local food keeps your money circulating in your own state and helps the businesses in your community.

**Support California Family Farms**
When you eat California grown products you are buying from your California farmer neighbors.

**Standards:** Standards: Math- Grade 4: Statistics, Data Analysis, and Probability (SDA), Grade 6: Mathematical Reasoning (MR), Visual Arts- Grade 4:

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**Activity**

**Where do you find your locally grown products?**

Draw a picture of your favorite place to buy farm-fresh food and flowers.

**Tech Check**

**California Grown Scavenger Hunt!**
Before your next trip to the grocery store download a scavenger hunt from www.cfaitc.org/wgo7/cagrown to see how many locally grown products you can find!

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**What does “in season” mean?**

Eating with the seasons means you are buying and consuming fruits, nuts, and vegetables soon after they are harvested. Seasonal products are often:

- **at peak taste**
- **plentiful**
- **less expensive**

To find out if you are eating food that is in season, visit www.cfaitc.org/seasonal

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**Did You Know?**

5,565 jobs

The number of new jobs created throughout the state if Californians bought 10% more California grown products.

340

The number of farmers’ markets in our nation in 1970.

4,385

The number of farmers’ markets in our nation in 2006.

Use the information about the increasing number of farmers’ markets to create a line graph. Draw a trend line. If this trend continues, how many farmers’ markets will there be in 2020?

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**How to stay “COOL”**

COOL stands for Country of Origin Labeling. All fresh or frozen fruits and vegetables and select nuts and meat products must be labeled to indicate in which country they were produced. This makes it even easier to see if the items in your grocery cart are locally grown!

Source: www.fdnnews.org
What is an invasive species?
An invasive species is an unwanted plant, animal, disease or insect that has been intentionally or accidentally brought from its original (native) home into California. These invasive species compete with beneficial ones for food and can cause major damage to crops.

How do invasive pests affect agriculture?
In California, losses to unwanted pests equal $3 billion annually. Pests can destroy crops by eating the fruit, damaging the roots of plants, burrowing into trees, feeding on leaves, spreading disease and more. Unwanted pests result in higher food prices, increased pesticide use, and damage to California’s native plants and animals.

Researchers commonly trap insects to monitor areas for invasive pests. What would you use to trap an insect? How would you attract an insect to your trap?

Standards: Science - Grade 3; Grade 4

Draw a line connecting the invasive insect to its country or region of origin.

- The Mediterranean fruit fly is native to Africa and represents a major threat to California’s agriculture. Commonly known as the “medfly,” it has been recorded infesting more than 300 cultivated and wild fruits.
- From the Caribbean, the diaprepes root weevil eats citrus and other ornamental plants.
- The Mexican fruit fly, from Mexico, attacks more than forty kinds of fruit. It commonly targets citrus trees.
- The light brown apple moth threatens more than 2,000 plants including many California natives. This pest originated in Australia.
- The glassy-winged sharpshooter is a native of Mexico and the Southeastern United States. It can damage grapes, citrus, almonds, cherries and plums.

Use an agriculture publication, such as Ag Alert (www.agalert.com) or your local newspaper, to find articles about invasive species. Use a separate sheet of paper and write a summary paragraph explaining how invasive species could affect you.

Standards: ELA - Grade 3: Reading 1.0; Reading 1.0; Grade 4: Writing 1.0; Reading 1.0; Grade 5: Reading 1.0; Grade 6: Reading 1.0; Grade 7: Reading 1.3; Grade 8: Reading 1.3

Work with a partner to define the following vocabulary words on a separate piece of paper.

- Entomologist
- Invasive species
- Insect
- Pest
- Native plant
- Ornamental plant
- Exotic insect
- Beneficial insect

Standards: ELA - Grade 3: Writing 1.0; Reading 1.0; Grade 4: Writing 1.0; Reading 1.0; Grade 5: Reading 1.0; Grade 6: Reading 1.4; Grade 7: Reading 1.3; Grade 8: Reading 1.3
Go Green!

Where Is Your Green From?

After the dust bowl of the 1930s, thousands of farmers from Oklahoma, Kansas, Texas and other dry states migrated to California. With a strong background in farming, migrant farmers took residence in the Salinas Valley, a rich agricultural area on California’s central coast, to farm the fertile land. The Salinas Valley and Monterey area are still known today as the “Salad Bowl” of the world. Many of California’s leafy greens are produced in this region.

Spinach: Young leaves are incredibly nutrient packed.

Endive: Crunchy leaves are pale yellow and commonly found in appetizers.

Watercress: Spicy, robust leaves are perfect for sandwiches.

Chinese cabbage: Young leaves have a crunchy, celery-like texture.

Mizuna: Has a tangy flavor and fringed leaves.

Radicchio: Dark red leaves with white veins and a bittersweet taste.

Benefits of Eating Green

There are numerous nutritional benefits of eating fresh, green, leafy produce! Circle any of the greens you have tasted before.

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Foods</th>
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</thead>
<tbody>
<tr>
<td>Folate</td>
<td>Cooked spinach, Chinese cabbage, leaf lettuce, romaine lettuce</td>
</tr>
<tr>
<td>Potassium</td>
<td>Beet greens, spinach, loose leaf lettuce, chard, parsley, endive</td>
</tr>
<tr>
<td>Vitamin A</td>
<td>Turnip greens, mustard greens, kale, collard greens, Chinese cabbage, leaf lettuce, romaine lettuce, spinach</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>Kale, cabbage, collard greens, mustard greens, red cabbage, spinach</td>
</tr>
<tr>
<td>Iron</td>
<td>Spinach, chard, collard greens, parsley</td>
</tr>
<tr>
<td>Fiber</td>
<td>Spinach, collard greens, parsley</td>
</tr>
</tbody>
</table>

Sources: www.fruitsandveggiesmatter.gov, www.dolesuperkids.com

Daily Food Log

Record and analyze your food consumption for one day. Place a star next to good food choices you make. This may include leafy greens and other vegetables.

<table>
<thead>
<tr>
<th>Grains</th>
<th>Vegetables</th>
<th>Fruits</th>
<th>Milk</th>
<th>Meat &amp; Beans</th>
</tr>
</thead>
</table>

Create a plan to replace unhealthy foods with healthier choices using the information from this page and the food pyramid above.

My plan:

Using pictures from your newspaper or grocery ads, create a collage of leafy greens you can incorporate into your diet. Label each leafy green.

Standards: Visual Arts: Grade 3: 2.4, Grade 5: 2.4, Grade 6: 2.4

Standards: Physical Education: Grade 4: 4.4, Grade 5: 4.1, Grade 6: 4.7, Grade 8: 4.5

Standards: Science: Grade 3: 3a, Grade 4: 2

Standards: Visual Education Grades 1-4, Grade 5, Grade 6, Grade 8, Grade 11, Grade 12, Source: www.mypyramid.gov

Where Is Your Green From?

Tech Check

Why do leafy greens thrive in the Salinas Valley and Monterey? Use online resources to investigate why the climate conditions in the “Salad Bowl” region of California make it ideal for growing salad essentials. Based on your findings, what can you conclude about the optimum growing conditions for leafy greens?
Drip, drip. Tim and Tuck investigate the amount of water wasted by a leaky faucet. Tim helps Tuck realize the many effects wasting water has on our everyday lives, including the food we eat.

This award-winning story, “Water Flowing Keeps Crops Growing” by Russell Sweet from Siskiyou County, can be viewed at www.cfaitc.org/imaginethis/water.

Check it out!
Did you know asparagus roots function like the gas tank in a car? The plant must have enough “gas in the tank” to produce asparagus spears in the spring. So how does it “fuel up?” In the summer and fall, harvesting stops, and the unharvested spears grow into a fern. Through the process of photosynthesis, the asparagus plant uses its leaves to collect and store carbohydrates in the roots. Carbohydrates are an essential form of energy for an asparagus plant, similar to the gas you put in your car.

Standards: Science- Grade 3: 1a, 3a, 3b; Grade 4: 2a; Grade 5: 2e, 2f, 2g; Grade 6: 5a; Grade 7: 5a, 5b

Asparagus is one of the few perennial vegetables, which means it does not die after one season of growth. What other vegetables are perennials? Search for this information online.

Standards: Science- Grade 3: 3; Grade 4: 2; Grade 5: 2; Grade 6: 5; 6a; Grade 7: 5a, 5b, 5f; Grade 8: 6c

In the space below, write the chemical equation for photosynthesis and draw a picture illustrating the process. (Hint: The ingredients are water and carbon dioxide, the product is sugar and oxygen.)
Standards: Mathematics - Grade 3: Measurement and Geometry (M&G) 1.1; Grade 4: M&G 3.2; Grade 5: M&G 1.4; Grade 6: M&G 1.1, 1.2; Grade 7: M&G 1.2

California Asparagus Pizza

1  Unbaked pizza crust (12-inches)
2/3 cup  Red bell peppers, cut into ½ inch squares
½ cup  Onion, chopped
½ cup  Olives, chopped
12 oz.  Fresh California asparagus, trimmed, then blanched
¼ cup  Mozzarella cheese
¼ cup  Crumbled feta cheese

On crust, layer red bell pepper, onion and olives. Boil asparagus for 3-5 minutes to blanch. Arrange asparagus spears, tip towards edge, in a pinwheel fashion over vegetables. Evenly sprinkle cheeses. Bake at 500°F until crust and cheese are lightly browned, about 10 minutes. Cut into eight wedges.

Did you know?
Asparagus folklore credits the delicious green spears for curing a variety of ailments, including toothaches!

California produces 75% of all asparagus that is grown, nationwide.

Practice writing a letter to the editor persuading Californians to buy California grown asparagus. What are the benefits? How will a growing California asparagus industry influence our economy and lives?

Standards: ELA- Grade 3: Writing 2.3, Writing and Oral English Language Conventions (WOL) 1.0; Grade 4: WOL 1.0; Grade 5: Writing 2.4, WOL 1.0; Grade 6: Writing 2.5, WOL 1.0, Grade 7: Writing 2.4, WOL 1.0, Grade 8: Writing 2.4, WOL 1.0

Standards: Mathematics - Grade 3: Measurement and Geometry (M&G) 1.1; Grade 4: M&G 3.2; Grade 5: M&G 1.4; Grade 6: M&G 1.1, 1.2; Grade 7: M&G 1.2

Bigger is Better!

When you are shopping for asparagus, you will find the product in four different sizes: standard, large, extra large and jumbo. According to the California Asparagus Commission, extra large and jumbo asparagus is usually more tender than other sizes.

*Actual size shown.

Activity
Asparag's folklore credits the delicious green spears for curing a variety of ailments, including toothaches!
Beat the Heat!

What do you have in common with a construction worker, an athlete and a farm employee? We are all at risk for heat illness. Hundreds become ill each year due to dehydration or over-exerting themselves in hot environments without resting to cool off. Brainstorm ways to stay safe when temperatures start rising!

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Illness</th>
<th>Possible Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>dizziness</td>
<td>heat stroke</td>
<td>water</td>
</tr>
<tr>
<td>confusion</td>
<td>heat rash</td>
<td>sports drink</td>
</tr>
<tr>
<td>cramps</td>
<td>heat exhaustion</td>
<td>shade</td>
</tr>
<tr>
<td>blisters</td>
<td>heat cramps</td>
<td>rest</td>
</tr>
</tbody>
</table>

Activity

Draw a line to match each type of heat illness to the possible symptom and treatment.

Check your answers at kids.cfaic.org/wgo7/heat

Standards: Science- Grade 3: 3c; Grade 4: 3b; Grade 5: 2. Physical Education- Grade 3: 4.5; Grade 4: 4.5; Grade 5: 4.2

What Would You Do?

We can help prevent heat illness by making good choices. Fill in the final frame of the comic strips to show how you would respond to the symptoms of heat illness.

Did You Know?

Drinking small amounts of water frequently is better than drinking lots of it less often.

Sweating is your body’s natural way of cooling itself down. The sweat leaves your skin through tiny holes called pores. When the sweat hits the air, the air makes it evaporate (this means it turns from a liquid to a vapor). As the sweat evaporates off your skin, you cool down.

86° F is what temperature in degrees Celsius?

\[ C = \frac{5}{9}(°F-32) \]

13° C is what temperature in degrees Fahrenheit?

\[ F = \frac{9}{5}(°C+32) \]

Is 42° C a dangerous temperature to work in? Why?

Standards: Mathematics- Grade 6: Algebra and Functions (AF) 1.0; Measurement and Geometry 1.1
Turkey Talk

Turkeys have a rich history in a variety of cultures and countries around the world. Initially called “guinea fowl” in the Americas, early explorers took turkeys to other parts of the world where they gained popularity as a healthy and delicious food.

1492 – Turkeys become domesticated (tamed) in Northern Mexico.
1519 – Domesticated turkeys are taken from the Americas to Spain by explorers such as Christopher Columbus and Hernando Cortez.
1524 – Turkeys arrive in England from Spain.
1530 – English merchants introduce turkeys to the Eastern Mediterranean, or Turkish, area. This is possibly where the name “turkey” originated.

Travelin’ Turkeys

Try This Activity

Draw the route “guinea fowl” traveled to claim the name “turkey.”

Standards: History/Social Science- Grade 3: 3.1; Grade 5: 5.2; Science- Grade 3: 3d (Source: University of Illinois Extension - [www.urbanext.illinois.edu/turkey/facts.html].
www.wildturkeyzone.com

Turkey Test

1. Many historians believe the first Thanksgiving originated in _____ in 1621.
   a. Washington, D.C.
   b. Plymouth, Massachusetts

2. Which president made Thanksgiving a national holiday?
   a. George Washington
   b. Abraham Lincoln

3. Until 1935, turkeys were raised for their _________.
   a. white meat
   b. colorful feathers

4. An average turkey farmer raises ________ birds each year.
   a. 50,000
   b. 500

5. In the United States Thanksgiving is on the _______ Thursday in November.
   a. fourth
   b. third

Did You Know?

The wishbone of a turkey is actually the turkey’s collarbone. Many American families hold a post-Thanksgiving competition where the person who breaks off the largest part of the wishbone will have their greatest wish come true.

Complete the Venn diagram to determine the similarities and differences between turkeys and chickens. Use encyclopedias, Web sites and other references to find their various characteristics. This may include size, weight, physical attributes, names of males, females and young, etc. Check your answers online at kids.cfaaic.org/wgo7/turkey

Standards: Mathematics- Grade 3: Mathematical Reasoning (MR): 1, 1.1; Grade 4: MR 1.1.2; Grade 6: MR 1.1; Grade 7: MR 1.1; Science: Grade 3: 3a

Standards: Science- Grade 3: 3a; Grade 6: 5c (Source: California Poultry Federation, “Gobble It Up” Teacher Resource)
Use the sports section of your newspaper to select a soccer, football or baseball team playing today. What field are they playing on? Research the location and determine if that field uses natural turf.

Activity

Label each of the images 1-5 based on the chronological order of the production.

Standards: Mathematics- Grade 3: Mathematical Reasoning (MR) 1.1; Grade 4: MR 1.1; Grade 5: MR 1.1

Turf’s “Roll” in the Environment

Turf generates oxygen for the atmosphere and helps clean the air of pollutant gases. Turf also controls soil erosion, reduces dust, controls land temperatures, reduces noise and replenishes the ground water.

Source: Science - Grade 5: 2f, 2g

What’s In A Name?

“Sod” and “Turf” are words often used interchangeably. Sod actually refers to the grass before it is installed on an area of land. After installation, it officially becomes turf.

Source: Zuckerman Heritage Farms, “Sod King had Dreams of Fields” California Country Magazine

Grassy Green Math

Sod Specifications:
Roll size: 24” x 60” = 10 sq. ft.
Roll weight: 40-50 lbs.

Your yard needs a new lawn. You decide to order sod from a local sod producer. Your yard measures 20 feet by 120 feet.

Determine the square area (A = l x w) of your yard. 

How many rolls of sod will you need to buy? 

What will the total cost be if the sod sells for $0.30 per square foot? 

Approximately how much will the sod weigh when it is delivered to your home? 

Standards: Mathematics- Grade 3: Measurement and Geometry (M&G) 1.2; Grade 4: M&G 1.1; Grade 5: M&G 1.1

Source: www.deltabluegrass.com
Fresh and Fruity California Apples

Make an apple-y delicious smoothie by blending the following ingredients.

INGREDIENTS
2 cups applesauce
1 cup 100% apple juice
1 cup orange juice
1 cup ice
2 tbsp. honey
½ tsp. ground cinnamon
½ tsp. ground nutmeg

(Makes 2 servings)

"Apple-idioms"
An idiom is a saying that does not make sense if translated literally. For example, "All ears!" means someone is ready to listen, not that they have more than one set of ears!

Apple Idioms:
• An apple a day keeps the doctor away.
• The Big Apple
• The apple of my eye

What other apple idioms have you heard? Create your own apple idiom! For more idioms, visit dictionary.cambridge.org

Rewrite the recipe above to make enough servings for your entire class!

1.___________
2.___________

3.___________
4.___________
5.___________
6.___________

American consumers eat an average of 46 pounds of apples every year!

Source: California Apple Commission, US Apple Association

Johnny Appleseed
John Chapman was born in Leominster, Massachusetts on September 26, 1774. In his early twenties, he migrated to Pennsylvania where he worked as a traveling preacher and apple nurseryman. He eventually moved west, planting apple trees for nearly 50 years. He became known as the "Appleseed Man" and later as "Johnny Appleseed." He died in 1845.

Standards: History/Social Science- Grade 5: 5.4
Source: US Apple Association "Johnny Appleseed: a Pioneer and Legend"

Did You Know?
A bushel of apples weighs (on average) 45.5 pounds. If you have 182 pounds of apples, how many bushels do you have?

You will need 2 pounds of apples to make one 9-inch pie. How many pounds of apples will you need to make four pies?

It takes 36 apples to make one gallon of apple juice. How many apples will you need to make one cup of juice? Five gallons of juice?

Standards: Mathematics- Grade 5: Number Sense (NS) 2.0; Grade 6: NS 1.0

13
A Unique Environment

Edible mushrooms grow indoors in temperature and humidity-controlled trays or beds. Many farmers use computers to help monitor and regulate these growing conditions. The beds in which mushrooms grow contain a rich mixture of organic compost such as straw, hay, corncocks and water. The compost is pasteurized to destroy any germs or bacteria that might harm mushroom development. Used or “spent” mushroom compost is recycled and used as fertilizer for some crops and home gardens.

Standards: Science- Grade 4: 2; Grade 6: 5e

Mushroom Varieties

Mushrooms come in a variety of shapes, colors and sizes! There are more than 250 different varieties of edible mushrooms. Below are six common varieties.

White Button
The most popular mushroom, white buttons represent about 90 percent of mushrooms consumed in the United States. Try them sliced and sautéed on pizza or in a quesadilla.

Crimini
Also known as baby ‘bellas, criminiis are similar in appearance to white buttons, but are more tan in color. Their hearty taste makes them an excellent addition to beef and vegetable dishes.

Portabella
Portabellas have tan or brown caps and measure up to 6 inches in diameter. Grill and serve them as “burgers” on toasted buns.

Enoki
With a crunchy texture, enoki have small caps and long, spindly stems. Try them in salads and sandwiches.

Oyster
Oyster mushrooms can be gray, pale yellow or even blue! Try them over pasta with steak and red peppers.

Maitake
Maitake are fan-shaped, without caps. Use in side dishes and soups for a richer taste.

Activity

An acrostic is a poem in which each letter of a word spells out another message relating to the word. Complete this acrostic with information you have learned about mushrooms.

F — Fabulous way to add flavor to everything from sandwiches to soups!
U —
N —
G —
U —
S —

Standards: ELA: Grade 3: Written and Oral English Language Conventions (WOC) 1.0; Grade 4: Writing 2.4; WOC 1.0; Grade 5: WOC 1.0; Grade 6: WOC 1.0; Grade 7: Reading 1.5; WOC 1.0; Grade 8: Reading 3.1

Did You Know?

Mushrooms are neither plant nor animal, but have their own biological kingdom, fungus.

Standards: Science- Grade 4: 2c; Grade 6: 5a, 5b, 5c

Tech Check

Choose one mushroom variety and search for a related recipe at www.mushroominfo.com. Try this recipe with your family this week!

Caution!

Be careful what you eat! Some mushrooms can be poisonous. Only eat mushrooms bought at a grocery store or other produce market.
animal tissues and serve mainly as a reserve source of energy.

**Crude fiber** – The indigestible portion of plant foods that move food through the digestive system, absorbing water and easing defecation.

**Crude protein** – A fundamental component of all living cells. Necessary for growth and development of muscle.

**Dam** – A barrier constructed across a waterway to control the flow or raise the level of water.

**Dehydration** – Excessive loss of water from the body from illness or fluid deprivation.

**Domesticated** – To train or adapt an animal or plant to live in a human environment and be of use to humans.

**Dormant** – A condition of biological rest or inactivity characterized by cessation of growth or development.

**Economy** – The system of production, distribution, and consumption of goods and services.

**Entomologist** – A person who studies the classification, life cycle and habits of insects and related life forms.

**Estuary** – The part of the wide lower course of a river where its current is met by the tides.

**Evaporate** – To convert or change into a vapor.

**Farm stand** – A temporary or permanent structure used for the display and sale of agricultural products.

**Farmers’ markets** – A location where farmers sell their agriculture products directly to the public.

**Fungus** – Any of numerous eukaryotic organisms of the kingdom Fungi, which lack chlorophyll and vascular tissue.

**Ground water** – Water beneath the earth’s surface, often between saturated soil and rock, that supplies wells and springs.

**Humidity** – Dampness, especially of the air.

**Lanolin** – A fatty substance obtained from wool and used in soaps, cosmetics, and ointments.

**Native** – Originating, growing, or produced in a certain place or region; indigenous.

**Origin** – The point at which something comes into existence or from which it is derived.

**Ornamental** – Plants typically used for flower gardens, house plants, landscaping or cut flowers.

**Pasteurized** – The process of heating liquids for the purpose of destroying bacteria, protozoa, molds, and yeasts.

**Photosynthesis** – The process in green plants and certain other organisms by which carbohydrates are synthesized from carbon dioxide and water using light as an energy source.

**Precipitation** – Any form of water, such as rain, snow, sleet, or hail, that falls to the earth’s surface.

**Reservoir** – A natural or artificial pond or lake used for the storage and regulation of water.

**Seasonal** – Applies to what depends on or is controlled by the season of the year.

**Symptom** – An indication of disorder or disease, especially when experienced by an individual as a change from normal function, sensation, or appearance.

**Trend** – The general direction in which something tends to move.

**Waterways** – A navigable body of water, such as a river, channel, or canal.

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Choose five words from the glossary and write the words on the numbered lines. Find each word in the dictionary and write the guide words for that page in the area provided.

<table>
<thead>
<tr>
<th>Glossary Words</th>
<th>Guide Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
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<tr>
<td>3.</td>
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<td>4.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
</tr>
</tbody>
</table>

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**Resources:**

- American Farm Bureau Federation [www.fb.org](http://www.fb.org)
- American Farmland Trust [www.farmland.org](http://www.farmland.org)
- California Apple Commission [www.calapple.org](http://www.calapple.org)
- California Asparagus Commission [www.calasparagus.com](http://www.calasparagus.com)
- California Department of Food and Agriculture [www.cdfa.ca.gov](http://www.cdfa.ca.gov)
- California Farm Bureau Federation [www.cfbf.com](http://www.cfbf.com)
- California Poultry Federation [www.cpif.org](http://www.cpif.org)
- Colorado State University Extension [www.ext.colostate.edu](http://www.ext.colostate.edu)
- Dole SuperKids [www.dolesuperkids.com](http://www.dolesuperkids.com)
- Mushroom Council [www.mushroomcouncil.com](http://www.mushroomcouncil.com)
- Oregon State Agriculture in the Classroom [aict.oregonstate.edu](http://aict.oregonstate.edu)
- OSHA [www.osha.gov](http://www.osha.gov)
- Produce for Better Health Foundation [www.fruitsandveggiesmorematters.org](http://www.fruitsandveggiesmorematters.org)
- Superior Farms [www.superiorfarms.com](http://www.superiorfarms.com)
- UC Division of Agriculture and Natural Resources [www.ucanr.org](http://www.ucanr.org)
- University of Illinois Extension [www.urbanext.uiuc.edu](http://www.urbanext.uiuc.edu)
- US Apple Association [www.usapple.org](http://www.usapple.org)
- Water Education Foundation [www.watereducation.org](http://www.watereducation.org)
- Zuckerman Heritage Farms [www.deltabluegrass.com](http://www.deltabluegrass.com)

To request a free *What’s Growin’ On?* Teacher’s Supplement that will enhance the use of this newspaper, visit [www.cfaitc.org/wgo](http://www.cfaitc.org/wgo) or call (800) 700-2482.
Granny Smith is the most popular apple variety grown in California.

A 3-ounce serving of lamb has 175 calories.

Recipe Idea:
Wrap a hamburger in lettuce instead of a bun for a creative “green” meal.

The California Foundation for Agriculture in the Classroom (CFAITC), a 501(c)(3) nonprofit educational organization, provides educators with low-cost and free materials, training and information to increase student understanding of California agriculture while teaching the core disciplines. Contact CFAITC or www.cfaitc.org for:

- Resources/Lesson Plans
- Story-writing Contest
- Conference Opportunities
- Newsletters
- Web Site (www.cfaitc.org)
- Kids’ Corner (kids.cfaitc.org)

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