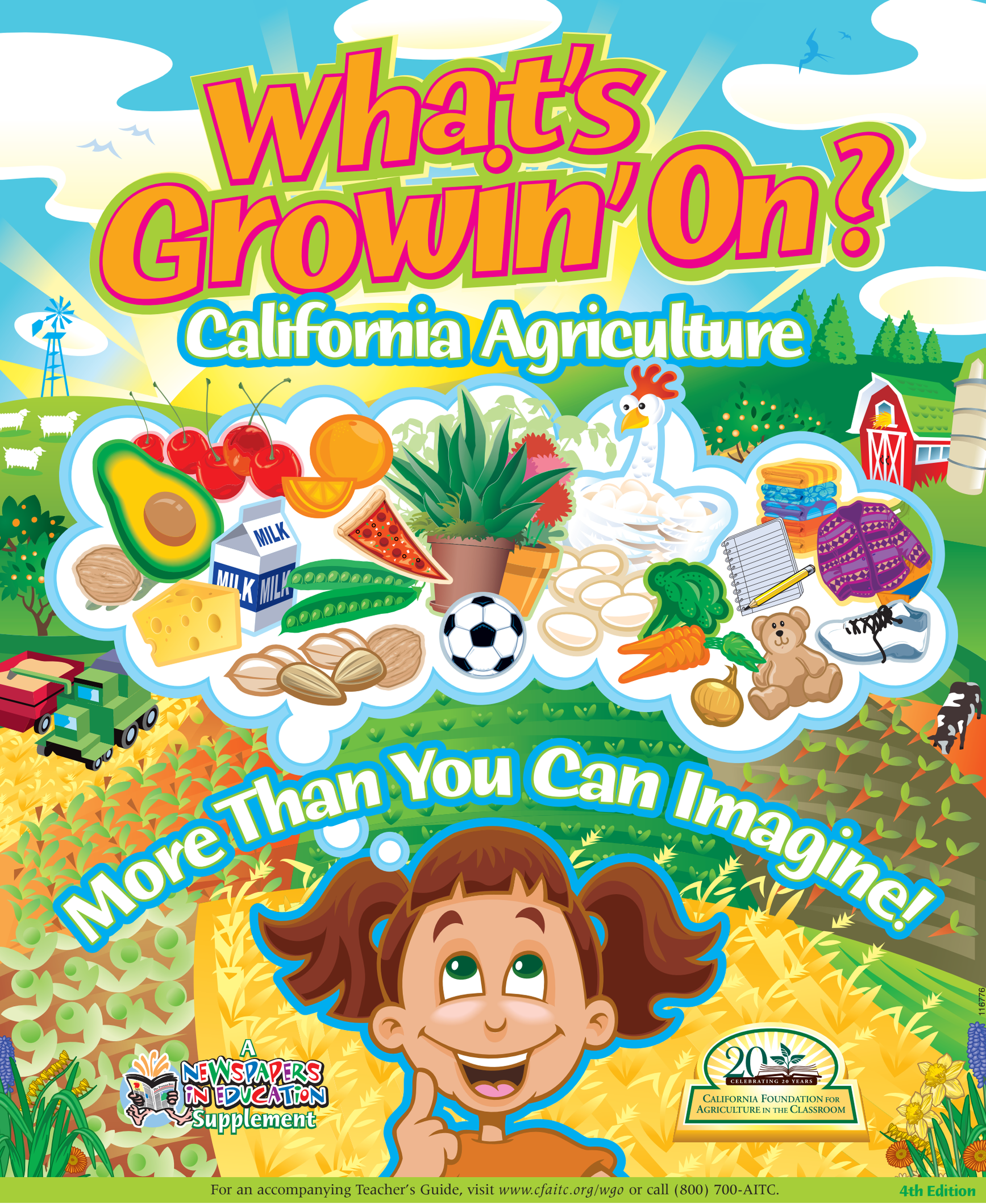
What's Growin' On?

California Agriculture



More Than You Can Imagine!

A Newspapers in Education Supplement

California Foundation for Agriculture in the Classroom
Celebrating 20 Years

116776

For an accompanying Teacher's Guide, visit *www.cfaitc.org/wgo* or call (800) 700-AITC.

4th Edition

Welcome

to California Agriculture!

California is like a patchwork quilt—some squares are full of green forests and alfalfa fields; others are golden rangelands and drying wheat fields. Waterways connect this unique landscape, which is appliquéd with cities that cover more than 1/3 of the state… and all of these people depend on **agriculture**. If you were to make a quilt of all of California's agricultural **commodities**, you would need over 350 squares. Agriculture is a part of your life, more than you can imagine!

This newspaper was created and reviewed by educators to bring the awareness of agriculture into the lives of us all. Through minds-on reading and hands-on investigations, ***What's Growin' On?*** provides opportunities to learn about agriculture.

Each reading is accompanied by an activity. The fourth through eighth grade Content Standards for California Public Schools are emphasized and listed for each activity.

So take a moment… relax and read… and then dig into some fascinating activities that teach about one of California's leading industries.

Table of Contents

Agriculture and You!

One day, 12-year-old Sierra of Winters, California, wrote this in her journal…

October 10, 2005

My Weekend

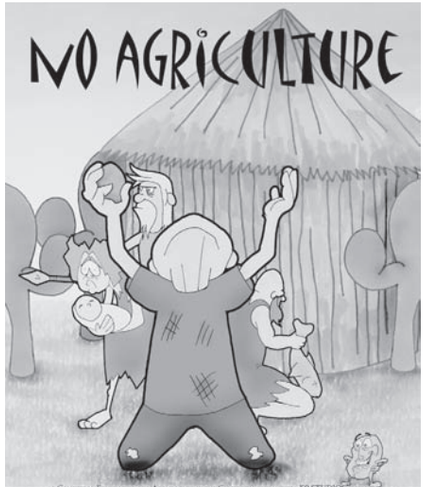
First off, Saturday morning I had some cereal and orange juice. Then I found my soccer ball, put on sunscreen and got ready for my game. We have new uniforms this year. My new shoes were awesome. They didn't hurt me and my socks didn't slip. After our game we had our team party. I was starving so the pizza and ice cream tasted great. Saturday night I spent the night at my friend Emmy's house! Yeah! I took my sleeping bag, favorite blanket, and my stuffed bear. We had popcorn and frozen grapes while we watched "Charlie and the Chocolate Factory." The movie was good. Sunday, we ate some scrambled eggs and then my mom picked me up in our new car. That night I was so tired I could hardly read my book.

Leather used to make athletic equipment comes from cattle.

Activity

Read Sierra's journal. Find and circle at least 15 items that agriculture helped to create. Check out the answers at *kids.cfaitc.org/wgo4/journal*.

Imagine a Day Without Agriculture!



Have you ever wondered what it would be like if there were no agriculture? How would you get your food? Your clothes? Your home? Your yard and houseplants? All of these are products of agriculture. Check out what award-winning student author Eva Healy has to say in her story titled "No Agriculture." You can find it at *www.cfaitc.org/imaginethis/noag*.

Newspaper Activity

Read and cut out an article in your local paper. Underline at least five words that you need defined. Create a glossary for the article. Make sure you alphabetize the words and write a definition for each. Do any of these words relate to agriculture?

Get a Clue!

This newspaper may use terms that are new to you. The words in **bold** are defined in the glossary on page 15.

Standards: **Grade 4** English-Language Arts: Reading 2.0, 2.2; Writing 1.7 **Grade 5** English-Language Arts: Reading 1.0, 2.0 **Grade 6** English-Language Arts: Reading 1.0, 2.0, 2.1 **Grade 7** English-Language Arts: Reading 1.0, 1.3, 2.0, 2.2 **Grade 8** English-Language Arts: Reading 1.0, 2.0

116782

Tasty Plants!

So… have you ever chomped on a stem? How about devoured a luscious green leaf? Sounds kind of strange when you first think about it–but you probably have! That is if you have eaten celery and lettuce! All fruits, vegetables, nuts and grains are parts of plants.

Plant Basics

Roots

- Roots anchor the plant in the soil, absorb water and minerals, and in some plants, store food that has been made in the leaves. Radishes, beets, jicama, sweet potatoes and carrots are a few examples of edible roots.
- The first carrots were long skinny purple roots that had a branch-like shape. Carrots are grown throughout California where soils are light and water is plentiful. California produces 80% of the nation's fresh carrots.

Stems

- Stems support the leaves and flowers of plants. They transport water from the roots to the leaves and flowers and carry sugar and starches made in the leaves to other parts of the plant. Examples of edible stems are rhubarb, asparagus, cinnamon and celery.
- The first celery grew in the marshes in the eastern Mediterranean. The word "celery" comes from the Latin word "celer," which means "quick acting." Celery was first used to cure stomach **ailments**. The U.S. produces over 2 billion pounds of this edible stem each year.

Leaves

- Leaves make food for the plant from carbon dioxide and water, using light for energy. This is called **photosynthesis**. Cabbage, nopales (cactus pads), spinach and collards are some leaves we eat.
- Heart of Romaine lettuce is grown along the Central Coast of California. Workers cut the lettuce, place it into plastic bags and seal the bags with a machine. Believe it or not, this is all done right in the field!

Flowers

- Flowers contain the reproductive parts of a plant. Colorful and fragrant flowers attract insects, which pollinate the flowers that then form seeds. Examples of edible flowers are cauliflower, broccoli and artichokes.
- Cauliflower, a member of the cabbage family, got its name from the Latin words "caulis," meaning "stalk," and "floris" meaning "flower." As the head forms, the crown of leaves surrounding it shelter it from the sun, preventing **chlorophyll** from developing and turning it green. Cauliflower is grown along the coast.

Seeds

- Seeds are produced when a flower is **pollinated** and **fertilized**. If conditions are right, the seeds develop into new plants. Examples of edible seeds are popcorn, black pepper, sunflower seeds and peas.
- Popcorn is a cereal grain that originated from a wild grass. The ears of corn dry on the stalk and then are harvested with a **combine**. Once the kernels contain only 16% - 20% moisture, the plants are harvested. Although California grows lots of corn, most popcorn is grown in the Midwest.

Fruit

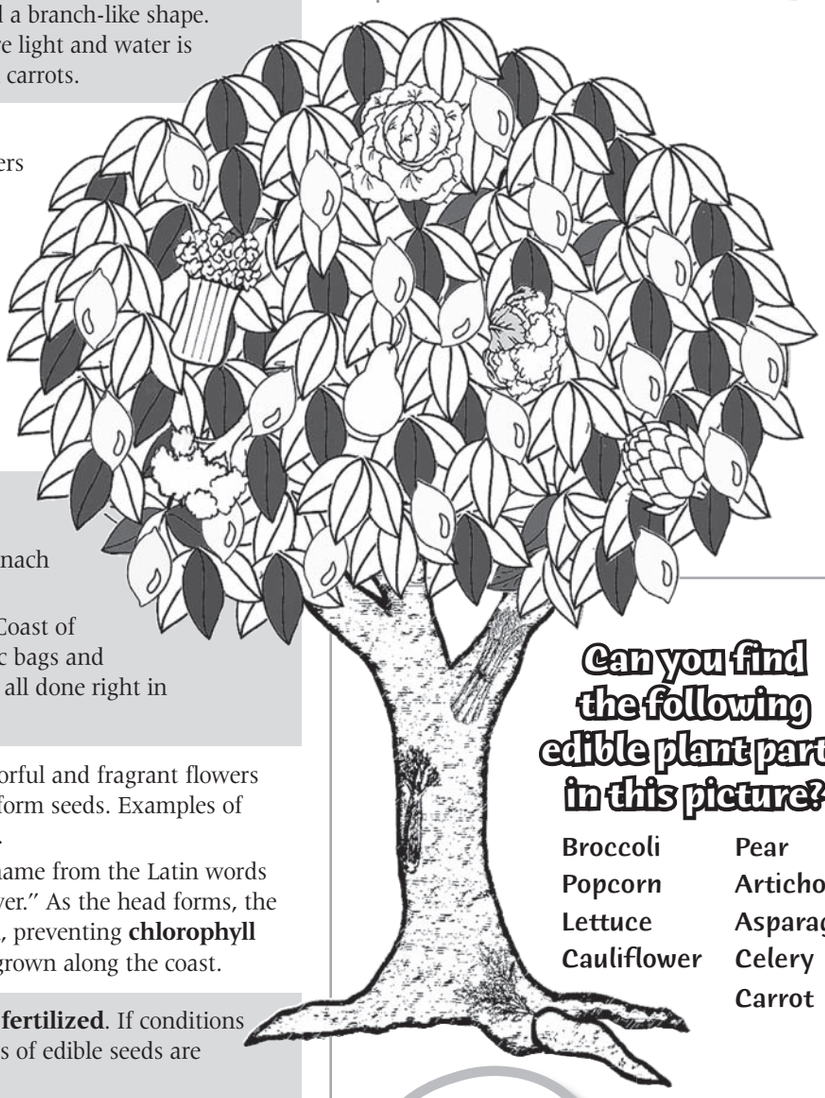
- A fruit is a soft structure, normally found around a seed. Examples of fruits are lemons, apples and plums.
- Lemons grown in this state are usually eaten fresh. Those grown in Florida and Arizona are often processed into products like lemonade and lemon juice. Some growers put copper rings around the tree trunks so that snails will not climb up and eat the leaves and fruit. The snails avoid the copper since their slime reacts with the copper and give the snails an uncomfortable electrical shock.

Source: California Farm Bureau Federation

Newspaper Activity

Find and cut out examples of fruits and vegetables in your newspaper's grocery ads. Sort them into roots, stems, leaves, flowers, fruits, and seeds and create a pictograph. List the six plant parts along the x-axis and the numbers along the y-axis.

Standards: **Grade 4** Math: Statistics, Data Analysis and Probability 1.0, 1.1 Mathematical Reasoning 2.0, 2.3 **Grade 5** Math: Statistics, Data Analysis and Probability 1.0, 1.2 Mathematical Reasoning 2.0, 2.3 **Grade 6** Math: Mathematical Reasoning 2.0, 2.4 **Grade 7** Math: Mathematical Reasoning 2.0, 2.5



Can you find the following edible plant parts in this picture?

Broccoli	Pear
Popcorn	Artichoke
Lettuce	Asparagus
Cauliflower	Celery
	Carrot

How many lemons can you find?

Standards:
Grade 4 Science 2, 2a, 3, 3c
Grade 5 Science 2, 2e, 2f
Grade 6 Science 5, 5a, 5b

Did you know?

Next time you eat a piece of broccoli, take a look. Each tiny round piece you eat is a flower bud! The stalk is a stem.

116783

Cherries and Weather

A Little Bit of History...

Cherries originated in the land between the Black and Caspian seas of Asia Minor. It is thought that birds were the first to carry cherries to Europe. The Romans planted trees along roadsides. Both the wood and fruit were valued, just like they are today. Sweet cherries came to the U.S. with the English colonists in 1629 and then were introduced to California by the Spanish missionaries.

Crossing Over

There are five main types of cherries grown in California—Bing, Rainier, Tulare, Brooks, and Garnet. All are sweet and are eaten fresh. For cherries to form, pollen from one type of cherry tree must enter the blossom of another variety. This is called **cross-pollination**. So, farmers have at least two kinds of cherry trees growing in their orchards.

Newspaper Activity

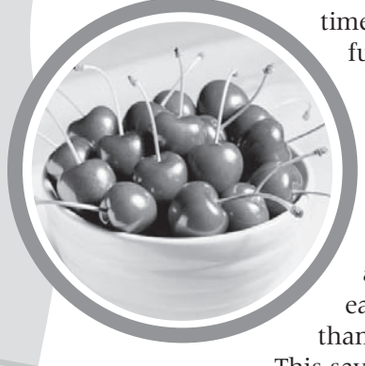
An area's **climate** determines where cherries can be grown. Cherries need a combination of nutrient-rich soil, sunny days and mild nights. The San Joaquin and Santa Clara valleys have this great combination.

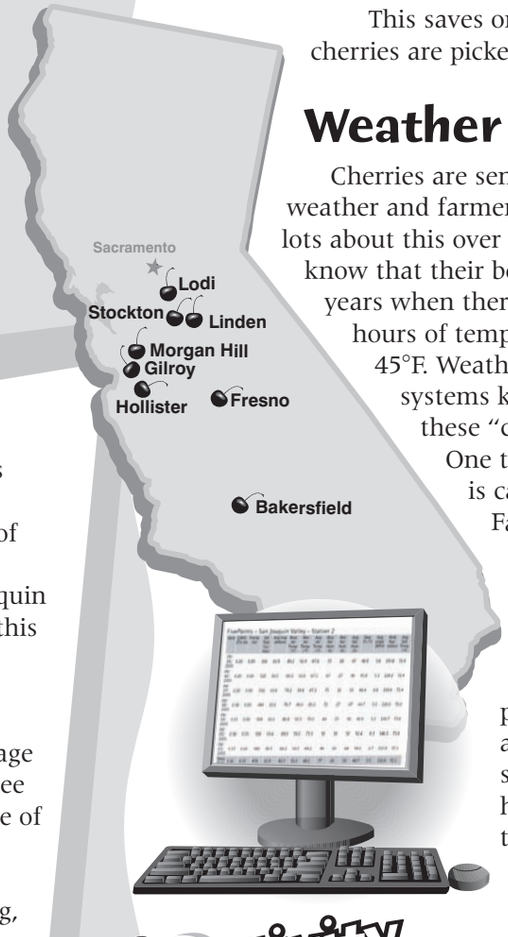
- Look on this page and find where cherries are grown.
- Now look on the weather page of your local newspaper and see what temperature it is in three of those cities.
- Are those temperatures higher or lower than Redding, California? Are they warmer or cooler than San Diego?
- Write a well-written paragraph about what you learned about cherries and weather.

Standards: **Grade 4** English-Language Arts: Writing 1.0 Science 4, 4d

It's All About Research...

Scientists discovered that if calcium nitrate is applied to a cherry tree at the right time, it will stimulate all of the buds to blossom at the same time. This is helpful since cherries have to be picked when they are ripe—they don't ripen off the tree. Workers can then pick the fruit off a tree two times each season rather than four or five times. This saves on labor since all cherries are picked by hand.





Weather it Out!

Cherries are sensitive to the weather and farmers have learned lots about this over the years. They know that their best crops are on years when there are 1,000-1,200 hours of temperatures below 45°F. Weather tracking systems keep track of these "chill hours." One tracking system is called **CIMIS**. Farmers sign onto the Web site and get the weather reports they need. Then they make predictions and adjust their work so the cherry harvest will be the best it can be!

Life is a Bowl of Cherries

- Low in calories.
- Contain antioxidants, which help reduce the risk of cancer.
- Contain no fat.
- High in Vitamins C, B-complexes and minerals.
- Contain anthocyanins, substances that can help reduce pain.
- Excellent source of boron, needed for healthy bones.
- Contain flavonoids, which can help prevent heart disease.

Air Blasting!

Did you know that some farmers use large fans and even helicopters to whoosh away rain-water from ripening fruit? Too much rain can make cherries bust right out of their skins. This is called "rain crack." Next time you blow-dry your hair, remember the cherry farmers. They use blow dryers too!

Activity Can You Solve This Riddle?

Alex saw a cherry tree in May, full of ripe cherries. "Gee," he said. "I wonder how many cherry pies I could make from the fruit on that tree?" He quickly estimated that the tree had about 7,000 cherries on it and that it took 50 cherries to make a cherry pie. So... how many pies can be made from that cherry tree? _____

Check your answer on page 15.

Standards: **Grade 4** Math: Number Sense 1.0 Mathematical Reasoning 1.0, 1.2 **Grade 5** Math: Number Sense 1.0 Mathematical Reasoning 1.0, 1.2 **Grade 6** Math: Number Sense 1.0 Mathematical Reasoning 1.0, 1.3

Avocados

It's All Done by Hand

Next time you go to the grocery store and pick out a fresh avocado, think about the person who picked it for you! Imagine climbing up a 30-foot ladder holding a 14-foot pole in one hand. You must maneuver the special shears, called clippers, on the edge of this pole to slice the fruit off the tree. You place it in your picking bag you have hanging over your shoulders and continue doing this until your bag has about 40 pounds of fruit in it. You climb down the ladder, pick another good spot and do this again. If you were an avocado picker, that is what you would do! Now, how's that for your exercise for the day?

Just the Facts

Avocados are native to Central America where they grow on trees in the **understory** of tropical rainforest environments. On an average tree, 1,000,000 tiny flowers form at the tips of buds. However, less than one in 3,000 will develop into avocados. With proper care, soil and weather, the avocados will be ready for harvest in 10 to 12 months. Avocados won't ripen until they are removed from the tree.

Activity
How Do You Like Your Avocados?

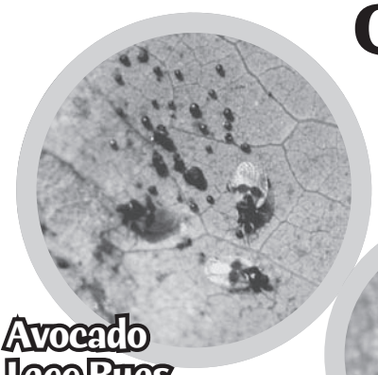
- Nicaragu**a**ns st**u**ff them with cheese, cover them with batter and bake them.
- Ja**p**anese **e**njoy them in **s**ushi rolls.
- Taiwanese eat them **w**ith milk and sug**a**r.
- The French fill them with **s**hrimp.
- K**o**reans use them in facia**l** creams.
- B**r**azilians add avoca**d**os to ice cream.
- Mexica**n**s use them as a tast**y** **b**utter.

Unscramble the bolded letters to find out on what day Americans eat the most avocados.

Check your answer on page 13.

Quit Bugging Me!

On a nice summer evening, have you ever been bitten by a pesky mosquito? Those small insects can be quite bothersome. Avocados have some pesky insects that bother them too! Growers need to watch out for three tiny insects—the persea mite, avocado thrips and the avocado lace bug. These little critters have found their way from the avocado's native habitat in Mexico to California's avocado groves. You can do your part to stop their damage by not transporting fruits and vegetables from other countries into California.



Avocado Lace Bugs

Live in colonies on the underside of leaves consuming the tree's valuable energy. This causes the leaves to drop and the fruit to be small.

Avocado Thrips

Creates a rust-like coloring on the fruit's skin.

Persea Mites

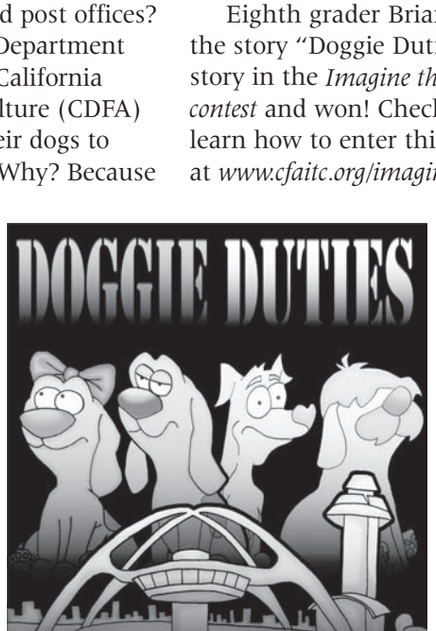
Cause spotting on the leaves which then fall off, allowing exposed fruit to get sunburned.

Disease Control and Dogs on Patrol

Dogs on patrol at airports and post offices? That's right! The United States Department of Agriculture (USDA) and the California Department of Food and Agriculture (CDFA) have hired dog handlers and their dogs to protect California's agriculture. Why? Because most **pests** and diseases that attack the commodities grown in California are brought here from other countries.

Dogs, with their keen sense of smell, can be trained to sniff suitcases and parcels to locate fruits, vegetables, plant products and meat. When they smell one of these items, they sit next to the package until the handler checks out the smell. Imagine having that job…

Eighth grader Brianna Edlund wrote the story "Doggie Duties." She entered her story in the *Imagine this… story writing contest* and won! Check out her story and learn how to enter this writing contest at *www.cfaitc.org/imaginethis/doggie*.

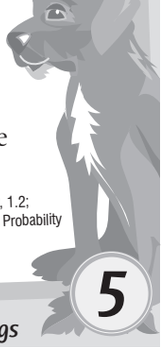


"Our economy is based on ag. If a lot of our food gets damaged by insects, that will impact our economy. Then we'll have to come up with something else for income or we'll have to learn to live with less money."
Brianna Edlund
8th grader
Los Angeles County

Newspaper Activity

Dogs are all different. Those that work at airports sniffing for food need not be of a specific breed. Rather, they must be able to work around lots of people and mind their handler. Find five dog sale ads in the "Classified" section of your local newspaper. Cut them out and glue them on a sheet of paper. Find the mean (average) cost of the dogs. Now, write a "for sale" ad for a dog that might be a good airport or postal inspection dog. Be sure to list the characteristics the dog should have.

Standards: **Grade 4** Math: Statistics, Data Analysis and Probability 1.0, 1.2; Language Arts: Writing 1.7, 1.8 **Grade 5** Math: Statistics, Data Analysis and Probability 1.0, 1.1 **Grade 6** Math: Statistics, Data Analysis and Probability 1.0, 1.1; Language Arts: Writing 1.1



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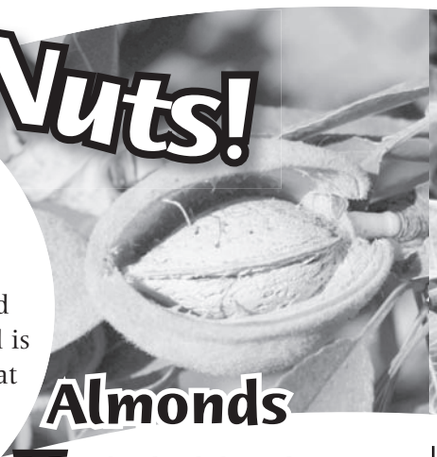
Answer to Page 12 Question: *59 dozen eggs*

Going Nuts!

Scientifically speaking, a **nut** is a dry fruit with one seed whose outer wall becomes very hard. In cooking, the word "nut" is used more loosely and is associated with any kernel that has a hard outer shell. Let's learn about common nuts people eat!

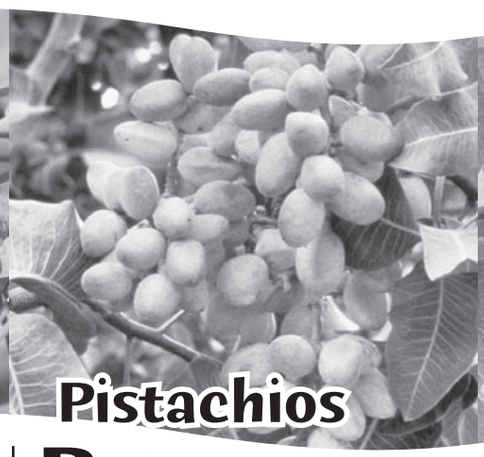


Almonds

Two kinds of almond trees are planted in alternate rows. As bees work gathering nectar for their hives, they carry pollen from one type of almond tree to another. This cross-pollination is needed to grow the almonds we eat.

The fuzzy hull, which covers the growing almond, eventually hardens and splits, telling the farmer it's time for harvest.

The fuzzy almond hulls don't go to waste. They are fed to dairy cattle.



Pistachios

Pistachio nuts are formed when pollen from a male tree reaches the female flowers of another tree. No bees need apply for work on this tree crop. Pistachio pollen is wind-borne.

Pistachio nuts grow in grape-like clusters on trees. Each pistachio is encased in a fleshy hull that turns rosy when ripe. Inside the hull, the shell splits naturally while on the tree.

Pistachio kernels get their green color from chlorophyll, the same pigment that makes leaves green.

Walnuts

Walnut trees are self-pollinating trees. That means that the pollen from one part of the tree must reach its flower. Each tree contains both the pollen and the flower and requires the swish of the wind to transfer the pollen.

You won't see beautiful blossoms on walnut trees; rather, gangly tassle-like pollen baskets appear.

Walnut shells are used in sandblasting.

Did you know?

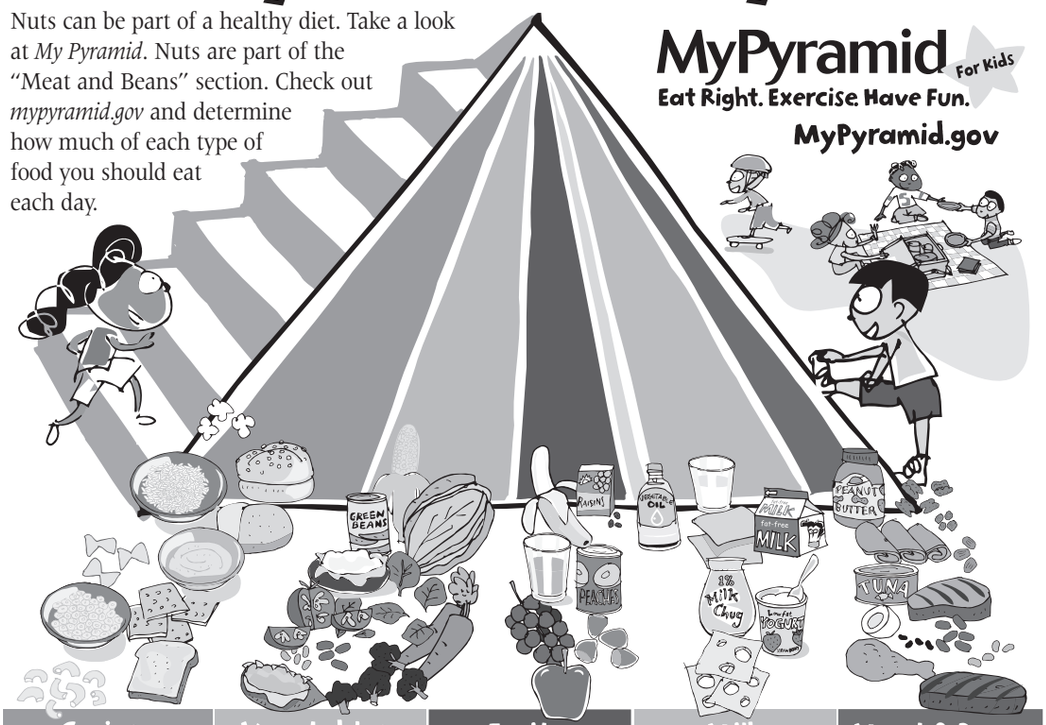
Eating nuts can reduce the risk of heart disease, some types of cancer and other diseases. They can also help reduce the bad (LDL) cholesterol, increase the good (HDL) cholesterol and contribute protein to your diet.

On Shaky Ground

Almonds, walnuts and pistachios are harvested **mechanically.** Imagine a shaker wrapping its claw-like arm around the base of each tree trunk and then shaking it, causing the nuts to fall. Almonds and walnuts fall directly on the ground and then are swept into rows by a mechanical sweeper. A third machine picks up the nuts and transports them to carts, which are towed to a huller, where the outer hull is removed. Pistachios are more delicate, so they fall onto a **canvas** catching frame, that moves the nuts directly into bins. Pistachios must be taken immediately to a huller or they will spoil. Almonds and walnuts can be stored in their hulls.

Nutty About a Healthy You!

Nuts can be part of a healthy diet. Take a look at *My Pyramid*. Nuts are part of the "Meat and Beans" section. Check out *mypyramid.gov* and determine how much of each type of food you should eat each day.



Grains	Vegetables	Fruits	Milk	Meat & Beans
Make half your grains whole	Vary your veggies	Focus on fruits	Get your calcium-rich foods	Go lean with protein
Start smart with breakfast. Look for whole-grain cereals. Just because bread is brown doesn't mean it's whole-grain. Search the ingredients list to make sure the first word is "whole" (like "whole wheat").	Color your plate with all kinds of great-tasting veggies. What's green and orange and tastes good? Veggies! Go dark green with broccoli and spinach, or try orange ones like carrots and sweet potatoes.	Fruits are nature's treats – sweet and delicious. Go easy on juice and make sure it's 100%.	Move to the milk group to get your calcium. Calcium builds strong bones. Look at the carton or container to make sure your milk, yogurt, or cheese is lowfat or fat-free.	Eat lean or lowfat meat, chicken, turkey, and fish. Ask for it baked, broiled, or grilled – not fried. It's nutty, but true. Nuts, seeds, peas, and beans are all great sources of protein, too.
Eat 6 oz. every day; at least half should be whole	**Eat 2 1/2 cups every day**	**Eat 1 1/2 cups every day**	**Get 3 cups every day;** for kids ages 2 to 8, it's 2 cups	**Eat 5 oz. every day**

Oils Oils are not a food group, but you need some for good health. Get your oils from fish, nuts, and liquid oils such as corn oil, soybean oil, and canola oil.

Try This Activity

Make a nutty butter by grinding 1 cup of your favorite nut with 1/8 teaspoon salt in a food processor. Blend in one tablespoon of vegetable oil at a time until the butter is of spreading consistency. Write clear directions on how to make a "nutty butter sandwich." Next, follow your instructions exactly and see what kind of afternoon snack you have made. How would you change your directions to get a better product?

***Standards*: Grade 6** English-Language Arts: Reading 2.5

Sources: Almond Board of California, California Pistachio Commission, United States Department of Agriculture, and Walnut Marketing Board

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What Would You Do Without Your Refrigerator?

People have had refrigerators for less than 100 years. Before that time, people had to be creative on how they would store the food they worked so hard to gather or grow. Some would use salt to cure meats and vegetables. Others would "can" their foods. Some people had iceboxes, a special container that stored ice and **perishable** food—similar to the ice chests of today. Some stored food in basements where it was cool. The oldest known method of food preservation was **dehydration**, where the water was removed from the food preventing the growth of harmful microorganisms. These food preservation methods are still used today.

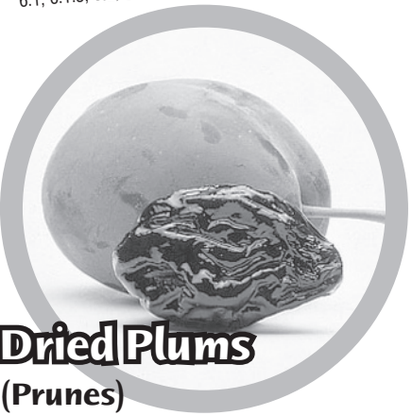
Ancient Foods We Still Eat Today

Activity

Draw a line from each food to its country of origin!

Check out your answers on *kids.cfaitc.org/wgo4/ancientfood.*

Standards: **Grade 6** History-Social Science 6.1, 6.1.3, 6.2, 6.3



Dried Plums (Prunes)

- Dried plums originated in Western Asia then found their way into Europe and the Balkans. Louis Pellier began growing dried plums in the Santa Clara Valley after failing to make money gold mining.
- In 1905, Martin Seely, a California farmer, tried to use monkeys to pick his prunes. It didn't work too well—the monkeys picked them okay, but they ate them too!

Source: California Dried Plum Board

Figs

- It is thought that figs originated in ancient Babylonia. The fig tree was held sacred in all countries of southwestern Asia, Egypt, Greece and Italy and was a part of most ancient cultures.
- Figs were used as a training food by the early Olympic athletes and are still used in that way today. They are high in potassium. The first Olympic "medals" were laurels of figs.

Source: California Fig Advisory Board

Raisins

- The first raisins were discovered when humans happened upon grapes drying on the vine. One can find historical references to sun-dried grapes and raisins as early as 1490 B.C. The first were established between 120 and 900 B.C. Native to the Mediterranean regions, raisins were grown primarily in Greece and Spain and traded by the Phoenicians.
- The first California raisin crop was produced by nature when a heat wave hit the Central Valley in 1873 drying the grapes before farmers could harvest them.

Source: California Raisin Marketing Board

Dates

- Date palm orchards flourished near the Tigris and Euphrates Rivers in ancient Mesopotamia, now known as Iraq, before 3000 B.C. Ancient Egyptians created date palm **hieroglyphs**. In fact, dates were found buried with King Tutankhamen. The Hebrews called the date palm "the tree of life."
- In 1904, date palms were planted in Southern California. Today 30 million pounds of dates are produced each year in the Coachella Valley.

Source: California Date Administrative Committee

116787

Newspaper Activity

Using a newspaper U.S. weather map and data chart, locate a state whose weather would be ideal for dehydrating fruit today. If you were to look at a weather map in about three months, would your answer most likely be the same? Explain your reasoning to the class.

Standards: **Grade 4** English-Language Arts: Listening and Speaking 1.0, 1.1 **Grade 5** English-Language Arts: Listening and Speaking 1.0, 1.5; Science: Earth Science 4d

Horticulture... As Diverse as

Horticulture...

Horticulture is the growing and caring for gardens and orchards including vegetables, fruits and ornamental flowers, shrubs and trees. Let's read about some horticulturists and see what they do!

So What's a Nursery Product?

Take a look around you... you see houseplants, flower arrangements, soccer fields, fruit trees, the fruits and vegetables in the grocery store and the lawn and garden landscape around your home. All of these items are nursery products, products that make your life greener!

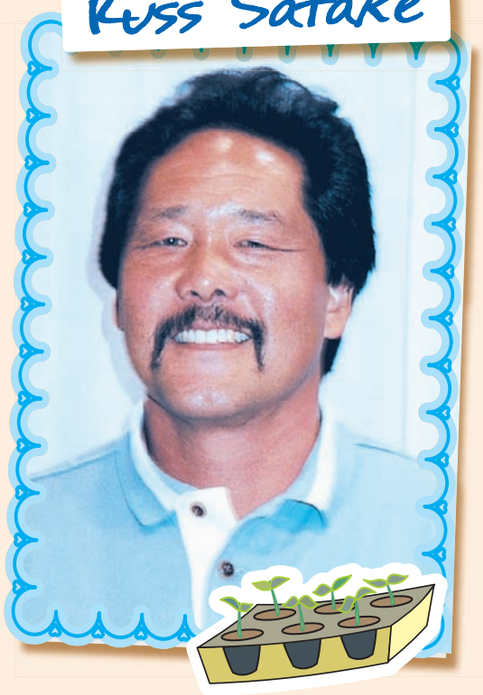
Did you know?

Gardening is the number one leisure activity in the U.S. today.

Did you know?

It took just two days to lay the 120,000 square feet of sod on the San Francisco Giants Baseball Stadium field in San Francisco.

Russ Satake



"I think it is important for children to understand how horticulture impacts their lives. I want them to know and appreciate the roles plants and trees play in our existence."

-Russ Satake
President, Satake Nursery, Inc., Morgan Hill

Mr. Satake operates his family-owned business in one of California's most populated areas — the Bay Area! He is responsible for the production and selling of millions of plants and six-pack flowers produced each year. You may find him driving an electric cart checking inventory or moving supplies. From determining what to plant to getting the items to the market, Mr. Satake handles paperwork and publicity for his company. He sells his plants to stores that then sell them to you. Mr. Satake's Bachelor of Arts degree from UC Berkeley provided him with the knowledge he needs to keep his business successful.

Chris Rowe Martinez

"Find a way to do what you love. Every day I get to see nature in action and find it rewarding to work with people who respect and love plants and our planet."

-Chris Rowe Martinez
General Manager, Orchard Nursery & Florist, Inc., Lafayette

Ms. Rowe-Martinez is responsible for making sure her retail nursery is in working order. She manages employees, orders plants and provides her employees with the equipment they need like forklifts that move material and water wands used to water the plants in the garden center. Her 2.5 years of college and her California Certified Nursery Professional certification help her to make decisions that keep her operation running smoothly.

Seth Taylor

"One thing that gives me great pleasure is to help customers find the right plants for their yard."
-Seth Taylor Sales Manager, Capital Nursery, Sacramento

You might hear his voice hosting a Saturday morning gardening talk show (KCTC 1320 AM), or identifying common pests found in landscapes. One of Mr. Taylor's favorite things is helping customers identify pests that are "bugging" a bush or tree. He uses a lighted magnifying lens to identify tiny critters that can cause a great amount of damage. His hard work through schooling and hands-on experience has allowed him to turn his hobby of gardening into a profession.

our State!

"Listen to your heart, follow your dreams and listen to your elders for direction on how to achieve your goals."

-Fernando Sanchez
Class "A" Driver and Merchandizer
Color Spot Nursery, Inc., Richmond

Fernando Sanchez

Mr. Sanchez delivers plants. Each day he performs a pre-trip inspection of his truck or semi tractor-trailer and prepares for loading the plants. He checks his travel route, drives safely, and then unloads his plants at their final destination. Mr. Sanchez takes pride in the displays he creates at the retail outlets where the flowers are sold.

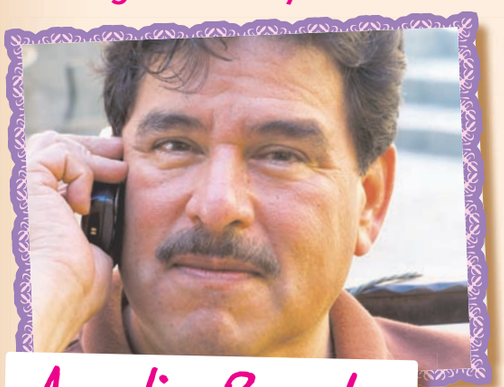
Steve Atwood

"Learn to listen. Listen to your parents, teachers and other leaders, and then do what is right."

-Steve Atwood
CEO/President, Clyde Robin Seed Company, Inc.
Castro Valley

Mr. Atwood's company produces wildflower seeds... from Shasta Daisies to Red California Poppies. His degrees in business, economics, accounting and statistics help him track many accounting details. Mr. Atwood is a good listener and an innovative businessman. One such innovation is the use of plastic sparrow hawks, fake birds that flutter from a string in the wind. They keep sparrows and other small birds away from the fields.

"Learn how to study. It takes work but once you develop good study habits learning becomes easier."



Aurelio Posadas

-Aurelio Posadas
Assistant Director, Division of Plant Health and Pest Prevention Services, California Department of Food and Agriculture, Sacramento

Mr. Posadas might be in Washington D.C. learning about exotic pests such as the Mediterranean fruit fly, in his California office writing reports, or in Mexico sharing his knowledge with other experts. He depends on his cell phone and handheld "blackberry" to keep in touch during his travels. After being a firefighter for the US Forest Service, Mr. Posadas used his college degree in biology to help control pests in California.

Source: California Association of Nurseries and Garden Centers

Try This Activity — Tools of the Trade

Horticulturists use a variety of tools. Read about the horticulturists then match each tool to the person who uses it.

Russ Satake ○	○ lighted magnifying lens 
Chris Rowe Martinez ○	○ tractor trailer 
Steve Atwood ○	○ electric cart 
Aurelio Posadas ○	○ plastic sparrow hawks 
Fernando Sanchez ○	○ cell phone and blackberry 
Seth Taylor ○	○ watering wand 

How many of these tools can you find in your newspaper?

Newspaper Activity

Skim through the "Help Wanted" sections of your local newspaper. Find and cut out at least three jobs that relate to horticulture. Glue them to a sheet of paper. Circle the one you find most interesting. Write a well-written paragraph that explains your reasoning. Be sure to include an introductory and concluding sentence in your paragraph.

Standards: **Grade 4** English-Language Arts: Reading 2.0, 2.1 Writing 1.0, 1.1, 1.6, 1.7, 1.8 **Grade 5** English-Language Arts Reading 2.0 **Grade 6** English-Language Arts: Reading 2.0, 2.1 Writing 1.0, 1.1 **Grade 7** English-Language Arts: Reading 2.2 **Grade 8** English-Language Arts: Reading 2.1

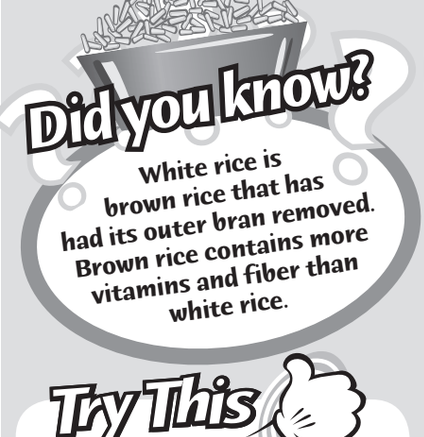
Try This Activity

Interview a horticulturalist in your community. Pretending you are that person, write a journal entry for a particular day. What did you do? Where did you go? Who did you talk to? How do you feel? Remember to:

- Write your story as if the person you interviewed was writing it.
- Indent your paragraphs.
- Use proper punctuation and capital letters.
- Use lots of details by including adjectives and adverbs.

Standards: **Grade 4** English-Language Arts: Writing 1.0, 1.1, 1.7 Written and Oral English Language Conventions 1.0, 1.3, 1.6 Listening and Speaking 1.0, 1.1, 1.2 **Grade 5** English-Language Arts: Writing 1.0, 1.2 Written and Oral English Language Conventions 1.0, 1.4 Listening and Speaking 1.0, 1.3 **Grade 6** English-Language Arts: Writing 1.0, 1.1 Written and Oral English Language Conventions 1.0, 1.3, 1.4 **Grade 7** English-Language Arts: Writing 2.0, 2.1 Written and Oral English Language Conventions 1.0, 1.5, 1.6 Listening and Speaking 1.0, 1.1, 1.2 **Grade 8** English-Language Arts: Writing 2.0, 2.1 Written and Oral English Language Conventions 1.0, 1.5

So what's for dinner? Is it chicken and rice? How about sushi or a rice bowl? It could be red beans and rice or paella or risotto. Chances are one of your meals this week will include rice. In fact, it may be the main ingredient in your morning cereal. Rice is the most widely consumed grain in the world.



Try This

Buy some brown rice and white rice and examine the nutritional label of each. With your family, prepare and eat both kinds of rice. Keep a few kernels of uncooked brown rice for an experiment. During your meal compare and contrast the appearance, texture, taste and nutritional value.

Place the uncooked brown rice kernels you saved between two pieces of sand paper. Polish the rice by rubbing it back and forth. Take a look at the rice. You have just processed brown rice into white rice. What do you notice?

In a well-written essay, explain what you did and what you learned. Be sure to have introductory and concluding paragraphs and some interesting facts throughout.

Standards: **Grade 4** English-Language Arts: Writing 1.0, 1.1, 1.2 **Grade 5** English-Language Arts: Writing 1.0, 1.2 **Grade 6** English-Language Arts: Writing 1.0, 1.2 **Grade 7** English-Language Arts: Writing 1.0 **Grade 8** English-Language Arts: Writing 1.0, 1.1

So That's How It's Grown!

Most of California's rice is grown in the Sacramento Valley. In April and May, airplanes spread rice seed over fields flooded with about 4"to 6" of water. The seeds sink to the ground, take root and grow upward. In September and October, when the rice stalks are full-grown, most of the rice is harvested with a machine called a **combine**.

Agriculture and the Environment

California's rice fields are wildlife habitats for hundreds of species of birds, mammals and amphibians. They are one of the favorite viewing areas for millions of birds that use these wetlands for their annual migration from north to south. One might see Snowy and Great Egrets roaming the waters, or Red-tailed hawks soaring over the fields looking for snakes or gophers that live along the water's edge. A Bald Eagle may even be sighted.

Once a pesky by-product that was burned or tilled back into the soil, rice straw is now finding its way into the consumer world. You might see it on the sides of roads as wattles, long tubular structures placed to control soil erosion. It can be made into fiberboard used to build walls. Mushroom growers use it to produce their delicacies, while others use rice straw to make specialty papers and newsprint. Rice straw buildings require less heating and air-conditioning than conventional homes. These uses not only help the farmers make money, but they also help the environment.

It might seem like rice needs a lot of water in order to grow. It does, but no more than many other crops. It takes about 25 gallons of water to produce one serving of rice. That's about the same amount of water it takes to produce one orange or a handful of cherries. Water use is just more noticeable with rice. Farmers monitor the water they use and work to make the water they return to the rivers cleaner than the water they take from them. Rice farmers use a high tech, water conserving process called "laser-leveling" to make fields as flat as a table top. It takes teamwork—scientists, engineers, inspectors and farmers working together.

Source: California Rice Commission

Newspaper Activity

Look through the "Foods" section of your newspaper and find a recipe that includes rice. How many servings does the recipe make? How many students are in your class? Double, triple or quadruple the recipe so that if you prepared this recipe you would have enough for your class.

Standards: **Grade 4** Math: Number Sense 1.0 Mathematical Reasoning 1.0, 1.2 **Grade 5** Math: Number Sense 1.0 Mathematical Reasoning 1.0, 1.2 **Grade 6** Math: Number Sense 1.0 Mathematical Reasoning 1.0, 1.3

116790

We Share the Air!

Take a Deep Breath!

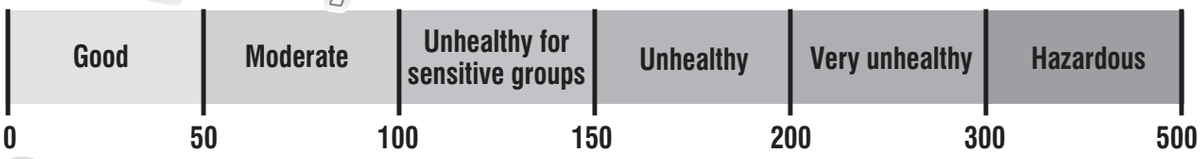
Nothing is more refreshing then breathing the crisp clean air after a rainstorm. Why? The air has been washed of **pollutants**. The pollutants we can see are called particulate matter. But most air pollution is a kind we cannot see. These pollutants are gases that come from different sources.

Did you know?

Pure air is 21% oxygen, 78% nitrogen and 1% other gases. You breathe about 35 pounds of air every day. That's the weight of seven 5-pound sacks of flour!

Air Quality

Air Quality Index



Each day, scientists gather information from air quality stations throughout the nation. These stations record the amount of pollutants in the air.

The Environmental Protection Agency (EPA) requires that air quality data is gathered and made available to the public. You can find a chart like this in the weather section of your newspaper as well as on the Internet. Your local news also reports the air quality.

The Air Quality Index values range from zero to 500. The smaller the number, the cleaner the air. Good air quality ranges from zero to 50.

Let's All Clean the Air!

Agriculturalists know clean air is important. After all, the plants they grow and the animals they raise need clean air to survive. However, our air has become dirtier over the years. More cars and trucks on the road, an increase in industry and some agricultural practices are just some of the contributers to increased air pollution. Each year, the San Joaquin Valley suffers more than $150 million in crop damage due to air pollution. That's a lot of money!

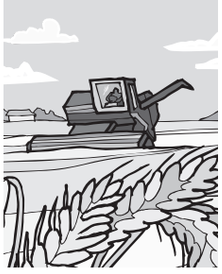
The Big Five Pollutants

Here are five pollutants that are measured regularly by scientists. Look at the chart to learn more about these pollutants.

Pollutant	Description	Sources
Ozone (O_3)	A colorless gas made of three oxygen atoms	• Formed when vehicle exhaust and other fumes combine with other substances in the presence of sunlight
Particulate Matter	Very small particles such as dust, soot or droplets of liquid	• Power plants • Wind-blown dust • Diesel engines • Wood fireplaces/stoves
Carbon Monoxide (CO)	A colorless and odorless gas made of one carbon and one oxygen atom	• Gasoline burning engines • Natural gas appliances
Nitrogen Oxides	Gaseous compounds made of nitrogen and various amounts of oxygen	• Vehicles • Power plants that burn fossil fuels
Sulfur Dioxide (SO_2)	Gas made of one sulfur atom for every two oxygen atoms	• Power plants and factories burning coal • Charcoal barbeques • Oil refineries

Source: airnow.gov

Here are a few things that agriculturalists can do to help improve the air:



- Engines of all types are used in agriculture – to move water, operate tractors and trucks, and run heating and cooling systems in greenhouses and poultry houses. Replacing diesel engines with engines that emit less pollution is a benefit to us all!
- The amount of dust can be reduced by quickly re-planting fields after harvest, tilling the soil on less windy days, and using equipment that produces less dust.
- Burning less waste reduces particulate matter in the air. Some almond growers, for example, chip their prunings and sell it as animal bedding. This actually becomes a commodity from which they can earn money!

Source: San Joaquin Valley Air District

Activity
What Can You Do?

Take a deep breath and think of three ways you can help reduce air pollution. List them here:

1) _____

_____

2) _____

_____

3) _____

_____

In the space below, draw a cartoon that shows you doing one of these activities. Be sure to include at least one sentence in your cartoon.

Comic title: _____ by: _____

Newspaper Activity

Read this page on air quality and then find the "air quality" report in the "weather" section of your newspaper. At home tonight or tomorrow, discuss with your family what you have learned.

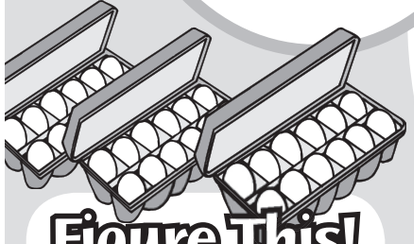
Standards: **Grade 4** English-Language Arts: Written and Oral English-Language Conventions 1.0 **Grade 5** English-Language Arts: Written and Oral English-Language Conventions 1.0 Physical Sciences 1, 1b, Life Sciences 2f **Grade 6** English-Language Arts: Written and Oral English-Language Conventions 1.0 Science Resources 6b **Grade 7** English-Language Arts: Written and Oral English-Language Conventions 1.0 **Grade 8** English-Language Arts: Written and Oral English-Language Conventions 1.0

116791

The Chicken and the Egg

What's Inside an Egg?

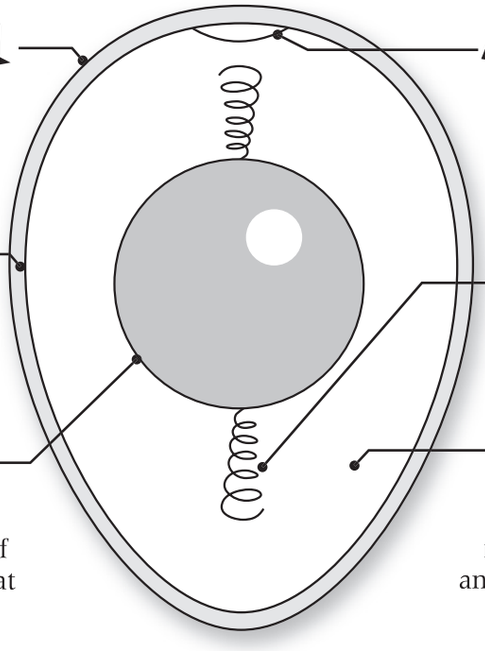
Eggs are a great source of protein and contain 14 minerals and 11 vitamins. But when you eat an egg, have you ever looked at it closely? Let's take a look…



Shell
outer covering of egg composed mostly of calcium carbonate

Shell Membranes
two paper-like membranes that keep in moisture and protect the egg

Yolk
yellow part of the egg, which is a major source of vitamins, minerals and fat



Air Cell
usually forms on the large end of egg between the two shell membranes; the older the egg, the larger the air cell

Chalazae
these whitish strings hold the yolk in place; the fresher the egg, the more noticeable

Albumen
also known as the egg-white; this clear-like substance is a major source of riboflavin and protein

Figure This!

Eggs are often sold by the dozen. If you worked at a restaurant and on average sold 350 two-egg breakfasts each day, how many dozen eggs would you need to have on hand each day?

Check your answer on page 5 or learn how to solve it at *kids.cfaitc.org/wgo4/eggproblem*.

Standards **Grade 4** Math: Mathematical Reasoning 1.0, 1.1, 1.2 **Grade 5** Math: Mathematical Reasoning 1.0, 1.1, 1.2 **Grade 6** Math: Mathematical Reasoning 1.0, 1.1, 1.3 **Grade 7** Math: Mathematical Reasoning 1.0, 1.1, 1.3

Chicken Nuggets

Spanish explorers brought the first chickens to North and South America in the 1500s.

Settlers in Jamestown raised small flocks of chickens as early as 1607.

Chickens raised for meat are called "fryer" chickens.

The Single Comb White Leghorn is the most common breed used for the production of white shell table eggs.

Eggs are candled (viewed with a bright light) and then are sorted by quality and size.

A rooster is not needed for a hen to lay an egg, just an egg that will grow into a chick.

One laying hen lays about 240 eggs per year… that's almost one a day.

Americans eat about 80 pounds of chicken per person per year. In 1960 the average consumption was 30 pounds per year.

Newspaper Activity

Bring in your favorite family recipe that uses chicken or eggs. Price the ingredients in the grocery ads of your newspaper. Estimate the prices for the ingredients for which you cannot find prices. Determine the price per serving by dividing the total cost of the meal by the number of people it will serve.

Standards **Grade 4** Math: Mathematical Reasoning 1.0, 1.1, 1.2 **Grade 5** Math: Mathematical Reasoning 1.0, 1.1, 1.2 **Grade 6** Math: Mathematical Reasoning 1.0, 1.1, 1.3 **Grade 7** Math: Mathematical Reasoning 1.0, 1.1, 1.3

Try This Activity

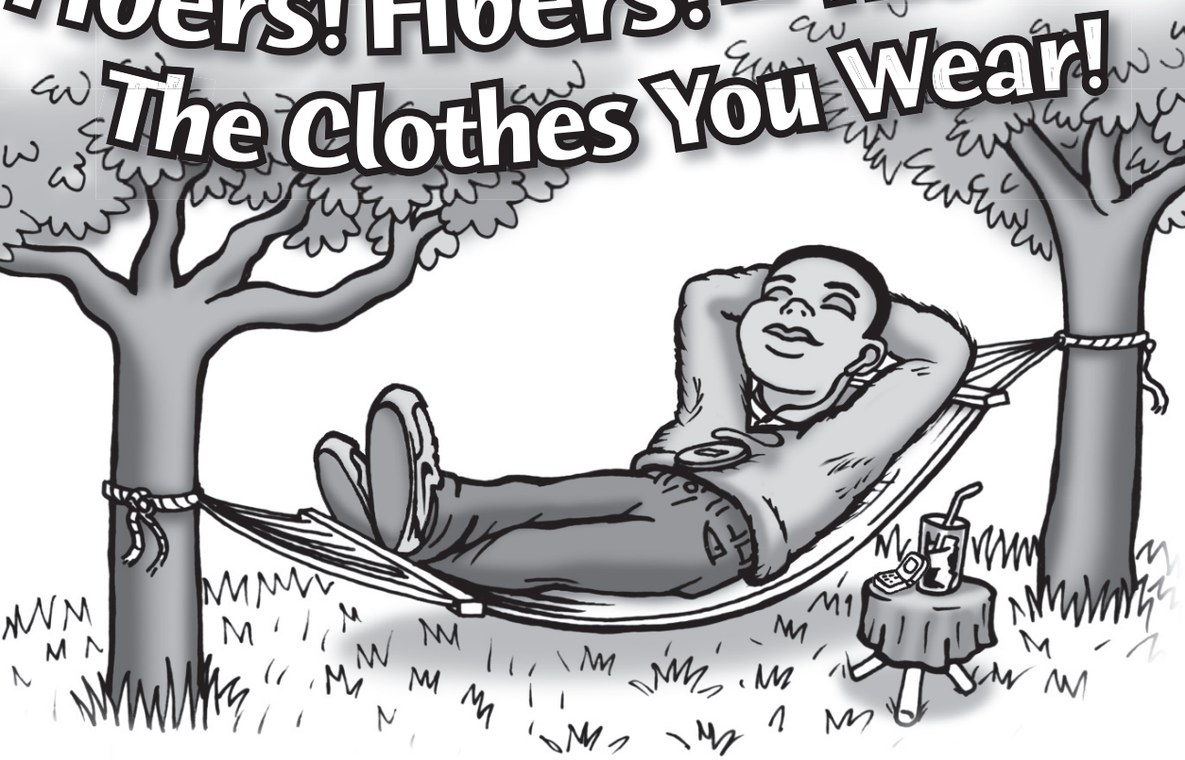
Did you know that an egg can bounce?

WAIT A MINUTE… don't use a raw or cooked egg! Instead make your bouncing egg by following the procedure at kids.cfaitc.org/wgo4/bouncingegg

116792

Sources: American Egg Board and California Poultry Federation

Fibers! Fibers! – The Things You Use! The Clothes You Wear!



Cellulose forms the walls of plant cells. It is the woody part of trees and plants. Wood, cotton, flax and hemp are largely cellulose fibers. These fibers are used to make things you use such as paper, fabric and some plastics.

The rope used to make this hammock and the material from which your pants are made come from cotton. Cotton grows on a plant that produces cotton bolls. These bolls contain soft fibers and seeds.

Sometimes **cotton** fibers are woven into fabric and are used to make bedsheets and denim pants. Levi Strauss created the first jeans out of ship sails and sold this sturdy pant to gold miners. The rivets that now decorate jeans were first used to attach the thick fabric together. In 1880, the U.S. Navy designed an undershirt that, when laid flat, had the shape of a T. We now call this popular shirt a T-shirt.

Your warm sweater or coat may come from sheep wool. **Wool** is the hair of sheep. Like human hair, it is made of a protein called keratin. Sheep are sheared once a year. The shearers are skilled and know how to hold the wooly ruminants so the skin is tight and the fleece cut long. The longer the wool fibers, the more the rancher gets for the fleece. Most shearers wear special burlap moccasins that are specially designed to prevent the crew from slipping on floors slick with the lanolin which is the natural oil in the wool. Next time you wear a wool sweater or use lotion, think of the sheep who provided you with these items.

The **cashmere** sweater that keeps you warm may have gotten its start on a California goat farm. The U.S. cashmere business began about 1990 and has now grown to approximately 100 goat ranchers in the country.

Linen is made from the fibers of flax plants. It is woven and makes fabrics used for tablecloths and clothing. Flax seed is becoming a popular grain that people eat to increase fiber in their diets.

Sources: American Sheep Industry Association and California Farm Bureau Federation

Activity

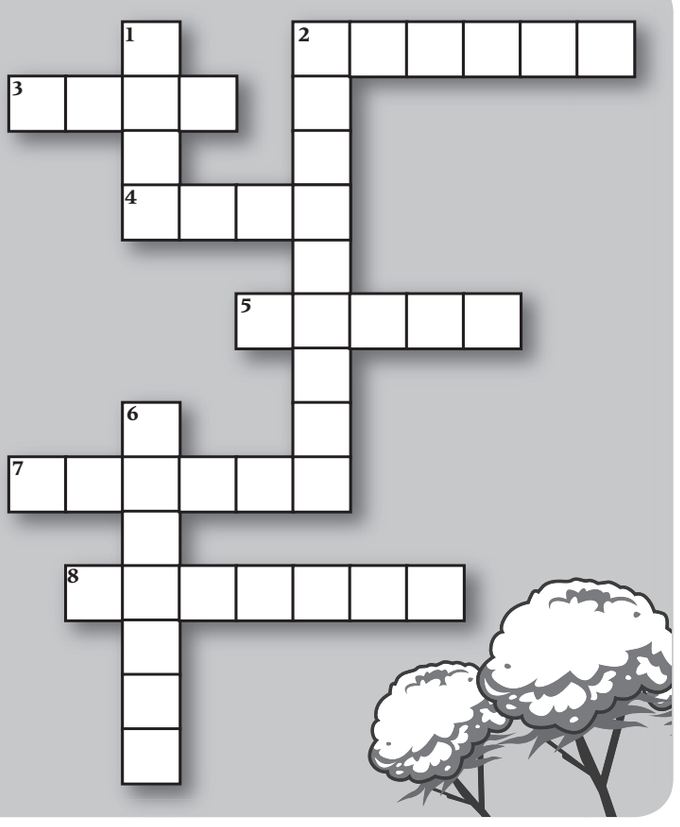
Use the information on this page to solve this crossword puzzle.

ACROSS

2. the fiber from which the first blue jeans were made
3. the plant from which linen fibers come
4. the part of the plant from which cotton fibers and seeds form
5. what cotton grows on
7. the coat of wool that comes from a sheep
8. a natural oil found in sheep wool

DOWN

1. a baby sheep
2. forms the walls of plant cells
6. the protein found in animal fur or hair



Standards **Grade 4** Reading 2.0; Life Science 3c **Grade 5** Reading 2.0 **Grade 6** Reading 2.0 Science: Resources 6c

Try This Activity

Next time you eat peanut butter and celery, check out the long fibers on the celery stalk. Those are cellulose fibers. Fiber is a part of all fruits and vegetables. It keeps your digestive tract working properly.

Newspaper Activity

Look through your local newspaper and read a few articles that interest you. Do they mention items that are made from plant or animal fibers? What would your life be like without these items? Discuss your thoughts with a partner.

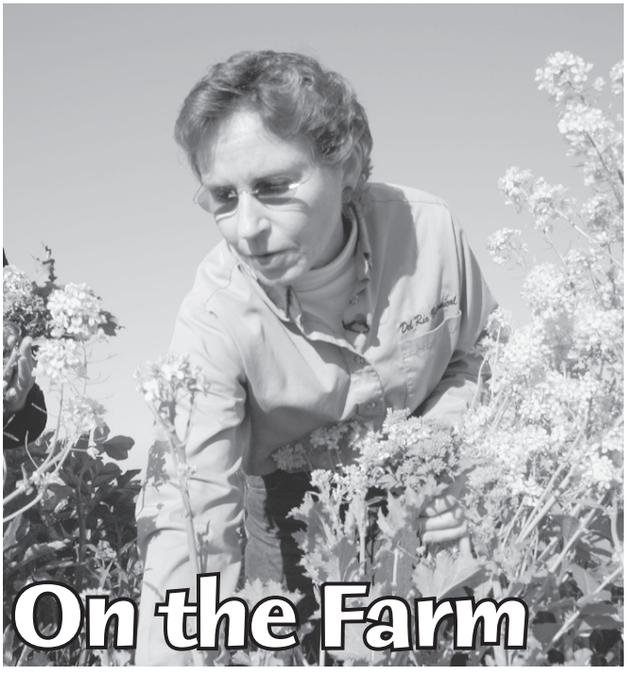
Standards **Grade 4** Reading 2.0; Life Science 3c **Grade 5** Reading 2.0 **Grade 6** Reading 2.0 Science: Resources 6c

Answer to Page 5 Activity:
Americans eat the most avocados on Super Bowl Sunday.

Crossword Answers: ACROSS - 2.) cotton 3.) flax 4.) boll 5.) plant 7.) fleece 8.) lanolin
DOWN - 1.) lamb 2.) cellulose 6.) keratin

116793

Extra! Extra!—Read All About It!—Niche Markets



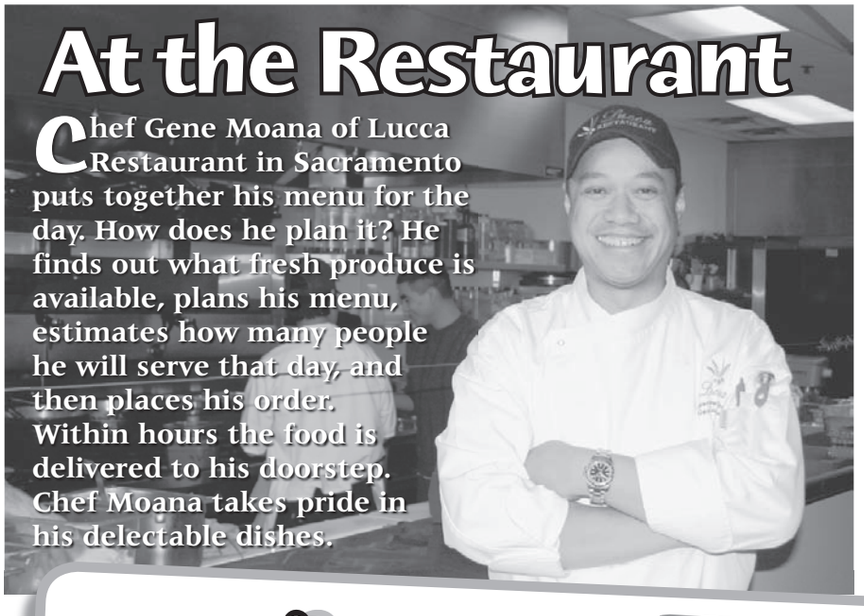
On the Farm

Del Rio Botanical owner and grower Suzanne Peabody Ashworth lives along the Sacramento River in Yolo County. She grows rare fruits and vegetables on her 200-acre ranch. She has saved seeds from over 1,500 varieties of rare **produce** and herbs including specialty basils, tomatoes and peppers. Ashworth lets local restaurants know what she has available.

On the Road

Once Ashworth receives an order, Ashworth and her work crew harvest the order, pack it and then quickly place it into refrigerator trucks. Within an hour, the food reaches its destination—the restaurant.

At the Restaurant



Chef Gene Moana of Lucca Restaurant in Sacramento puts together his menu for the day. How does he plan it? He finds out what fresh produce is available, plans his menu, estimates how many people he will serve that day, and then places his order. Within hours the food is delivered to his doorstep. Chef Moana takes pride in his delectable dishes.

Try This Activity

Tomato Mozzarella Salad

- 5 slices fresh mozzarella cheese
- 8 cherry tomatoes sliced in half
- ½ yellow tomato sliced into wedges
- 1 cup arugula or romaine lettuce leaves
- ½ ounce red wine vinegar
- 1 ounce extra virgin olive oil
- Salt and pepper to taste

Wash tomatoes and pat dry before cutting. Wash lettuce and drip or spin dry in salad spinner. In a mixing bowl toss lettuce and cut tomatoes together with oil, vinegar, and salt to taste. Arrange the cheese slices in a circle, placing the salad in the center. Drizzle the dressing from the bottom of the bowl over the entire salad. Serve with fresh ground pepper. Yield 1 salad.

Chef Moana's gourmet version of this recipe can be found at *www.kids.cfaitc.org/wgo4/tomatosalad*.

Did you ever wonder where basil for pesto comes from? How about the lemongrass used in Thai food? Many farmers grow specialty items, providing you with lots of choices that impact your senses.

Nothing tastes better than farm fresh food. **Consumers** can enjoy a sensory experience of smells, colors and tastes at local farmers' markets. To find a farmers' market in your area check out *www.cafarmersmarkets.com*.

Some farmers produce food that is "organic." They are called "organic farmers." As with any farmer, organic growers must keep their plants healthy and productive. Organic farmers can use natural chemicals such as **manures, sulfur** and **mulches** to keep the crops healthy. Other times beneficial insects are put into fields so they will eat other little critters that are enjoying the farmers' plants.

The USDA has a **certified organic** program which requires organic growers to follow certain regulations. Their products can display this symbol. Nearly 1% of California farms and 2% of the nation's farms produce food that carry this symbol.

Source: www.ams.usda.gov

Community-supported agriculture is when local farms are supported by their community. One such example is when people pay to get a box of fresh fruits and vegetables delivered each week. Sometimes school salad bars use local produce.

Have you ever eaten a pluot, a fruit produced by crossing a plum with an apricot? How about the purple arugula leaves that brighten up your salad plate? California farmers produce over 350 crops from asparagus to zucchini!

116794

Glossary and Resources

Agriculture-the science, art and business of soil cultivation, crop production and the raising of livestock

Ailment-illness or sickness

Canvas-a strong cloth with a coarse weave; often made of cotton

Cashmere-fibers from goats

Certified Organic- a food produced without the use of synthetic pesticides, synthetic fertilizers, bioengineering or ionizing radiation.

Chlorophyll-a substance in green plants that converts light energy into chemical energy using carbon dioxide and water

CIMIS (California Irrigation Management Information System)-a program that monitors weather

Climate-the kind of weather a place has

C**ombine**-a machine or tractor that cuts, threshes and cleans a crop while moving across a field

Commodity-any product, such as grain or fruits used in trade

Consumer-someone who uses products

Cotton-a plant that produces long fibers that are used to make things such as fabric and rope

Cross-pollination-to transfer pollen from one variety of plant to another

Data-facts or known information

Dehydration-to dry or remove water

Fertilized- in flowers the process where pollen actually reaches the ovary.

Fertilizer-any substance added to water or soil to increase the nutrients available to plants

Fleece-the intact coat of wool shorn from a sheep

Hieroglyph-a picture, character or symbol standing for a word

Horticulture-the growing and caring for gardens and orchards including vegetables, fruits, and ornamental flowers, shrubs and trees

Linen-a fabric made of flax fibers

Manure-solid animal waste products

Mulch-soil, straw, wood chips or any loose substance placed on the ground to conserve soil moisture, prevent soil erosion or control weeds.

Mechanically-by machine or some type of equipment

Niche-a suitable or special place or position

Nut-a dry fruit with one seed whose outer wall becomes very hard

Perishable-liable to spoil or decay

Pest-a living thing such as a plant, animal or virus that is unwanted in a particular place at a particular time

Pesticide-a chemical used to control pests

Photosynthesis-process where plants use light, carbon dioxide and water to produce sugars

Pollinated-when pollen transfers from the anther to the stigma of a flower

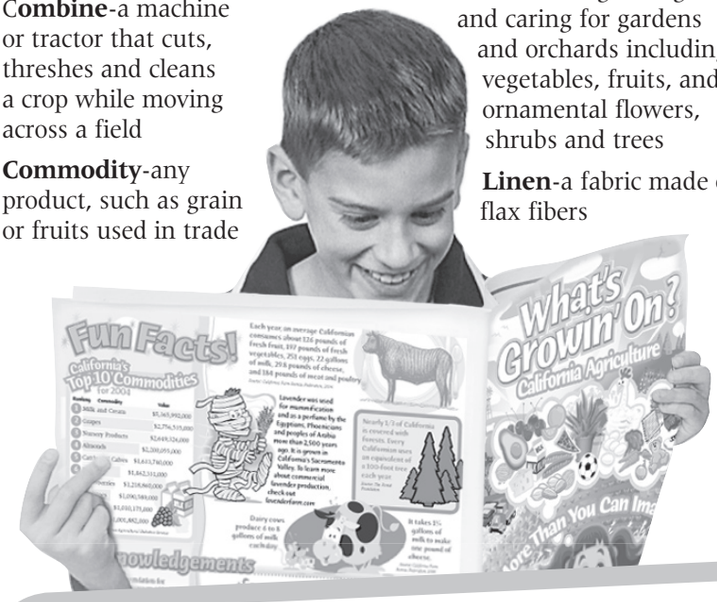
Pollutant-a substance in water, soil, air or elsewhere that impairs its usefulness

Produce-to make; sometimes refers to fruits and vegetables

Sulfur-a mineral sometimes used to control insects and fungi

USDA-United States Department of Agriculture, a governmental agency

Wool-the fibers from sheep

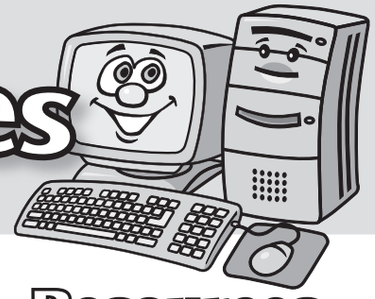


Activity

Find two of the glossary terms in this newspaper. Copy the sentences each are in and then report the uses in bibliography format. Use quotation marks which are required when you copy something. You must also provide credit; hence, the bibliography.

Example:

Sentence Quote	Bibliography
"Celery was first used to cure stomach ailments."	"Tasty Plants," What's Growin' On?, p. 3.



Resources:

Air Now:
airnow.gov

Almond Board of California:
www.almondsarein.com

American Egg Board:
www.aeb.org

California Association of Nurseries and Garden Centers:
www.cangc.org

California Avocado Commission:
www.**avocado.org**

California Cherry Advisory Board:
www.calcherry.com

California Date Administrative Committee:
www.datesaregreat.com

California Department of Food and Agriculture:
www.cdfa.ca.gov/kids

California Dried Plum Board:
www.californiadriedplums.org

California Fig Advisory Board:
www.californiafigs.com

California Pistachio Commission:
www.pistachios.org

California Poultry Federation:
www.cpif.org

California Raisin Marketing Board:
www.calraisins.org

California Rice Commission:
www.calrice.org

CFAITC Kids' Corner:
kids.cfaitc.org

Cotton Counts:
www.cottoncounts.net

MyPyramid:
mypyramid.gov

Walnut Marketing Board:
www.walnuts.org

Zip 4 Tweens:
www.zip4tweens.com

To request a free ***What's Growin' On?*** Teacher's Guide that will enhance the use of this newspaper, visit *www.cfaitc.org/wgo* or call (800) 700-2482.

Answer to Page 4 Riddle:
You can make about 140 pies from an average cherry tree.

Standards: **Grade 4** English-Language Arts: Writing 1.5 **Grade 7** English-Language Arts: Reading 1.5

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Fun Facts!

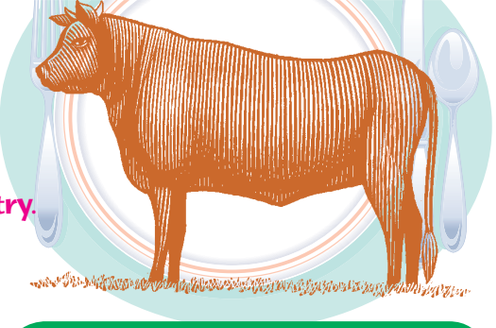
California's Top 10 Commodities for 2004

Ranking	Commodity	Value
1	Milk and Cream	$5,365,992,000
2	Grapes	$2,756,535,000
3	Nursery Products	$2,649,326,000
4	Almonds	$2,200,055,000
5	Cattle and Calves	$1,633,740,000
6	Lettuce	$1,462,331,000
7	Strawberries	$1,218,860,000
8	Tomatoes	$1,090,589,000
9	Hay	$1,010,175,000
10	Flowers	$1,001,882,000

Source: California Agricultural Statistics Service

Lavender was used for mummification and as a perfume by the Egyptians, Phoenicians and peoples of Arabia more than 2,500 years ago. It is grown in California's Sacramento Valley. To learn more about commercial lavender production, check out *lavenderfarm.com*

Each year, an average Californian consumes about 126 pounds of fresh fruit, 197 pounds of fresh vegetables, 251 eggs, 22 gallons of milk, 29.8 pounds of cheese, and 184 pounds of meat and poultry.



Nearly 1/3 of California is covered with forests. Every Californian uses the equivalent of a 100-foot tree each year.

Dairy cows produce 6 to 8 gallons of milk each day.

It takes 1¼ gallons of milk to make one pound of cheese.

Sources: California Farm Bureau Federation and The Forest Foundation

Acknowledgements

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)

California Foundation for Agriculture in the Classroom

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CALIFORNIA FOUNDATION FOR AGRICULTURE IN THE CLASSROOM

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California Farm Bureau Federation

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California Beef Council

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California Cherry Advisory Board

Foster Farms

Farm Credit: You invest in the land. We invest in you.

Farm Credit: American AgCredit, Farm Credit West, Fresno Madera Farm Credit, Northern California Farm Credit, Sacramento Valley Farm Credit

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