

WE'RE HARVESTING

Avocados!







AND MORE!



NEWSLETTER

Farmer Spotlight

RACHAEL LAENEN - KIMBALL RANCHES-EL HOGAR SANTA PAULA, CA

Nestled between Santa Paula and Fillmore in Ventura County, Kimball Ranches has produced crops for generations. Today, sixth-generation farmer Rachael Laenen works alongside her



family and eight full-time employees to manage the family's 320 acres. About 150 acres are planted with avocados; the rest is steep hillsides where farming isn't possible.

South-facing slopes, rocky soil, and coastal influence create ideal avocado conditions. "Good drainage is key," Laenen said. "Avocados like moisture, but they don't like wet feet." Over the years, crops have ranged from lima beans to walnuts, but since 1984 the focus has been avocados.

The ranch primarily grows Hass, the bumpy-skinned variety common in grocery stores, with some Bacon and Zutano trees as pollinizers. "Hass grows well here, ships well, and has great flavor," Laenen said.

Avocados have a unique cycle. After planting, trees take three years to bear fruit and reach full production in seven to ten years. They are "alternate bearing," supporting two crops at once: maturing fruit and next year's flower buds. Flowering

occurs from April to June, and the fruit from that bloom is usually harvested beginning the following February.

Knowing when to pick takes skill. Growers watch fruit size, weight, and color. "When the green dulls and the weight increases, it's getting close," Laenen said. All harvesting is done by hand using clippers, long poles, and ladders.

After picking, fruit is loaded into bins, taken to a packinghouse, washed, graded, and sized before shipping to buyers—mostly in the western U.S. "California avocados demand a premium," Laenen said. "They're closer to the source, ripen naturally, and are grown under strict food safety standards."

In 2017, the Thomas Fire destroyed 70 percent of the orchard and the family's home, barn, office, equipment, and much of the irrigation system. Rather than rebuild the same, they improved, installing a million-gallon water tank, upgrading irrigation, and replanting with optimal spacing and rootstock. "It was awful, but it gave us the chance to start fresh," Laenen reflected.

For the Kimball family, success comes from adapting. "If you don't innovate, if you're not resilient, you're going to give up. That's not who we are."

FOOD Lot FUEL



Avocados provide unique health benefits. They are full of essential vitamins and a natural source of beneficial antioxidants. HERE ARE SOME OF THE HEALTH BENEFITS OF INCLUDING AVOCADOS IN YOUR DIET:

Healthy SKIN

The healthy fats found in avocados help keep skin hydrated, and the vitamin A in avocados helps keep your skin healthy.

Strong BRAIN

Avocados provide healthy fats and folate that support brain health, which can help you concentrate on difficult tasks.

HEART

Avocados support a healthy heart by providing good fats and potassium, which help maintain healthy blood pressure.



AVOCADO PINEAPPLE POPSICLES

Avocados are harvested mainly in the spring and summer months, making them a perfect ingredient for cool, creamy popsicles when the weather heats up. These refreshing avocado popsicles are a tasty way to beat the heat and enjoy this nutritious fruit during its peak season. Yields six popsicles.



Ingredients:

- 2 cups fresh or frozen pineapple
- 1 medium ripe avocado
- 1 tablespoon agave syrup
- 1½ tablespoons fresh lime juice
- 1/4 cup toasted coconut

Tools:

Knife and cutting board, spoons, blender, measuring spoons, popsicle molds

Always check student information, especially allergies, before preparing or serving food to keep everyone safe.

(Adapted from sweetpotatosoul.com)

Wirections:

- 1. Gently wash the avocados under cool running water. Cut in half, remove the pit, and scoop out the flesh.
- 2. Wash the pineapple and cut into cubes if not already done.
- 3. Add the pineapple cubes, avocado, agave syrup, and fresh lime juice to a blender or food processor. Blend until smooth and creamy, about 30 seconds to 1 minute. Taste and add more agave or lime iuice if vou like.
- 4. Carefully pour the mixture evenly into popsicle molds, filling each one without overflowing.
- 5. Sprinkle a spoonful of toasted coconut shreds on top of each popsicle.
- 6. Freeze the popsicles overnight or until they are completely solid.
- 7. To remove, dip the molds in warm water for 10 to 20 seconds until the popsicles loosen, then gently pull them out.
- 8. Enjoy your refreshing avocado pineapple popsicles!



Avocado Inspection

In this lesson, students step into the role of produce inspectors to examine avocados closely. They'll inspect size, shape, and quality, learning how experts ensure only the best fruit reaches our tables. Using observation and measurement skills, students gain hands-on experience with food standards and quality control in agriculture.

Materials: Ripe avocados, digital scale or balance, small paper plates, spoons and plastic knives, hand lens, paper towels, worksheet (page 3).

Procedure:

- 1. Begin the lesson by asking students: "Would you rather have an avocado with a giant seed or one packed with creamy green goodness?" Today they will step into the role of a produce inspector to determine which avocados are worth sending to the stores.
- 2. Introduce avocados and briefly discuss where they're grown and how they're used. Explain that before avocados make it to our kitchens, inspectors check them for size, shape, ripeness, and any defects like bruises or blemishes that could affect quality.
- 3. Explain the inspection challenge: in teams, students will observe, measure, and analyze an avocado to determine if it meets quality standards. They'll use a worksheet to guide their process and record findings.

- - 4. Divide students into small groups and provide each group with the listed materials.
 - Groups work together to complete their inspection using observation and math skills.
 - 5. Once all groups have finished, invite them to share their results and compare findings. Which avocado had the best quality? Did your group find signs of damage or poor quality? What could be done with those avocados to help reduce food waste?
 - 6. Wrap up by reflecting on the importance of quality control in agriculture and how science and math help keep our food safe and of the highest quality.

Objectives:

Students will work in teams to inspect avocados using observation, measurement, and math skills. They will weigh fruit parts, calculate ratios, and learn how quality is judged in agriculture.

California Standards: CC Math: 4.MD.A.1, 5.NBT.B.7, 6.RP.A.3, 6.NS.B.3



Name:	
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Avocado Inspection

Get ready to step into the shoes of a real produce inspector! In this activity, you'll take a close look at one avocado to see how it measures up. You'll check for:

- External defects (what you see on the outside)
- Internal defects (what you find on the inside)
- The ratio of flesh to whole fruit (how much of the avocado you can actually eat!)

Before you start, weigh your whole avocado and record the mass: _____grams

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Give your avocado a score from 1 to 10 for each defect. A score of 1 means only a small part is damaged. A score of 10 means the whole thing is. Look closely to decide how much of the surface is affected.

DEFECT SCORE

Ridging	Scarring
Sunburn	Lenticel Damage

INTERNAL DEFECTS

(CHECK IF PRESENT)
Cut the avocado in half.
Look inside and place a
checkmark next to any
internal defects you see:

FI	lesh	disco	lorat	ion

	Flesh	stuck	to	pit
~~~				

## Stem end rot

## **FLESH RATIO**

- 1. Scoop the flesh onto a paper plate. Then weigh the skin and record its mass: _____ grams
- 2. Next, weigh the pit and record its mass: _____ grams
- Find the mass of the flesh by subtracting the pit and skin mass from the total avocado mass you recorded earlier.

Mass of flesh: _____grams

4. To find the percent of flesh, divide the flesh mass by the total mass, then multiply by 100.

% Flesh: _____ %

5. Most good avocados have 60–70% flesh. Less means lower quality. More means excellent! How would you describe the quality of your avocado? Scan the QR code to see pictures and examples of each defect to

help you identify

them more easily.



Scan Me



PIT



In this interview, sixth-generation Ventura County avocado farmer Rachael Laenen of Kimball Ranches shares her journey from managing global Formula One events to running her family's farm. Math and science, once her least favorite subjects, are now tools she uses every day.



# **DIG DEEPER**

These books, websites, and other resources will help you and your students learn more about avocados.

#### **BOOKS**



## **Avocado Magic**

by Taltal Levi

When Ellie worries she is not growing, her father shows her the magic of an avocado seed. As the seed begins to sprout, Ellie learns that growth takes time and

wonder. Includes instructions for growing your own avocado tree.

#### **Bravo Avocado**

by Chana Stiefel

Avocado wants to be Today's Special at the farmer's market, but nothing seems to make her stand out. With the help of her fresh produce friends, she learns that what makes her special was inside



her all along. This pun-filled story explores friendship, confidence, and self-discovery.

# Guacamole ONCE ARGUITA: MARCHANTO ANDA

## Guacamole

by Jorge Argueta

This bilingual cooking poem follows a young girl as she joyfully prepares guacamole using fresh ingredients. With playful language and rich imagery, the story celebrates the beauty of food, family, and cultural

traditions. Includes a simple, kid-friendly recipe.



#### californiaavocado.com

Showcasing the flavor and benefits of California-grown avocados, this site offers nutrition facts, tasty recipes, and helpful how-to guides. Visitors can explore the history, different varieties, ripening tips, and creative ways to enjoy this heart-healthy fruit.

#### learnaboutag.org

The California Foundation for Agriculture in the Classroom provides free resources to teachers. The resources highlight many of California's 350 agricultural commodities, including avocados.

### loveonetoday.com

Created by the Hass Avocado Board, this site highlights the science-backed health benefits of fresh avocados. Explore easy recipes, nutrition facts, prep tips, and free wellness resources for every stage of life.



#### **Lesson Plan: Freshest Fruits** (*Grades K-2*)

By California Foundation for Agriculture in the Classroom

In this lesson, students explore the characteristics and nutritional benefits of fresh fruits, including avocados. Through hands-on observation, they examine the size, shape, texture, and seeds of a variety of fruits.

## **Science Project: Ripening Avocados** (Grade 2-5)

By Education.com

In this science experiment, students test how quickly avocados ripen under different conditions—like in a bag with a banana or stored in the fridge. Along the way, they learn about ethylene gas and how it affects fruit ripening.





#### Partnering for Farm to School Success

Great things happen when classrooms and cafeterias work together! Discover resources and a special guide packed with creative ideas for partnering with your school nutrition program.

Download today at learnaboutag.org/farmtoschool.

