

From Farm Road

48th DAA Schools' Agriculture and Nutrition Program Spring 2015 www.agfair.org

l ocated at: Bldg. F10 Farm Road, Mt. San Antonio College

Mailing Address: PO Box 707, Walnut, CA 91788-0707 909.274.2433 909.274.2439 fax DAA48th@aol.com e-mail

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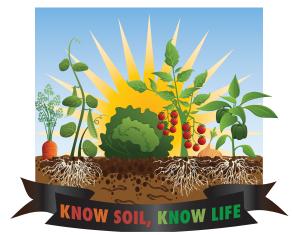
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#### Mission

To increase the understanding. appreciation and participation of urban teachers and students in agriculture and nutrition through cooperative involvements of the California agricultural industry, educational institutions and community partners.

# **2015 Schools' Agriculture and Nutrition** Fair Theme: Know Soil, Know Life



## May 12—16, 2015 at Fairplex, Pomona, Building 10

Thousands of student and teacher exhibits from more than 60 elementary, middle and high schools in the Los Angeles County and local areas will compete for ribbons and premiums at the annual Schools' Agriculture and Nutrition Fair sponsored by the 48th District Agricultural Association. This year's theme is Know Soil, Know Life.

Admission to the Fair is free and school field trips can be arranged with reservations by calling 909-274-2433.

The five day event at Fairplex Pomona, May 12–16, will include agricultural and nutritional themed exhibits. Teachers annually compete for premium awards with their presentations of Educational Agriculture or Nutritional themed booths. About 60 School Gardens will be competing for premium awards. School gardens are judged prior to the fair. The school gardens are represented at the fair with murals telling the story and celebrating their gardens.

Ag Day LA, May 13 and 14, will be held in the Big Red Barn and The Farm at Fairplex in conjunction with the Fair. Pre-registered 3rd & 4th grade students will learn about water, plants, bees/ insects, fiber/cotton, food and dairy, and view a sheep shearing demonstration by Mt. San Antonio College.

Other scheduled attractions include Dairy Council of California/Mobile Dairy Classroom, Discovering Science interactive show and exhibits, All about Animals petting zoo, Insect Display by Dept. of Agricultural Commissioners/Weights and Measures, L.A. County. Visit http://www.agfair. org/2015fair/index.htm for the dates and times.

Saturday May 16th, the last day of the fair, is celebrated beginning at 10:30 am with the Annual Spelling Bee open to 1st-6th grades. At 3 pm, the Teacher Awards Ceremony will be held including recognition to school gardens with the There is a School in Every Garden Award.

For more information, visit our website at www.agfair.org or call 909-274-2433.

# The Farm at Fairplex

The Farm at Fairplex is an innovative model agricultural business and educational resource that serves our diverse communities through sustainable and locally focused programs.

Schools interested in arranging field trips, community workshops, corporate team building and culinary classes at The Farm at Fairplex, contact Sarah Davila, 909-865-4266 or Davila@fairplex.com. Visit www.fairplex.com for additional information.

Please visit our Facebook page www.facebook.com/48thDAA and click 'Like'.

#### Directions to 48th DAA Office:

#### From the 57 Freeway: Exit at

Temple, go West. Turn right on Bonita, turn right at the stop sign. Continue straight through parking lot. Stay to the left and turn left onto Farm Road.

#### Follow directional signage.

#### From the 10

**Freeway:** Exit at Grand, go South. Turn left at Temple, turn left at Bonita, turn right at the stop sign. Continue straight through parking lot. Stay to the left and turn left onto Farm Road.

Follow directional signage.



WESTERN FAIRS ASSOCIATION

Member of Western Fairs Association

# Measurement Standards: It All Started Down on the Farm

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history of California,

When you go to the supermarket and you buy a gallon of milk or a pound of oranges, how do you know you're getting your money's worth? How about a quart of oil, or an acre of land, or a truckload of building materials? Well, it all started down on the farm...

As our ancestors made the transition from their hunter-gatherer origins to agriculture-based communities, the concept of the farm as an essential part of their lives evolved along with them. Over many generations,

the farm became a central point not just for the community's sustenance and survival, but also for its commerce. Early farmers and the people who bought, sold and traded for what they grew developed a richer understanding of the science of measurement as a basis for fairness in that burgeoning marketplace. Many industries developed and adapted their own

measurement standards, but the standards for measuring staples like milk and grain, the weight of livestock, an acre of land and many more were largely learned and passed down by societies because of interactions with farmers.

In the relatively brief history of California, folks who lived in rural communities and needed an accurate weight for a commercial transaction knew where to go—to the farmer. That's who had the spot-on scales and other measuring devices, as well as the expertise to use them. Even for the "city folk" who had ample occasion to make or convert measurements in their daily lives, one obvious place to look was the farmer's almanac. For centuries, agriculture has provided a trustworthy, reliable platform for fairness in commercial transactions.

Fast-forward to today, and CDFA's Division of Measurement Standards (**http://www.cdfa. ca.gov/dms/**) carries on that public trust by ensuring the accuracy of a broad range of devices used in commercial transactions, from gas pumps to truck scales to supermarket price scanners. CDFA's regulatory leadership and technical expertise in the science of measurement is a key reason why Californians trust that a gallon is a gallon, whether it's milk or gas or olive oil. With the assistance of county sealers and their inspectors, weights and measures officials are able to routinely inspect and test the 1.4 million scales, meters and other commercially used devices registered throughout California.

#### The Future of Measurement Standards

As modern commerce races ahead with new technologies, products and services, the standards of measurement must keep pace. For example: with the recent approval of a hydrogen fuel dispenser at California State University, Los Angeles (http:// plantingseedsblog. cdfa.ca.gov/

#### wordpress/?p=7621), the Golden State's

consumers are well on their way to adding a few kilograms of hydrogen (and zero emissions) to the weekly shopping list. CDFA's experts approved the equipment used to dispense that fuel. Another new "fuel" is electricity, and CDFA is focusing its efforts on the specifications and accuracy requirements for publicly available electric car charging stations that are popping up to meet the demand created by 120,000 electric vehicles (http://www. pevcollaborative.org/2014-PEV-Sales) now driving on California roads. Whatever the next

advancement, they'll be there. Just think of it as the latest in a long line of evolutionary steps that started on the very first farm.

Courtesy of Kristin Macey, Director, CDFA Division of Measurement Standards (CA Dept. of Food and Agriculture)

# Major sponsors

State of California. Department of Food & Agriculture, **Division of Fairs** & Expositions Mt. San Antonio College Weinberg Foundation Industry Manufacturers Council Agricultural **Awareness** & Literacy Foundation L.A. County Farm **Bureau Dairy Council of CA**, Mobile Dairy Classroom **Pomona Feed** Assemblyman Curt Hagman, 55th District

# SSSA International Year of Soils Overview

The 68th United Nations General Assembly has declared 2015 the International Year of Soils (IYS)! The Food and Agriculture Organization (FAO) of the UN is implementing the IYS 2015, within the framework of the Global Soil Partnership (GSP), which aims to increase awareness and understanding of the profound importance of soil for human life – including food security, essential ecosystem functions, and sustainable development.

Working with FAO and GSP, the Soil Science Society of America (SSSA) is celebrating this important year to raise awareness and promote the sustainability of our limited soil resources. We all have a valuable role in communicating vital information on soils, a life sustaining natural resource. Therefore, we want to provide you with resources to learn about soils and help us tell the story of soils!

To do this, SSSA has developed themes with coordinating messages, and materials for each month in 2015. And everything is downloadable for use including Activities for Educators, Classroom Visits and Videos.

Coloring & Activity Book—designed for the K–2 audience, the coloring book and activities demonstrate the themes of each month and are designed to get kids thinking about soil. Teachers and parents can use this to talk about soil and how it is important to kids, families, and the world!

Visit the 48th DAA office for a copy of the Coloring & Activity Book; also visit **www.soils.org** for additional activities and information.

(Courtesy of Soil Science Society of America)

# **Straw Bale Garden**

Steve Williams, master gardener and professor at Mt. San Antonio College, set up a Straw Bale garden in the back lawn area outside the 48th DAA office. The bales were donated by Mt. SAC, and



the work done by Professor Williams and his Senior Garden class.

Check out the Straw Bale garden when you visit the 48th office.

Visit **http://strawbalegardens.com** for information about starting your own Straw Bale Garden.

# Ag Bites — CA Foundation for Ag in the Classroom

Enclosed in this issue are two Ag Bites activities to create with your classrooms: **Tops or Bottoms** and **Say Cheese**, courtesy of CA Foundation for Agriculture in the Classroom. Ag Bites are bitesized activities for bringing agriculture into your classroom. Both activities are aligned to California State Board of Education Content Standards.

# **Save the Dates!**

#### **Ist Take-in for Fair Entries**

(Refer to page 8 of Exhibitor Handbook.) Friday, April 24: 2–7 pm Saturday, April 25: 9 am–4 pm

Includes: Ag Science Projects, Bird Houses/Feeders, Shoebox Dioramas, Fabric Wall Hangings, CA Missions, Models, Wall Murals, Needlework, Other Crafts, Painting/Drawing, Photography, Poetry, Acrostic Poems, Short Story, Graphic Design, Essay, Sawhorses, Scarecrows, Seed Art, and Sewing Construction.

Also, High School Fine Arts projects.

#### 2nd Take-in and Booth Set Up.

(Refer to page 18 of Exhibitor Handbook) Friday, May 8: 2–7 pm Saturday, May 9: 9 am–4 pm

Includes: Beneficial Insects, Silkworms and Worms, Bottle Biology, Horticulture/Container Gardens, Hydroponics.

Bring Fair Entries to: Fairplex, Building 10, 1101 W. McKinley Avenue, Pomona, 91768. Enter Gate 1 off McKinley Avenue

If you have concerns about delivering entries or setting up Booths, please contact us at **909-274-2433.** We will work with you.

#### May 2, 2015-Mt. SAC Farm Day

Farm Day at Mt San Antonio College 9 am–3 pm! Come visit the farm on campus—games, food, demonstrations and enjoy a hayride.

May 12 to 16, 2015—Schools' Agriculture and Nutrition Fair Theme: Know Soil, Know Life

# **Join SCAN!**

The Southern California Agriculture and Nutrition Foundation (SCAN) was established to provide support to the Schools' Agriculture and Nutrition Program—48th **DAA.** Friends of **SCAN receive** our newsletter. invitations to our events and annual meeting. Call 48th office for an application and join today!

**SCAN Board** of Directors Steve Williams, President Joan Smith, Treasurer Efrain Valenzuela, Secretary Dale Quasny, Director Curtis Thomsen, Director Natalie Ybarra. Director Heidi L. Gallegos, **Past President** 



Location: Fairplex Pomona, Building 10

Deadline for fair entry forms is March 13, 2015. Check your email for more updates or visit **www.** agfair.org

#### May 13 and 14, 2015 - Ag Day LA

Ag Day LA is held in conjunction with the Schools' Agriculture and Nutrition Fair, for third and fourth grade students. Pre-registration is mandatory at www.agdayla.com.

#### May 16, 2015 – 9th Annual Tractor and Car Show/Strawberry Festival

10 a.m. to 4 p.m. Also includes petting farm, bug fair, antique equipment display, live music, trophies, and much more! For more information about the event, visit https://www.cpp.edu/~farmstore/ tractor-car-show.shtml or contact Brenda Orozco at 909-869-6722 or brorozco@cpp.edu.

#### 2015 EAT Foundation AG Tour and Seminar Schedule

Register to attend the EAT Foundation (Education & Agriculture Together) AG Tour and Seminar Classes:

- Session I: June 22-25, 2015 Session 2: July 13-16, 2015
- Session 3: July 27-30, 2015
- The Education & Agriculture Together

Foundation, commonly known as the E.A.T. Foundation, is a non-profit organization designed to increase educator's knowledge and experiences in the Agriculture industry and equip them with the appropriate tools to educate future generations regarding the importance of agriculture and rural stewardship in today's society. Visit http:// www.eatfdn.org for details and to register. For questions, email Kelly at kellyg@eatfdn.org.



# **Did You Know**?

The following are **Common Core Lesson Plans** available at the 48th DAA

(Materials courtesy of CA Foundation for Agriculture in the Classroom)



**Fruits & Vegetables for** 

Science, Math, Reading/ Language, History/Social Science, Health/ Nutrition

#### "Steer" Toward STEM, Careers in Animal Agriculture Grades 3–5 Science, Math, Reading/Language, Health/ Nutrition

**Chemistry, Fertilizer and the Environment** Grades 8–12

Science, Math, Reading/Language

### **California Educator's Guide to Fun** with the Plant Nutrient Team

Grades K-3 Next Generation Science, Science, Math, English/Language, History/Social Science, Health/ Nutrition

Edible Plant Parts Grades 2–3 Next Generation Science, Science, Math, English/Language, History/Social Science, Health/ Nutrition, Visual/Performing Arts

From "STEM" to Plate: Careers in Food Science Grades 6-8 Next Generation Science, Science, Math, English/Language, Health/Nutrition, Visual/ Performing Arts

Too Much? Too Little? Grades 5-8 Next Generation Science, Science, Math, English/Language, History/Social Science, Health/ Nutrition, Visual/Performing Arts

#### What do Plants Need to Grow? Grades 2–4 Science, Math, Reading/Language, Health/ Nutrition

Come into the office or call us at 909-274-2433. Lessons are free of charge; equipment, books, DVD's and videos can be borrowed.

The 48th also has Cotton's Journey Kits; Bread making kits; Trout in the Classroom supplies, and incubators to hatch chicks. Visit www.agfair.org for additional available lessons and materials.

The materials furnished by the 48th DAA are free of charge to teachers, in exchange for participation by teacher/ students in the annual Schools' Agriculture and Nutrition Fair. Submit a minimum of one entry for each of the materials (projects) checked out from the 48th DAA office.

The 48th DAA is open year round and works with teachers from Pre K to 12th Grade. Teachers and parents – we look forward to meeting you!

The office is open Monday to Thursday; 8:30 a.m. to 5 p.m. (closed 12 to 1 p.m. for lunch). Please call ahead at 909-274-2433.



# Tops or Boffoms

Encourage students to eat more fruits and vegetables by familiarizing them with the plant parts we eat.

### Activity

1. Read the book "Tops and Bottoms" by Janet Stevens.

- 2. Have all of the fruits and vegetables from the book in a basket. Discuss the fruits and the vegetables with the students.
- 3. As you pull random fruits and vegetables from the basket or grocery bag have students make the following gestures based on how the fruit or vegetable grows:
  - grows underground (touch their toes)
  - grows in the middle (crouch)
  - grow on top of the soil (stand tall with hands to the sky)

### **Classroom Activities**

- Divide a piece of paper into TOP, MIDDLE, and BOTTOM. Brainstorm fruits and vegetables for each category.
- Define these plant parts: stem, roots, fruits, flowers.
- Use California Department of Education's Fresh Fruit and Vegetable Photo Cards to enhance the activity:
  - Distribute one card per student and instruct them to sort themselves based on plant part we eat, color, calories (highest to lowest), major producing states, or alphabetically.
  - Introduce students to some of the less well-known fruits and vegetables.
  - ▷ Educate students about which part of the plant is commonly eaten.
    - Show students some of the ethnic fruits and vegetables found in California markets.
    - ▷ Learn where many of the fruits and vegetables are grown in the United States.
    - Learn the scientific name (family, genus, species) of the produce they are eating.
      - Determine the nutrient analysis of specific fruits and vegetables.
        - Teach students the Spanish names of fruits and vegetables.

# Materials

Grades K-3

- Tops and Bottoms by Janet Stevens ISBN 0-15-292861-0
- Grocery bag or basket
- Assortment of fruits and vegetables
- Photos of fruits and vegetables: Fresh Fruit and Vegetable Photo Cards, CDE Press ISBN 978-0-8011-1650-6 (optional)

## Tip

Use fruits and vegetables that are growing in the school garden, from students' home gardens, or from a local farmers market.

### California State Board of Education Content Standards

#### Kindergarten

ELA: Reading 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2; Listening and Speaking 1.1, 1.2 Physical Education: 1.1, 1.4, 1.8, 3.1 5.2, 5.4 Grade 1 ELA: Reading 1.1, 2.2; Listening and Speaking 1.1, 1.2, 1.3, 1.4, 1.5 Physical Education: 2.2, 3.1, 5.1, 5.2, 5.6 Grade 2 ELA: Reading 2.2, 2.4, 3.1; Listening and Speaking 1.1, 1.2, 1.3, 1.4, 1.6, 1.8, 2.1 Physical Education: 1.2, 5.1, 5.2 Grade 3 ELA: Reading 1.5, 2.3, 2.4, 2.5, 3.3, 3.4; Listening and Speaking 1.1, 1.3

www.LearnAboutAg.org



## Say Cheese

Investigating the cheese-making process.

### Mozzarella Recipe

California is a leading producer of Mozzarella cheese. Mozzarella is a fresh cheese that originated in Italy and is commonly used on pizzas and in pastas. Recipe makes approximately 12-14 ounces of fresh mozzarella cheese and takes 30-60 minutes.

- 1. Pour milk into stainless steel pot, add citric acid and stir gently to blend. Heat milk over medium-low heat to 88-90°F.
- 2. Remove from heat, add rennet and stir for 30-60 seconds to blend. Cover and let sit for five minutes. Continue to heat to 105°F as curd and whey separate.
- 3. Line colander with cheesecloth. Gently pour curds (solids) and whey (liquid) into colander to strain. Place curds in microwave-safe bowl. Whey can be retained for other baking projects like bread.
- 4. Microwave curds for 30-60 seconds on high. Remove from microwave and gently press curds with hands (draining off additional whey). Repeat process two to three more times, microwaving in 20-30 second intervals. Press curds together while cheese is warm (almost too warm to handle) and knead cheese like bread dough until it is smooth and pliable (like pulling taffy). If needed, microwave cheese in 10 seconds intervals to keep cheese warm and pliable. Then, knead in salt.
- 5. Cheese is done when it is smooth. Form cheese into a ball and place in cold water to cool. When cheese is cold, remove from water and place in plastic wrap and refrigerate. Eat within one week.

### **Classroom Activities**

#### Science

• Have students record observations throughout the cheese-making process including descriptions of how the ingredient properties changed and the temperatures at which they observed phase changes. Have students identify the catalyst and describe the role it played in cheese making.

### Nutrition

• Instruct students to categorize mozzarella cheese into a food group, list the number of recommended servings of that food group per day and the nutritional facts of mozzarella cheese.

### English Language Arts

• Have students create their own mozzarella cheese brand name, slogan, logo, and informational advertisement that persuades shoppers to purchase their product. Students can present this material to their classmates using a poster, PowerPoint, or iMovie.

### California State Board of Education Content Standards

Science: 1b, 8b, 8c Next Generation Science: Matter and Its Interactions HS-PS1 Health: 1.4.N ELA: Reading Text 10, Writing 1a, b, Speaking & Listening 1



- ¼ teaspoon liquid or ¼ tablet rennet (dilute in ¼ cup water)
- 6-8 quart stainless steel pot (not aluminum)
- 1 gallon of whole milk
- 1 ½ teaspoons citric acid (dilute in 1 cup water)
- Dairy thermometer
- Colander
- Cheesecloth
- Microwave-safe bowl
- 1-2 teaspoons salt
- Food-grade rubber gloves

### Tip

Take a virtual tour of California dairies and meet dairy farmers at www.realcaliforniamilk.com/ farm-life/family-farms

> Adapted from "30 Minute Fresh Mozzarella" by Utah Education Network.



www.LearnAboutAg.org