# STRAWBERRIES

### A "Berry" Good Observation

A lesson plan for second graders



Ag in the Classroom

### LESSON PLAN Overview

#### Purpose

To teach students about runners on a strawberry plant. To teach students that weather is an important factor in growing and producing healthy plants.

#### Subject Area Addressed

Science, Math, English/Language Arts

#### Common Core/Essential Standards

#### SCIENCE:

**2.E.1:** Understand patterns of weather and factors that affect weather.

2.E.1.1: Summarize how energy from the sun serves as a source of light that warms the land, air and water.

**2.E.1.4**: Recognize the tools that scientists use for observing, recording, and predicting weather changes from day to day and during the seasons.

#### MATH:

**2.MD.1**: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.

2.MD.9: Generate measurement data by measuring lengths of several objects to the nearest whole inch...

#### WRITING:

**CCSS 2.7:** Research to build and present knowledge. Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).

runners

#### Vocabulary

inches

thermometer

weather

#### **Materials Provided**

temperature

"Strawberry Journal"

#### Materials Needed

WEBSITE: http://www.theweatherchannelkids.com/

**DOWNLOADED MATERIALS:** *Strawberry Time* booklet found at www.ncstrawberry.com. Use pages titled The Farmer Cares for the Plants and The Strawberries Grow. Soon They Are Ready to Pick.

**OTHER SUPPLIES:** thermometer, strawberry plants, rulers

## TEACHING STRATEGY

#### Preparation

- Photocopy "Strawberry Planting Journal," one copy per student, and assemble.
  Each journal will need multiple copies of the second page. Print enough for the number of visits you anticipate students will make to the strawberry bed.
- Gather thermometers and rulers, and bookmark www.theweatherchannelkids.com/
- Label strawberries in garden with student's names or section off specific areas for students.

#### Instructions

#### 1. READ AND DISCUSS ASSIGNED READING

Read selected pages from Strawberry Time. Explain that each student will be caring for plants in the strawberry garden and keeping important data on a specific strawberry plant. Label strawberry plants so that each student knows which plant he/she will be observing. Ask: Why is it important to keep data? What does it tell us? Is weather important? Why?

#### 2. RECORDING WEATHER DATA

Explain to students that they will also be monitoring the weather each day and when they record data in their individual "Strawberry Journal," temperature will be included. Discuss the types of weather that provide the best conditions in which strawberries grow. Ask: What happens if the weather is not good for the plants...ex. below freezing, drought, etc.? How does the weather affect the plants? What should farmers / gardeners do about adverse weather?

#### **3. READING A THERMOMETER**

Display a Fahrenheit thermometer and determine the temperature. Teach students how to read a thermometer. Ask: Is a thermometer the only way we can find out the temperature? Allow students time to explore the Weather Channel Kids website and learn how to check the temperature in their location.

#### 4. PARTS OF A STRAWBERRY PLANT

Observe the parts of a strawberry plant. Have students point out various parts of the plant. Have students locate runners on the plants. Ask: What are the runners? What will happen if the runners are not cut back each year (if plants are treated as perennials)? Tell students they will also be measuring the size of his/her runners when gathering data for the "Strawberry Journal." Demonstrate when to begin measuring and how to handle the plants when recording data so they won't be harmed.

#### **5. COMPARE TEMPERATURES ONLINE**

When students work in their strawberry journals, allow them to use a thermometer as well as to check the temperature from the Weather Channel Kids website. Compare the temperatures. Students may work in pairs or small groups when recording data. (If necessary, 2-3 students can be assigned to the same plant).

#### 6. ANALYZE, COMPARE, AND REPORT THE DATA

Upon completing the strawberry journals, have students analyze data and compare the information and report how well the strawberries are growing or producing fruit. What could have made the plants grow better?

### EXTENSION ACTIVITY

#### Instructions

- Establish a daily/weekly weather reporter to check the temperature each day.
- Make sure row covers are in place if frost or freezing temperatures are going to occur.
- See the Strawberries in Schools website www.growforit.org/strawberries for information about row covers.

#### **Background Information**

- Keep plants well watered. Because they are shallow rooting plants, strawberries will dry out very quickly in hot weather, and the crop will be affected.
- Growing strawberries in a garden will encourage just about every garden bird imaginable. The trouble is, they will ALL eat the strawberries... if allowed to do so! Protect your strawberries from unwanted visitors by covering plants with bird netting that can be purchased at local nurseries and garden centers.
- Runners—little plants coming off the main plant—should be removed before they root. This will encourage the 'mother' plant to produce more fruit. Strawberries should be picked every 3 days when in season.
- Each strawberry plant in a growers field can produce up to 2 pounds of fruit.

#### Assessment

- Check Strawberry Journals for accuracy.
- Answers will vary depending on the different strawberry plants.

### My Strawberry Planting Journal



This book belongs to:\_\_\_\_\_

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### My Strawberry Planting Journal

Today's date: \_\_\_\_\_

The weather is \_\_\_\_\_. (Draw a picture in the box to the left that represents today's weather.)

The temperature is \_\_\_\_\_. (Show the temperature on the thermometer to the right.)

My strawberry plant is \_\_\_\_\_\_ inches high and \_\_\_\_\_\_ inches wide. My strawberry plant has \_\_\_\_\_\_ leaves, \_\_\_\_\_ flowers, and \_\_\_\_\_\_ strawberries on it today.

Today I took care of my strawberry plant by:

This is what my strawberry plant looks like: (Draw a picture in the box below.)



