

### **Target Audience**

Students in grades 3-6.

### **Program Objectives**

- Highlight the history of rice in U.S. agriculture since colonial times and its economic importance today.
- Help students understand how sustainable agricultural practices used by U.S. rice growers benefit the local ecosystem.
- Raise awareness of the role that grainsparticularly rice—play in the USDA's MyPlate guidelines for a healthy diet.

#### **Program Components**

- This one-page teacher's guide.
- Three reproducible activity sheets.
- A colorful classroom wall poster.
- · A reply card for comments.

## **How to Use This Program**

Photocopy the teacher's guide and activity sheets before displaying the poster. To review alignment with national standards for social studies, science, and health, visit ymiclassroom.com/usarice.

# **Activity 1** FROM THEN TO NOW

Part 1: Read the information with students and help them complete the timeline. Answers: 1685-B; 1700-D; 1777-E; 1849-H; 1865-A; 1884-C; 1920-G; 2015-F.

Part 2: Direct students to view the poster to help identify and unscramble the state names. Answers: A-4; B-1; C-5; D-6; E-3; F-2.

You might assign student groups to research the history of rice in a state of their choosing. Each group can map the rice-growing areas of its state, collect local rice recipes, and relate the state's geography, climate, and rice-farming techniques to rice production.

# **Activity 2**

#### **RICE SUSTAINS**

Part 1: Use these answers and the poster to help explain the concepts presented. Have students work in groups to do further research.

#### **Answers**

- 1. True. American rice growers' use of computers and lasers helps conserve soil and water and protects wildlife.
- **2. False.** Rice is grown in wet fields that require flooding during the winter months as part of the growing cycle.
- 3. False. U.S. rice farmers use less water to produce their crops than any other rice-farming nation of the world. Advanced irrigation methods help U.S. rice farmers monitor water usage to help them recycle water.
- False. Many rice farmers use a no-till method for farming in which they level rice fields using heavy machinery. Tilling destabilizes and erodes soil, leaving it less fertile and impeding the flow of water.

- **5. True.** Eighty-five percent of the rice consumed by Americans is grown in the U.S., which reduces the amount of carbon produced by transporting rice from field to plate, compared to rice imported from other countries.
- **6. True.** Rice fields create a special wetland ecosystem that supports habitat for a variety of species and helps restore natural marsh. Waterfowl such as songbirds and raptors; reptiles and amphibians, including snakes, crocodiles, and frogs; and even mammals like beavers, otters, squirrels, and raccoons, find food, shelter, and nesting sites in American rice fields.
- **7. True.** The rice-growing regions of the United States correspond to the three important North American flyway regions for most migratory birds, whose migratory patterns time perfectly with the rice farmer's winter flooding of rice fields.
- **8. True.** U.S. rice farming provides affordable nutrition to help feed America and the world, saving energy, reducing the carbon footprint, and providing critical habitat for wildlife.

Part 2: Review with students the concept of a carbon footprint—the amount of carbon dioxide (CO<sub>2</sub>) produced when food is transported from its place of origin, which requires the burning of fossil fuels that emit carbon dioxide into the atmosphere. Eating locally grown foods helps reduce the carbon footprint. (Note: To simplify calculations, this activity uses a benchmark value for CO2 emissions associated with transporting rice and rounds off distances.) Answers for CO<sub>2</sub> emissions to CT: from China – 4200kg; India – 4800kg; Thailand – 5400kg. Answers for distances and CO2 emissions to CT: Missouri -1,000 miles/600kg; Arkansas and Mississippi – 1,100 miles/660kg; Louisiana - 1,200 miles/720kg; Texas -1,600 miles/960kg; California - 2,500 miles/1,500kg.

#### **Activity 3**

### THE RICE BOWL

Review the activity sheet with students and show them the recipes featured at the links provided before they craft their own Rice Bowl recipes, share them with classmates, and try them at home with a parent. Consider creating a class Rice Bowl Recipe cookbook that can be reproduced and taken home to parents.

#### Resources

- www.usarice.com
- www.ymiclassroom.com/usarice

(available at www.ymiclassroom.com/usarice)

- Facts about USA Rice
- The History of U.S. Rice Production (LSUAgCenter)
- Video: American Rice Home Grown, World Famous

# **Rice and Wildlife Conservation**

(available at www.ymiclassroom.com/usarice)

- "Conservation: A Banquet for Ducks," Ducks Unlimited
- Infographic: What's Good for Rice is Good for Ducks

#### **About Carbon Footprint and Food Miles**

- www.foodmiles.com
- www.foodemissions.com/ foodemissions/Calculator.aspx





Help your students Think Rice! when it comes to building a balanced diet with this free educational program that also celebrates rice's role in America's history and how U.S. rice growers help protect our environment through sustainable agricultural practices.

Brought to you by the USA Rice Federation and the curriculum specialists at Young Minds Inspired, this program will also remind parents that when families put locally grown rice on the menu for good nutrition, they are also supporting community agriculture, which in turn promotes the local economy.

We hope that you will share this valuable program with other teachers in your school. Although the materials are copyrighted, you may make as many copies as needed for educational purposes.

Please use the enclosed reply card or comment online at ymiclassroom. com/feedback-usarice to provide feedback. We look forward to hearing from you.

Sincerely,

Dr. Dominic Kinsley Editor in Chief Young Minds Inspired

For questions, contact us tollfree at 1-800-859-8005 or by email at feedback@ymiclassroom.com.