



READY, SET, PLANT

GRADE LEVEL: K-1

SUBJECT: Science

NATIONAL STANDARD(S):

(K-2) SC: 4.1, 5.1-2, 6.1, 7.1, 8.1-2

THEME: Plants

FOOD AND FIBER TOPIC: III-B,C,D

LEARNER OBJECTIVES:

Students will learn the basic steps a gardener takes in planting seeds.

VOCABULARY

consumes— To eat or drink.

harvest— The act or process of gathering a crop.

supermarket— A large self-service food store, usually selling more than \$2 million worth of products a year from at least 20,000 square feet of floor area.

BACKGROUND

Many people grow tomatoes in backyard gardens during the spring and summer months. Tomatoes are usually harvested when they begin to turn red. Supermarkets don't always stock and sell the tomatoes grown locally. Sometimes those tomatoes are sold at local farmers' markets.

Tomatoes have many uses. They are used as the base for many common food products such as ketchup, pizza sauce and spaghetti sauce. The average person in the US consumes 70 pounds of tomatoes each year.

STEP-BY-STEP INSTRUCTIONS

1. Give each student two or three tomato seeds in a small container. Have students examine the seeds and try to identify them. Ask students what they will need to plant the seed.
2. Pour a small amount of soil onto each student's desk or into his or her hands. Have students describe the soil. What is it made of? What color is it? How does it smell?
3. Pass out planting containers (plastic or paper cups with drain holes punched in the bottom), and have students fill the containers with soil.
4. Have students poke holes about 1 inch deep into the soil in their containers.
5. Provide spray bottles for students to moisten the soil in their containers.
6. Have students place their plants in a sunny window and water them when soil is dry to the touch.
7. In five to 10 days a plant will emerge in each container. If more than one plant germinates, have students carefully pull out all but the healthiest plant.
8. Hand out student worksheets, and have students cut out the pictures and place them in the proper order to complete the cycle.

RELATED ACTIVITIES

1. Have students make calendars to keep records of their plants' development.
2. Bring a scale to class. Explain to students that the average person consumes 70 pounds of tomato products each year. Have students look around the classroom and guess what objects might weigh close to that weight. Weigh different objects until you find some that come close.
3. Have students list tomato products they have eaten in the past few days.
4. Have students look at home for tomato products and keep a progressive list.
5. Invite a local gardener, greenhouse owner or county Extension agent to visit the class and offer tips for growing healthy plants.
6. If possible, take a field trip to a greenhouse.

RESOURCES

Student Books

- Kovalski, M. (1990). Pizza for Breakfast. Morrow Junior.
- Modesitt, J. (1988). Vegetable Soup. Macmillan.
- Watts, B. (1987) Tomato. Silver-Burdett.
- Webster, V. (1982). Plant Experiments. Children's.
- Wilkes, A. (1984) Growing Things. EDC.

Teacher Resources

- Growlab: A Complete Guide to Gardening in the Classroom, National Gardening Association, 180 Flynn Ave., Burlington, VT 05401 (\$14.95, plus \$3 shipping).
- National Gardening Association. For more information about programs for educators and kids you can either call them at 1-800-538-7476, e-mail us at nga@together.org, or fill out and submit the online form to request materials at <http://gardening.miningco.com/msub6.htm>
- Also available is information about their Youth Garden Grants program. (Information/applications for 1997/98 grants will be available summer, 1997.)

Related Internet Websites

- This Texas A&M horticulture site with questions and answers regarding home tomato production. <http://aggie-horticulture.tamu.edu/plantanswers/vegetables/tomato.html>
- This site contains facts about the origins of foods we eat, including tomatoes.
<http://gardening.miningco.com/msub6.htm>

EVALUATION

Were students able to glue the pictures in order on the cycle? Did they write the correct words in the blanks?

ACKNOWLEDGMENT

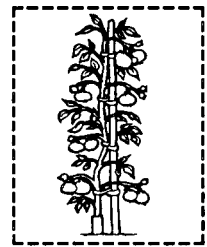
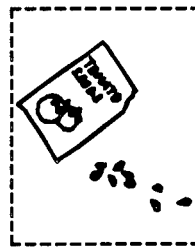
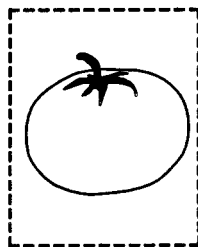
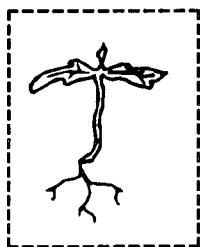
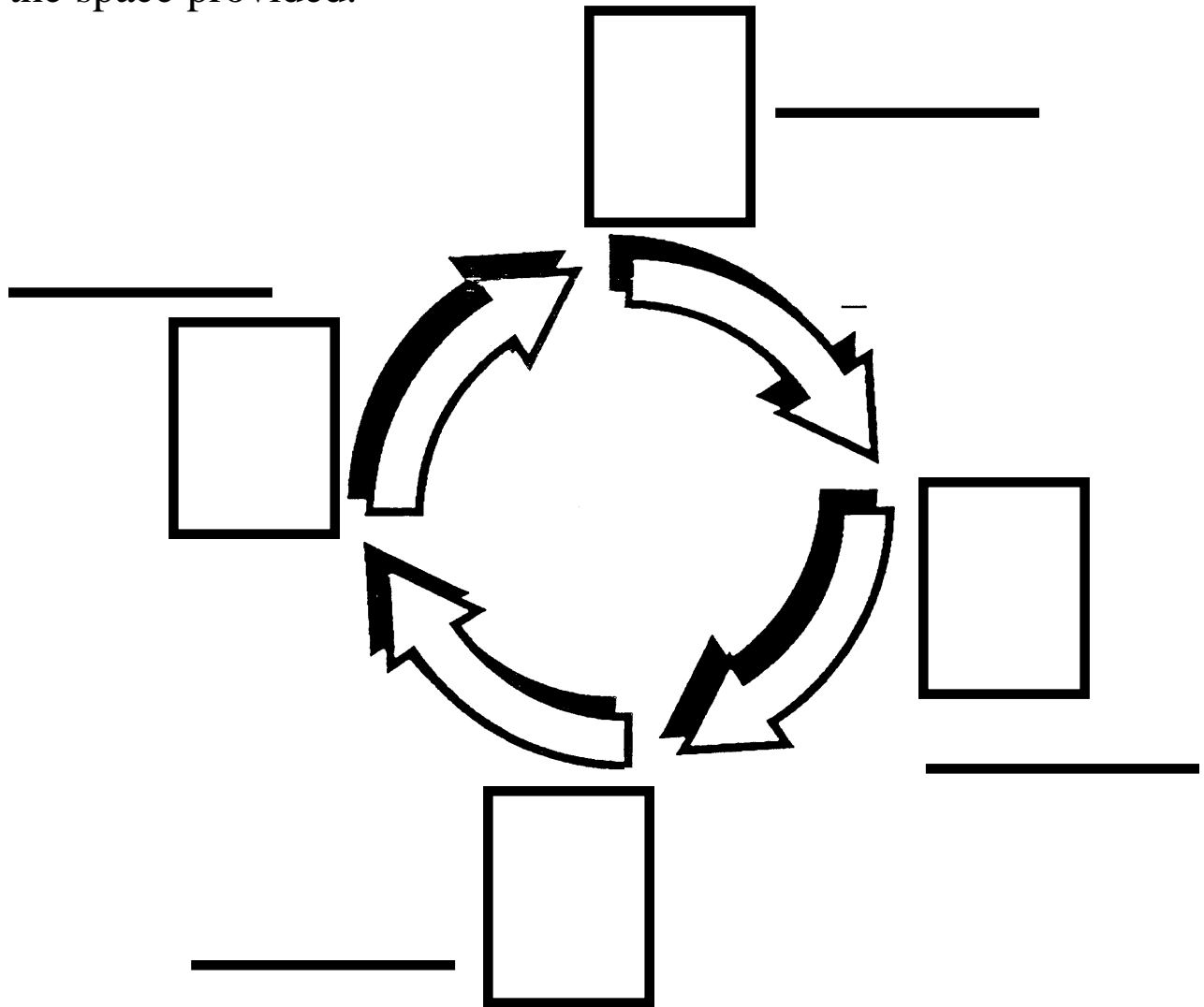
This lesson adapted from Oklahoma Ag in the Classroom, Department of Agricultural Education, Communications and 4-H Youth Development, Oklahoma State University, Stillwater, OK 74078.

Name: _____

Activity Sheet A

Ready, Set, Plant

Cut out the pictures at the bottom of the page. Paste them in order in the boxes to complete the cycle. Then write the correct word in the space provided.



Adapted from Oklahoma Ag in the Classroom

Food & Fiber Systems Literacy
Agricultural Education, Communications and 4-H Youth Development
Oklahoma State University, Stillwater, OK