

4: Flower Power

Based on the Kansas quarter reverse



OBJECTIVE

Students will investigate and understand the basic needs and life processes of plants. Key concepts include: living things change as they grow and need food, water, and air to survive.



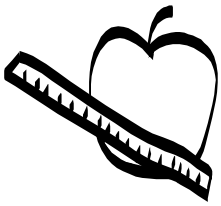
MATERIALS

- 1 overhead projector (optional)
- “Kansas Quarter Reverse” page
- 1 class map of the United States
- Chart paper/markers
- Clipboards
- Drawing paper
- Pencils
- Plastic containers with lids
- Tape
- Index cards
- 1 copy of an age-appropriate text that relates to plant survival, such as:
 - *The Magic School Bus Plants Seeds: A Book About How Living Things Grow* by Joanna Cole and Bruce Degen
 - *The Tiny Seed* by Eric Carle
 - *From Seed to Sunflower (Lifecycles)* by Gerald Legg
 - *From Seed to Plant* by Gail Gibbons
 - *A Seed Grows: My First Look at a Plant’s Life Cycle* by Pamela Hickman and Heather Collins
- “Flower Power” page
- Crayons



PREPARATIONS

- Make copies of the “Flower Power” page (1 per student).
- Make an overhead transparency (or photocopy) of the “Kansas Quarter Reverse” page.
- Locate an age-appropriate text relating to plant survival (see examples under “Materials”).



Flower Power



GROUPINGS

- Whole group
- Pairs
- Individual work



CLASS TIME

Three 20- to 30-minute sessions



CONNECTIONS

- Science
- Art



TERMS AND CONCEPTS

- Quarter
- Reverse (back)
- Living
- Non-living



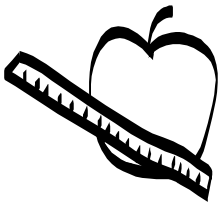
BACKGROUND KNOWLEDGE

The students should have a basic knowledge of plants.

STEPS

Session 1

1. Describe the 50 State Quarters® Program for background information, if necessary, using the example of your own state, if available. Then display the transparency or photocopy of the Kansas quarter reverse. Locate Kansas on a classroom map. Note its position in relation to your school's location.
2. Have the students identify what is on the reverse (back) of the coin. Students should respond that there is a plant (sunflower) and an animal (bison or American buffalo) on the coin.
3. Explain to the students that both a sunflower and a bison are living things. Ask the students to describe the characteristics of a living thing. List student responses on chart paper. Responses may include that living things eat, breathe, grow, etc.



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4. Distribute a clipboard, drawing paper, and a pencil to each student. Explain to the students that they will be taking a nature walk around the school, where they will observe and draw living and non-living things. Lead the class outside.
5. As students walk around the school grounds, have them observe, identify, draw, and discuss several living and non-living things. As students complete their observations, collect several specimens of living and non-living things in plastic containers with lids.
6. Reconvene in the classroom. Have the students share their drawings and identify each one as a living or non-living thing.
7. Place two desks side by side in the front of the classroom. Tape an index card to one desk labeled “Living” and another index card to the other desk labeled “Non-living.”
8. Introduce the students to the specimens you collected. As a class, sort the specimens and place them on the correct table. Discuss the features that make each thing living or non-living.
9. Explain to the students that, in the next session, they will learn more about what living things need to grow.

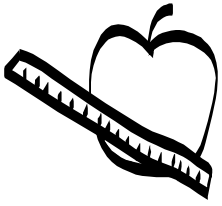
Session 2

1. Review with the students the characteristics of living things.
2. Display the overhead transparency of the Kansas quarter. Have students guess what the sunflower needs to grow. Explain to the students that they will be learning more about what plants need to survive and grow.
3. Introduce the selected text. As a group, preview the text and illustrations to generate observations about what might be occurring at different points in the book. Direct the students to pay careful attention to what plants need to grow.
4. Read the selected text aloud.
5. Have the students discuss what plants need to grow. List student responses on chart paper. Guide the students to respond that plants need sunlight, air, water, and soil in order to grow.
6. Distribute a “Flower Power” worksheet, crayons, and glue to each student.
7. Read aloud each of the boxes on the “Flower Power” page and have the students create an illustration for each.
8. Allow an appropriate amount of time for the students to complete the activity.

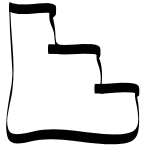


ENRICHMENT/EXTENSIONS

Have students identify a good place in the classroom to grow a plant. As a class, plant a seed and record its progress over an extended period of time. Allow students to take turns watering the plant.

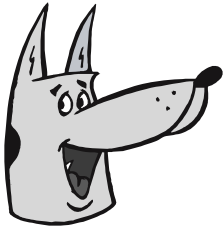


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DIFFERENTIATED LEARNING OPTION

Have the students cut out magazine pictures of living and non-living things to reinforce Session 1.



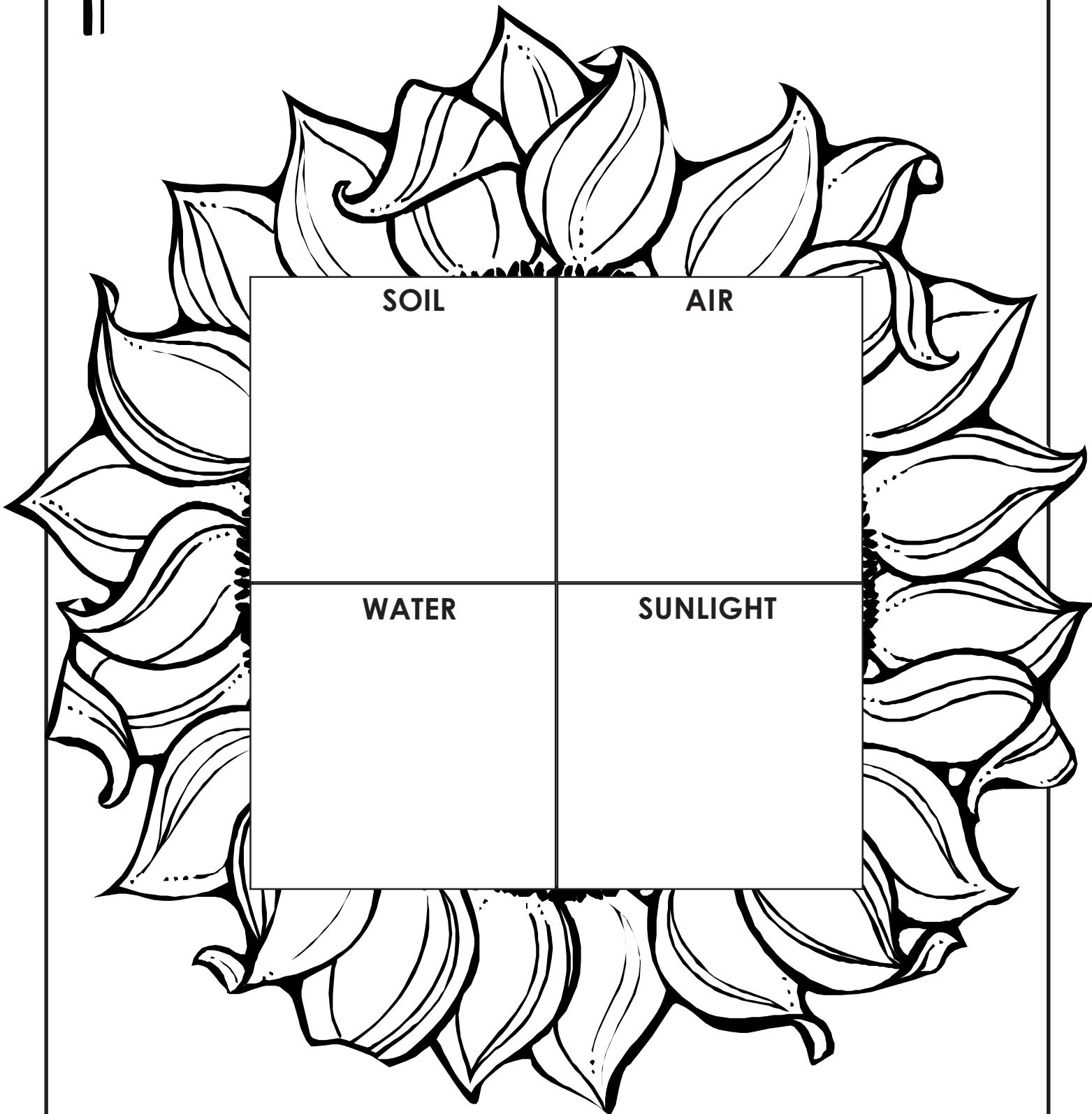
CONNECTION TO WWW.USMINT.GOV/KIDS

Build your own class garden in the exciting teacher feature “A Financial Flower Garden”!
(www.usmint.gov/kids/index.cfm?fileContents=teachers/features/2002/04.cfm)

NAME _____



Flower Power

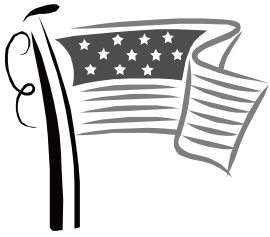


SOIL

AIR

WATER

SUNLIGHT



Kansas Quarter Reverse

