

Activity: The Apple Cycle

Activity Level: Basic

Source: Adapted from *Illinois Agriculture in the Classroom*

PURPOSE

Understand and model the apple life cycle and relate it to other agricultural plants.

EXAMPLE TOPICS IT SUPPLEMENTS

Parts of plants; changes in living things.

ACTIVITY SNAPSHOT

1. Organize and Prepare Supplies
2. Read Background Information
3. Interest Approach
4. Conduct Activity
Students will illustrate the life cycle of the apple using a model.
5. Ask follow-up questions and make the connection to agriculture
 - How do all plants start?
 - What is the order of the plant life cycle?
 - What agricultural plants that we talked about also have the similar cycle?
 - What can we share with others about what we learned today?

STATE STANDARDS IT SUPPORTS

SS 0.3.3—Students will identify natural processes in their physical world.
SC 2.3.1.c—Identify external parts of plants.
SC 2.3.2.b—Describe how living things change as they grow.
Science 2.3.4.a—Recognize seasonal changes in plants.

MATERIALS

- Suggested reading: Apples by Gail Gibbons
- Red paper plates—2 per student
- Construction paper in brown (seed), light green (small apple, tree), yellow (bee), white or pink (blossom)
- Brown or green yarn 8" long—5 pieces per student
- Tape
- Scissors
- Stapler
- Hole punch
- Apple chain template

WHAT'S THE CONNECTION TO AGRICULTURE?

The apple cycle shows how seeds are the start of fruits and food products. Just like apples, plants that farmers grow go through the same cycle. Corn, wheat, and soybeans are just a few things that Nebraska farmers grow and similarly, they start as seeds! These commodities get turned in to several products that we eat, wear, and use daily!

VOLUNTEER ENRICHING ACTIVITY

PROCEDURES:

1. Organize and Prepare Supplies

See “Materials” on cover page.

2. Background Information

A life cycle is the series of stages that an organism passes through during its lifetime. Specifically, this lesson discusses the life cycle of a plant starting as a seed, growing into a tree, producing a flower, pollination of the flower, development of a fruit, and the fruit containing a seed, thus starting the cycle over again. Students will see the life cycle for plants being modeled through the illustration of an apple. Plants that farmers grow also have a similar life cycle. Plants that farmers grow in Nebraska are corn, soybeans, wheat, dry edible beans, and sugar beets, to name a few. These plants are essential for use for food, fiber, and fuel!

3. Interest Approach

Have students brainstorm all the places they get food and clothes. Record on a writing surface.

Expected responses: grocery store, convenience store, mall, online, etc.

Discuss how these items that we eat or wear all start as something else, like plants. Farmers grow the plants, harvest the fields, and then the grain gets turned into other products. The plants go through a similar lifecycle that we will model today with apples.

Alternate extension of the interest approach: Read Apples by Gail Gibbons to students.

4. Conduct Activity

a. Cut each item of the Apple Chain template out of construction paper: seed, tree, blossom, bee, and little green apple.

Punch a hole on each side of the items you made with construction paper. The brown seed only gets one-hole punch.

b. Glue two red paper plates together around 2/3 of the edge. Leave the other 1/3 open. Allow time for it to dry. You can also skip the glue and staple the plates together depending on the age of the students.

c. Tape or staple a piece of yarn to the inside of the paper plates and extend the yarn out of the opening.

d. Add a stem and leaf to the red paper plates to make them look like an apple.

e. Tie the little green apple to the yarn coming out of the apple. Tie the bee to the little green apple. Tie the blossom to the bee. Tie the bee to the tree. Tie the tree to the seed. These should all form a chain.

f. Tuck the green apple, bee, blossom, tree, and seed into the apple. Starting with the seed, slowly pull shapes out of the apple and tell the story of how the apples grow.

g. Discuss how agricultural crops are plants that have a similar life cycle. Plants are grown by farmers and those crops provide food, clothes, and fuel for us to use

5. Ask Follow-Up Questions and Make the Connection to Agriculture.

- How do all plants start?

Seed

- What is the order of the plant life cycle?

Seed grows to tree, tree grows a flower blossom, the flower gets pollinated (represented here with a bee) the blooms starts growing into a small fruit (represented here with a small green apple) and matures into a full-size apple containing seeds. The seeds from inside the fruit can be planted and the whole cycle starts again.

VOLUNTEER ENRICHING ACTIVITY

- What agricultural plants that we talked about also have a similar cycle?

Corn, wheat, soybeans, dry edible beans, and sugar beets are agricultural products grown in Nebraska.

- What can we share with others about what we learned today?

The life cycle of a plant starts as a seed, grows into a tree, produces a flower, gets pollinated, develops a fruit, and the fruit contains a seed, which starts the cycle over again. Plants that farmers grow also have a similar life cycle. Plants that farmers grow in Nebraska are corn, soybeans, wheat, dry edible beans, and sugar beets, to name a few. These plants are essential for use for food, fiber, and fuel!

VOLUNTEER ENRICHING ACTIVITY











