



## EDUCATOR'S GUIDE: MY FAMILY'S CORN FARM

# Activity 1: Lifecycle of Corn

### Objectives:

- Students will be able to identify the lifecycle of corn.

### NGSS or Common Core Standards addressed:

- K-LS1-1 From Molecules to Organisms: Structures and Processes
- 1-LS1-2 From Molecules to Organisms: Structures and Processes
- 3-LS1-1 From molecules to Organisms: Structures and Processes

### The Pillar of Ag Lit it relates to:

- The Relationship Between Agriculture and Food, Fiber, and Energy

### Materials

- Activity 1: Worksheets #1 & #2 (copies for each student)

### Procedures

In this activity, students learn the lifecycle of a corn plant. Then, students cut and organize the parts of the lifecycle of a corn plant, from seeds to a mature plant.

1. Read *My Family's Corn Farm* as a class. Have the class discuss the different parts of the corn plants they remember from the book. As students mention them, copy them onto the board. (Ex: kernel, husk, roots, ear, leaves.)
2. If available, bring out a corn plant in the front of the room (if not, put a picture or diagram on the board). Give the students time to examine the plant and encourage them to look for the parts they have just listed.
3. Discuss the function of the parts of the plant:
  - a. **Roots:** gather water and nutrients from the soil
  - b. **Leaves:** absorb sunlight to help corn (and all plants) grow
  - c. **Ear:** the cob and kernels together surrounded by a husk
  - d. **Husk:** protects the corn kernels until harvest
  - e. **Kernels:** the seeds of the plant and the part of the plant made into food
4. Pass out Activity 1: Worksheet #1 and review the corn lifecycle:
  - a. Seeds
  - b. Germination
  - c. Sprouting
  - d. Seedling
  - e. Flowering
  - f. Fruit
  - g. Fruits with Seeds
5. Pass out Activity 1: Worksheet #2 and have the students cut out each lifecycle phase.
6. Tell the students to scramble the cut-out paper pieces, so that they are no longer in the correct order.

7. Then, have the students try to put them back in the correct order, from seeds to a fully mature plant.
8. Once the students have completed the lifecycle, instruct them to call on you to check their work. If the lifecycle isn't correct, have them try again.

**Tip:** Tell students that they may only call on you to check their work if they have ordered all steps in the lifecycle.

9. If students have difficulty placing each phase in the correct order, have them partner with someone to complete the project as a group.
10. Once all students have completed their lifecycle of corn, have a guided discussion with the class:

**Ask:** What was the most difficult part to place? What was the easiest part to place?

11. With more understanding of the lifecycle, break the class into seven equal-size groups. Then, give each group a stack of lifecycle stage title cards. Make sure each student in the group has a card (ex: Group 1: Seeds, Group 2: Germination, Group 3: Sprout, and so on.)
12. Once every student has a title card, challenge students to find new groups, this time with every stage of the corn life cycle in the group. Once in the groups, students should arrange themselves in order.

**Added Challenge:** Have a rule where no one can talk or where only a few students can talk.

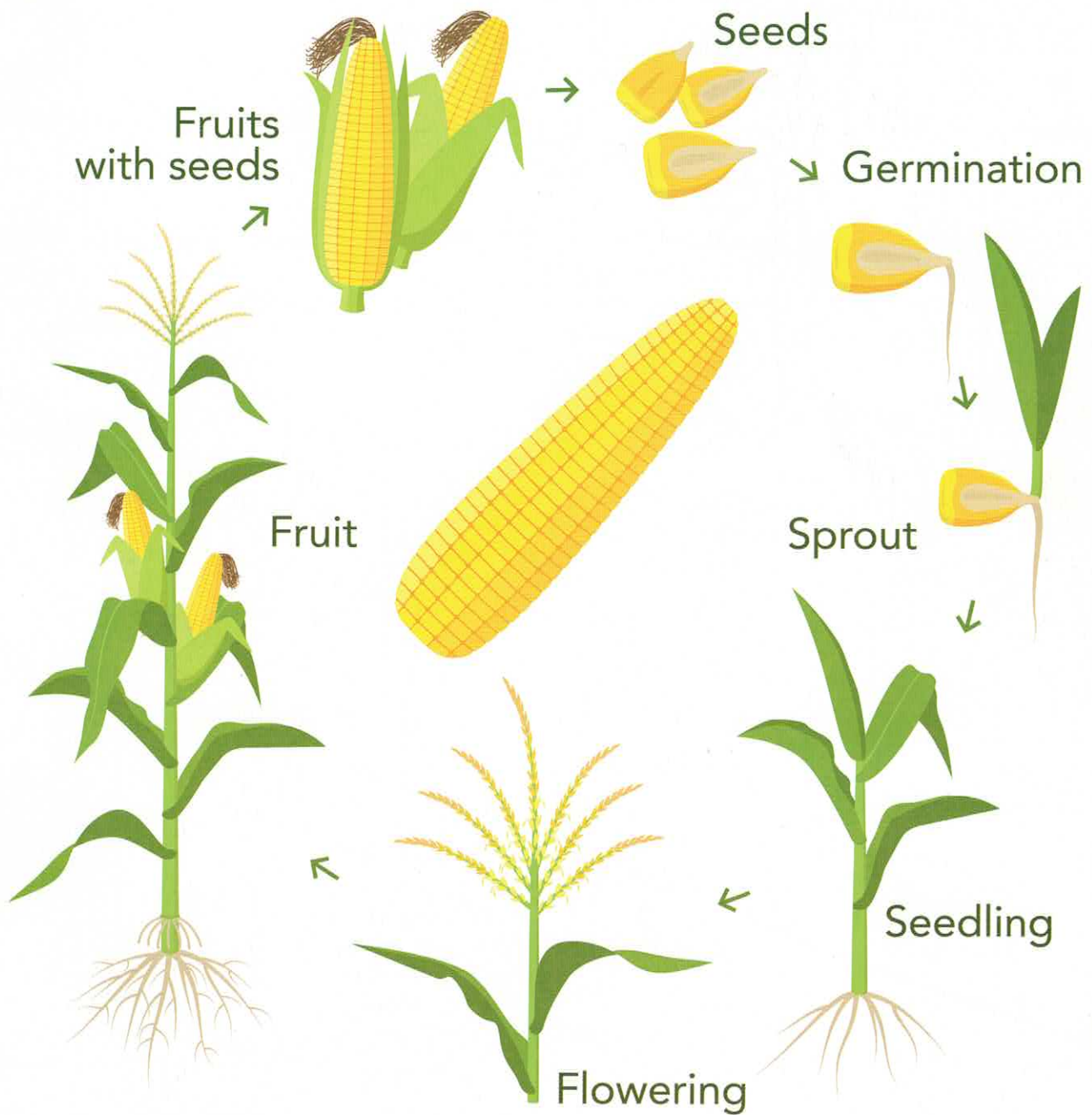
13. After students have had a few chances to find a group and get in the right order, review the lifecycle one last time. Then, ask what happens after the corn is fully grown (Talk through harvesting, feeding to animals, or making into products).

**\*Optional:** Reward of popping corn at the end of the lifecycle!





## Activity 1: Lifecycle of Corn WORKSHEET #1





## Activity 2: Lifecycle Title Cards

### WORKSHEET #2

**Seeds**

**Germination**

**Sprout**

**Seedling**

**Flowering**

**Fruit**

**Fruit with  
Seeds**