



Explorations in Agriculture

# ALL ABOUT CORN

## PURPOSE

Students will realize the large impact that corn has on their daily lives. They will identify the contributions of corn to everyday items.

## TARGETED AGE LEVEL

3rd–6th grade

## MATERIALS

- Actual items or photos of items: Aspirin, Baking Powder, Batteries, Bubble Gum, Coke, Corn Tortillas, Crayons, Cereal, Diaper, Gain Detergent, Matches, Pasta, Shoelaces, Snickers Bar
- 2 bins per classroom or group. One bin labeled “corn products” and the other labeled “non-corn products”
- Field corn sample
- Sweet corn sample



## ACTIVITY

1. Students will compete in a Corn Product Relay. Divide the group of students into two teams. Each team forms a single-file line on opposite sides of the room. Divide the photos or actual items between the two teams so each team has the same amount. The first student on each team places their photo/object into the “corn products” bin or “non-corn products” bin. Then they high-five the next student and then put their photo/object into the appropriate bin. Students continue to place photos/objects into the bins until all photos/objects are sorted. You can have students race to see which team can place all of their photos/objects in the bins first.
2. After the students have finished the relay, tell them that only one of the items does not contain corn. Ask the students to tell you which item they think does not contain corn.
3. Go over student choices and explain that corn is used to make many products that we eat and use.
4. Reveal to the class that the only item on the list that does not contain corn is the pasta. It contains wheat flour, not corn flour. Refer to the list below to explain what form of corn each remaining item contains.

Aspirin – cornstarch

Baking Powder – cornstarch

Batteries – cornstarch (insulation)

Bubble Gum – corn syrup

Coke – corn syrup

Corn Tortillas – corn flour

Crayons – corn oil

Crunch Berries – corn syrup

Diaper – cornstarch

Gain Detergent – cornstarch

Matches – cornstarch (match head)

Pasta – does not contain corn

Shoelaces – cornstarch (for smooth tying)

Snickers Bar – corn syrup

5. Ask students what other ways they like to eat corn? (sweet corn or corn on the cob, popcorn)
6. Using samples of the different types of corn, explain the differences of field corn, sweet corn, popcorn and Indian corn.

*Continued*



## CLASSROOM CONNECTIONS

### Science

If working with middle school students, bring in the concept of selective breeding and other advances in corn genetics in this discussion.

### Social Studies

Select one of the corn items and follow the agriculture processes and people that are required to create that product and bring it from the farm to the consumer. Use the six steps in the agriculture system as a place to start: producing, processing, distributing, marketing, consuming and disposing.

## ACADEMIC STANDARDS

### Minnesota Social Studies Standards and Benchmarks

3.2.3.5.1 Explain that producing any good or service requires resources; describe the resources needed to produce a specific good or service; explain why it is not possible to produce an unlimited amount of a good or service.

### Minnesota Science Standards and Benchmarkss

2.4.1.1.1 Describe and sort plants into groups in many ways, according to their physical characteristics and behaviors

3.4.3.2.1 Give examples of likenesses between adults and offspring in plants and animals that can be inherited or acquired.

### National Agricultural Literacy Outcomes

T2. K-2c Identify examples of feed/food products eaten by animals and people

T3.6-8i Identify sources of agricultural products that provide food, fuel, clothing, shelter, medical and other non-food products for their community, state and/or nation

## ADDITIONAL RESOURCES

- Crazy about Corn Songs, Videos and Activities:  
<http://aces.nmsu.edu/crazyaboutcorn/index.html>
- Bio-plastics activity: From MAITC Curriculum Matrix lesson, *Corn an A-mazing Plan: Food, Fuel, Plastic*