

Mapping Iowa Agriculture

Grade Level(s)

4th Grade

Estimated Time

30 minutes

Purpose

Students will identify products they use every day that come from Iowa agriculture, locate Iowa grown products on a map, and will explore how agriculture is connected to our lives.

Materials

- Iowa Map (1 per student for individual or 1 per group) provided in kit or available on website
- Map location markers/matching cards (1 set per student for individual or 1 set per group)
- Markers

Links

Website <https://www.linncoag.com/> -2020/21 virtual learning-October

Iowa Ag Today Issue 1 <https://www.iowaagliteracy.org/tools-resources/publications/iowa-ag-today-elementary-edition>

Intro video: https://www.youtube.com/watch?v=MAAaN_RW3Jo&t=13s

Items matching video: <https://www.youtube.com/watch?v=aNehTc6ivI0&t=3s>

Vocabulary

Biodegradable- capable of being decomposed by bacteria or other living organisms.

Map index- a map that shows (as by enclosing a small area in a rectangle on a large map) the location of one or more small areas in relation to a larger area

Map coordinators- A point on a grid has two numbers to identify its position.

Interest Approach – Engagement

Read page 1 of Iowa Ag Today Issue 1 and ask the following questions:

1. What is agriculture?
2. Can you live a day without ag?
3. List a few items in the classroom that come from ag.
4. Brainstorm items that come from ag in the food, fiber and fuel category.

Background - Agricultural Connections

Many agricultural and food products are not only grown in Iowa, but also produced and processed here. Students will learn about a few towns and the homes to one or more company/farm known for making the listed products. Crops and animals are raised all over the state.

Procedures

1. Introduce the lesson by showing the students the Items Matching video.

*Iowa grows a lot of things that we use every day! I have a bag of **corn starch** here, which comes from _____? Is this the kind of corn that we eat on the cob or is it different?*

I also have some vegetable oil which is made of soybeans that we grow in Iowa and some water. I'm going to mix all of these ingredients together. For the final step we'd need a microwave, what do you think would happen if I microwaved this plastic bag?

Would it melt? Explode? Get big and puffy?

I have a bag here that I did microwave, what is this stuff? It's corn plastic, let the students feel and touch.

Corn plastic is more biodegradable than other plastics, why is that better for the environment?

Iowa grows a lot of corn because we have such great natural resources. What is an example of the natural resource's farmers use to grow corn? Since we have so much corn scientists have discovered many uses for the corn we have. Examples include, cloth, hand sanitizer, plastic, and much more!

2. Group students into two's and have them view their Iowa map or keep as an individual activity. *What is this a map of? What direction on the map is North, East, South, West? Where are we at on the map?*
3. Explain: we are going to use mystery cards to discover items from Iowa agriculture. We are also going to connect each item to a place on the map.
4. Read the mystery card and try to guess what product it might be talking about. Look at the products and match the mystery card with the correct product card. If you get stuck, read the next card and narrow down the ones you do know. (this can be done individually or as a group activity- brainstorming as a class)
5. Draw a circle around the correct town; color a picture or write the name of the product in the corresponding county.

6. Hold a classroom discussion. *Were you surprised that some of the products produced here in Iowa? Why can't we grow oranges here in Iowa? Why do we produce so much corn? Do you see a pattern on the map?*
7. Review by reading "Made in Iowa" and "Iowa's Powerhouse Crops and Livestock" in the Iowa Ag Today Issue 1. *Name two things you learned today!*

Organization Affiliation

Modified by Morgan Hibbs from Dallas Ag in the Classroom Program's Mapping Iowa Ag original lesson plan. (Original lesson plan written by Brittany Nyhus).

Agriculture Literacy Outcomes

Theme 5 – Culture, Society, Economy & Geography

- Provide examples of agricultural products available, but not produced in their local area and state.
- Understand the agricultural history of an individual's specific community and/or state.
- Describe how supply and demand impact the price of agricultural goods.
- Discover that there are many jobs in agriculture.

Iowa/ Common Core Standards

SS.3–5.G.1 Essential Concept and/or Skill: Understand the use of geographic tools to locate and analyze information about people, places, and environments.

SS.3–5.E.4 Essential Concept and/or Skill: Understand factors that create patterns of interdependence in the world economy.