***********Agriculture in Our Lives***

**Target Grade Level**

1st grade

**Time**:

30 minutes

**Propose:**

Students will gain knowledge about agricultural by-products that they use every day.

**Materials**:

Book

Matching card game

**Vocabulary**

Agriculture- providing food, fiber and fuel

By-product- a product that is transformed into a new product for a better good

Farmer- someone that care for animals and crops

**Background**

The Midwest part of the United States grows some very important crops and livestock, including corn, soybeans, sugar beets, beef cattle, hogs and sheep. While these crops and livestock are grown for primary uses such as fuel (ethanol and biodiesel), food or fiber, they have secondary uses that are a huge part of our everyday lives. By-products from crops and livestock can be found in cosmetics, ice cream, bandages and brushes. These by-products are products that would otherwise go to waste but bring additional economic value to the crop or livestock item at harvest.

**Interest Approach or Motivator:**

Ask students what products are grown or raised here in Iowa? What comes from beef cattle? What do we get from beef cattle that is not meat? List off secondary items. By-products come from many things other than livestock.

**Procedures**:

1. Start off the lesson by reading *Where Did My Clothes Come From?* By Chris Butterworth to the class.
2. Have an open discussion about the storyline about the book. Start off by asking questions such as: What surprised you about where your clothes come from? What other items do you use every day?
	1. Example: desk, paper – Trees
	2. Hair bush, crayons, glue – Pigs
	3. Football or Basketball – Cows
3. Transition the conversation to defining by-products. A by-product is secondary uses that are a huge part of our everyday lives. For example, how do we get crayons? What are crayons made of? Crayons are a by-product of pigs.
4. Hand out worksheet to each student. Give the worksheet instructions.
	1. During the worksheet, walk around and help students that may be struggling and to check students’ answers.
5. Ask the students to look around the room and find by-products. Make a list of by-products on a piece of paper.
6. Wrap up class with the riddle worksheet. Ask the students to work on the riddles by themselves. Then have a class discussion about the riddles and reveal the answers. Ask the students what is a by-product and what they learned from this lesson. What surprised them? What didn’t?

**Essential Files**

*Where Did My Clothes Come From?* By Chris Butterworth

Worksheet document

Riddle document

**Did you know? (Ag Facts):**

* Pigs are a great source of by-products especially, medical uses. Pig skin can be attached to people with serious burns. Pig heart valves can replace a damaged human heart valve.
* Your desk is a by-product! The wood from your desk was at one point a tree.
* Footballs, baseballs, basketballs are made of cow or pig hide. Hide means cow skin or pig skin.

**Extension Activities:**

* Bring in some by-products that you have in your house. Makeup, pet food or bushes.
* FarmChat with a farmer
	+ Use google meet, zoom, or Facebook live
	+ [All About Beef - YouTube](https://www.youtube.com/watch?v=VxKvmOzym50)

**Sources/Credits:**

* *Where Did My Clothes Come From?* By Chris Butterworth
* [All About Beef - YouTube](https://www.youtube.com/watch?v=VxKvmOzym50)

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**National Agriculture Literacy Outcomes:**

1-LS3-1: Make observations to construct an evidence-based account that young plants and animals are like, but not exactly life, their parents.

SS.1.11: Compare the goods and services that people in the local community produce with those that are produced in other communities.

SS.1.12: Explain why people in one country trade goods and services with people in other countries.

SS.1.18: Use a map to detail the journey of particular people, goods, or ideas as they move from place to place.

SS.1.19: Compare how people in different types of communities use goods from local and distant places to meet their daily needs.

**Iowa Core Standards**

SS.1.8: Identify students’ own cultural practices and those of others within the community and around the world.

SS.1.11: Compare the goods and services that people in the local community produce with those that are produced in other communities.

K-2-ETS1-1: Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.

