

Ag in My Classroom

Objective

Students will consider all the things in the classroom that came from agriculture.

Background

“Ag” is short for agriculture. When you think of what we get from agriculture, you probably think of food, but agriculture is much more. Look around your classroom and you will see many things made from products grown on farms.

The wood on your pencil may be made from cedar grown on a tree farm. You may also have a ruler made from wood. Your paper is probably from the pulp of trees like the loblolly pine, which grows on tree farms in southeastern Oklahoma. Cotton is used to make high-quality paper for some documents and in money. Feathers and eggshells from the poultry industry and peanut shells are used to make some kinds of paper too. Poultry was Oklahoma’s third most valuable agricultural commodity in 2016. Cotton and cotton seed ranked number six. Peanuts ranked number 15.

The covers of hardback books may be made from cotton. Cotton fibers are also used to make cellophane tape.

The ink in your textbooks could be soy ink, made from the oil of soybeans that grow in Oklahoma. Soybeans were Oklahoma’s 7th most valuable agricultural commodity in 2016. Ink may also be made from the oil of cottonseed, corn and sunflower seeds or from the fat of beef and cows—all Oklahoma agricultural commodities. Your crayons may be made from soybean oil or from the fat of a pig or cow grown on an Oklahoma farm. Cattle and calves ranked number one among Oklahoma’s most valuable agricultural commodities in 2016. Hogs and pigs ranked number two.

The chalk your teacher uses may be from the bones of cows or pigs. Paintbrushes may be made from the hair of a pig or from the hair in a cow’s tail. Glue and other adhesives are made from other parts of cows and pigs.

The concrete on your playground could be reinforced with wheat, Oklahoma’s fifth most valuable agricultural commodity in 2016. Many agricultural products can be used to make plastic. These include corn, soybeans, cotton, peanut shells and chicken feathers. Plastic made from agricultural products is biodegradable, which means it is better for the environment than plastics made from petroleum products.

Oklahoma corn is used mostly as a feed for the livestock raised in our state, but corn has many nonfood uses. Cornstarch serves as an electrical conductor in batteries. Corn is also used in some paper and as an adhesive for wallpaper.

Agricultural products can even be found on the walls and floor

Oklahoma Academic Standards

PRE-KINDERGARTEN

Speaking and Listening: R.1,2,3,4; W.1,2. Phonological Awareness: 3. Reading and Writing Process: R. Critical Reading and Writing: R.4; W. Vocabulary: R.1,3; W.1. Language: R.2,3

KINDERGARTEN

Speaking and Listening: R.1,2,3,4; W.1,2. Phonological Awareness: 5. Phonics and Word Study: 3. Reading and Writing Process: R.1. Critical Reading and Writing: R.4; W. Vocabulary: R.1,3; W.1. Language: R.2,3

GRADE 1

Speaking and Listening: R.1,2,3,4; W.1,2. Phonics and Word Study: 1. Reading and Writing Process: R.1. Critical Reading and Writing: R.4,5. Vocabulary: R.1,4,5; W.1. Language: R.1,2,3,4,5

GRADE 2

Speaking and Listening: R.1,2,3,4; W.1,2. Phonics and Word Study: 1. Critical Reading and Writing: R.5. Vocabulary: R.1,5; W.1. Language: R.1,2,3,4; W.3

Materials

assorted classroom items—pencils, paper, tape, glue, books, chalk, paint brushes, paint, etc.

dictionaries

Vocabulary

adhesive—a substance that sticks (as glue or cement)

agriculture—the science or occupation of cultivating the soil, producing crops, and raising livestock

bristle—a short stiff coarse hair or filament

cellophane—a thin transparent material made from cellulose

cellulose—a white stringy substance from the cell wall of plants which is used in making various products such as paper

commodity—a product of agriculture or mining

farm—a piece of land used for growing crops or raising livestock

fiber—a slender and very long natural or synthetic unit of material (as wool, cotton, asbestos, gold, glass, or rayon) usually able to be spun into yarn

insulation—material used to prevent transfer of electricity, heat, or sound

plastic—any of numerous synthetic or processed materials that can be formed into objects, films, or fibers

poultry—domesticated birds kept for eggs or meat

pulp—a material prepared chiefly from wood but also from other materials (as rags) and used in making paper products

varnish—a liquid that when spread and allowed to dry on a surface forms a hard shiny typically transparent coating

of your classroom. Beef products are used in the production of linoleum flooring, insulation and wallpaper. Soybean products can be found in caulking compounds, electrical insulation, plywood and wallboard. Peanut shells are used in wallboard. Cotton and wool is used to make curtains, rugs and carpets. Peanut oil is used to make paints and varnishes. Wheat is used in roofing tiles, insulation and soundproofing materials. Beef, soybeans, peanut oil and cottonseed products also help keep your classroom clean with detergents and other cleaning products.

Source for current statistics: Oklahoma Agricultural Statistics, http://www.nass.usda.gov/Statistics_by_State/Oklahoma/Publications/Annual_Statistical_Bulletin/index.php

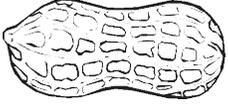
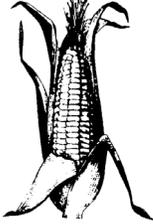
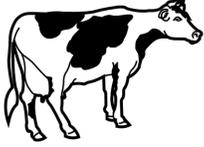
English Language Arts

1. Discuss the meaning of the word “agriculture.”
 - Walk around the classroom and pick up different items while asking students if they are MADE FROM AGRICULTURE or NOT MADE FROM AGRICULTURE.
 - Ask students to place the items in separate piles based on the two categories.
2. Read and discuss background.
 - After students have discussed the background read it again.
 - As you mention any item in the classroom, students will take turns placing the named item in the correct pile (MADE FROM AGRICULTURE/NOT MADE FROM AGRICULTURE).
3. Hand out student worksheets.
 - On a separate sheet of paper, students will make a list of all the items in their classroom that could have been made from agricultural commodities.
 - Students will use the worksheet to place the items under the picture of the agricultural commodity from which it could have been made.
4. Students will practice spelling the word “agriculture” by whispering, blocking in the letters and using sign language.
5. Students will look up the word “agriculture” in a dictionary.
 - What page is it on in the dictionary?
 - Is it in the front, middle or end of the dictionary?
 - Is it in the right or left column?
 - Is it at the top or bottom of the page?
 - Have students write the definition.
 - How many vowels are in the word “agriculture?” How many consonants?
6. How many syllables? Clap the syllables
 - What part of speech is the word “agriculture?”
 - Students will use the word “agriculture” in a sentence and tell what kind of sentence it is (declarative, etc.)

Name _____

Ag in My Classroom

Write the names of items from your classroom under the agricultural commodity from which it could have been made.

 cotton	 peanut	 corn	 trees
 pig	 cow	 chicken	 soybean