

NATIONAL SCIENCE STANDARD

- History and Nature of Science: Science as a Human Endeavor

OBJECTIVES

The student will:

1. define agriculture, farming and farm.
2. identify products, food and non-food, of farming.



BACKGROUND

Sometimes it is easy to forget that our food originates from the Earth and not the grocery store.

Agriculture is the huge system of the science and business of cultivating the soil, producing crops, and raising livestock useful to people. Farmers play a very important role in this system, which is responsible for putting food on our tables. Farmers are responsible for growing and collecting our food from the Earth. They also care for the animals that give us meat (beef cattle, pigs, poultry), milk (dairy cattle), and wool (sheep).

Agriculture gives plant crops that are used for food, as well as non-food items. Cotton for clothing and linens comes from cotton plants. Wool for clothing comes from sheep. Corn and soy crops are used to make crayons, chalk, shampoo, lotion, cosmetics, paint, motor oil, and gasoline.

Crops, plants that are grown for food, are grown in large tracts of land called fields. They are measured by acres. One acre is the size of a football field. The average farm in America is 460 acres.

Plants grow in the soil. Farmers use a machine called a tractor. The tractor can be attached to many different tools to assist in the planting process. A plow pulled by a tractor loosens the hard soil. A cultivator is pulled across the soil to smooth out the field. A seed drill is used to plant the seed. When the crop is ready to harvest (cut and collect), a farmer uses a combine (kŏm 'bĭn), which is the biggest machine on the farm. It is called a combine because it combines two jobs. It cuts the wheat and separates the grain from the rest of the plant. It is used for grain crops such as wheat and corn.

Once the crop is harvested, it is stored, sold, and distributed to food manufacturers who use it to make food or non-food items we need.

FAST FACT

ONE ACRE IS THE
SIZE OF A FOOTBALL
FIELD.

THE AVERAGE FARM
IN AMERICA IS 460
ACRES.

INSTRUCTION PROCEDURE

1. To set the stage, prepare a basket of common items that come from agriculture. Include products such as:
 - Cotton Underwear
 - Sheets
 - Shampoo
 - Body Lotion
 - Pasta
 - Oil
2. Discuss the importance to the student's everyday life.
3. Discuss the background information.
4. Hand out Activity 1: What is Agriculture?
5. Discuss the vocabulary words. Hand out Activity 2.



ASSESSMENT

1. Review "What is agriculture?" Activity 1 and Activity 2.
2. Distribute the items from basket of agricultural products among the students.
3. Look at the ingredient labels, then have them identify the agricultural product it is derived from.
4. Group the items into edible and non-edible products.

WORD POWER

acre *n.* A measurement of land.

agriculture *n.* The science and business of cultivating the soil, producing crops and raising livestock useful to people.

crop *n.* Plants grown for food.

cultivate *v.* To prepare the ground for the preparation of raising crops.

dairy *n.* Concerned with the production of milk.

farm *n.* Tract of land used for agriculture purposes.

farm *v.* Act of growing crops or raising animals.

farmer *n.* A person who cultivates land or crops or raises animals.

harvest *n.* The process of gathering a crop.

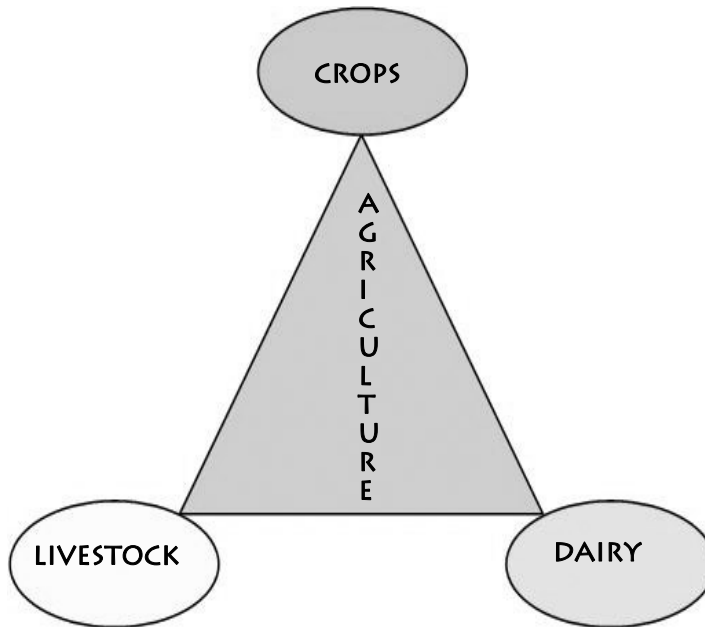
livestock *n.* Domestic animals kept for use on a farm or raised for sale and profit.

product *n.* Something produced.

NAME _____

ACTIVITY 1: WHAT IS AGRICULTURE?

Agriculture is the science and business of raising crops or livestock.



LISTING

List common examples of agriculture products in the following categories.

Crops: _____

Livestock: _____

Dairy: _____

NAME _____

ACTIVITY 1: WHAT IS AGRICULTURE? (CONTINUED)

Agriculture is the science and business of raising crops or livestock.

MATCHING

Draw lines to match the agriculture source in Column A to the products in Column B.

A

1. timber (trees)
2. dairy cow
3. cotton
4. wheat
5. flower

B

- A. cheese
- B. blue jeans
- C. paper
- D. perfume
- E. spaghetti



NAME _____

ACTIVITY 2 — WHAT IS AGRICULTURE?

WORD POWER

Use the Word Power vocabulary words to fill in the blanks.

1. To _____ is the actual process of growing or raising crops or animals.
2. A person who grows crops is a _____.
3. Corn, soybeans, wheat, and cotton are different types of _____.
4. A pig is an example of _____ .
5. The science and business of growing food is _____.
6. Milk comes from a _____ cow.

WORD POWER

- AGRICULTURE
- CROPS
- DAIRY
- FARM
- FARMER
- LIVESTOCK



Use the letters in the boxes to fill in the spaces.
