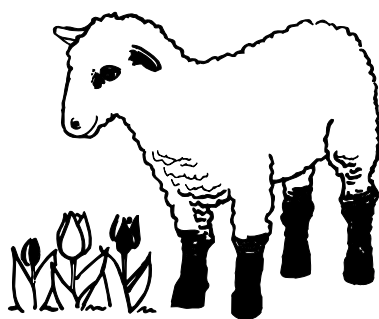
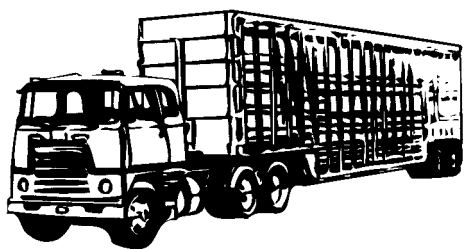
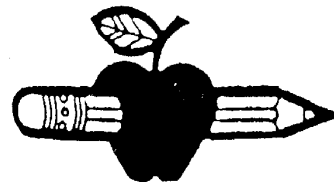


COUNTRY

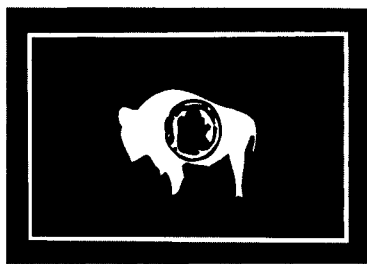
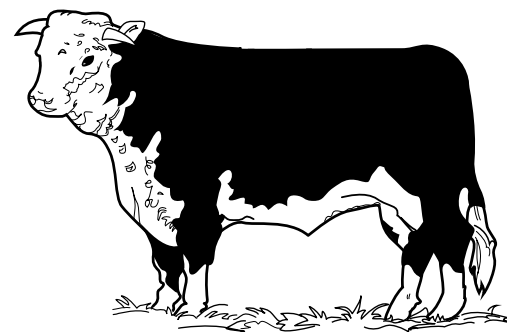
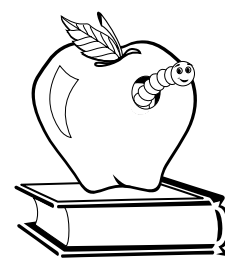
to



Classroom



World



Where in the World

Circle these pictures as you find them in the magazine...

Wyoming Ag in the Classroom

Volume 6



WHERE IN THE WORLD DO WE GET OUR FOOD?

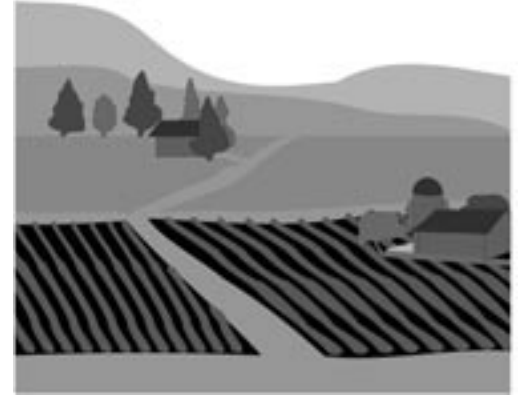
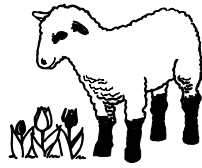
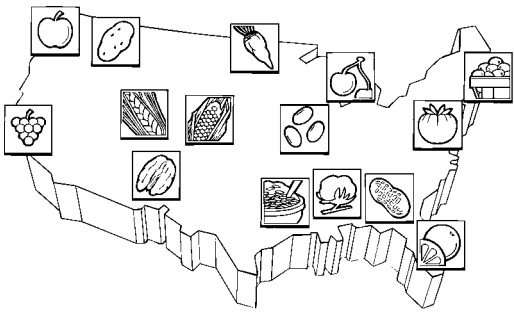
**D**id you ever wonder where all your food comes from? “Sure,” you say to yourself, “that’s easy. Meat comes from cows and sheep, oranges from trees, and milk from cows. Everybody knows that.”

But how did all the food get from where it started (the farm and ranch) to where it’s going to end up (your stomach)? Agriculture starts with the growing and harvesting of food and fiber. And ends with almost everything we eat, wear, and use and therefore helps make us who we are.

Did you know that there are four important steps in getting food and fiber to you? Look at the steps below to find out how farmers and ranchers provide products they grow and harvest to you.

### The first step is called production.

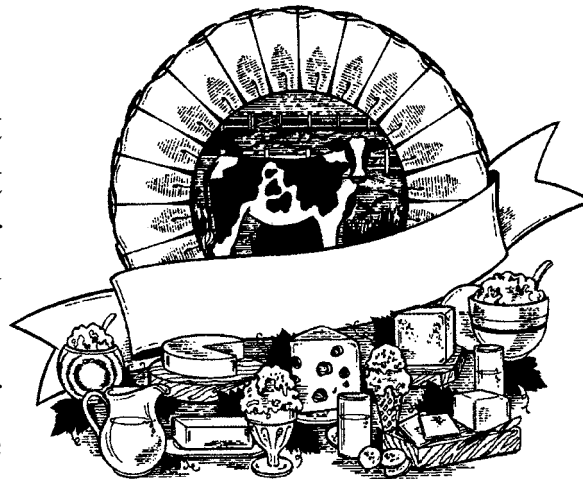
Someone has to raise the cattle, and other animals, grow the trees and the plants that produce the food you eat. That person is the farmer or the rancher. Growing plants, raising animals and logging are production.



## 1. PRODUCTION

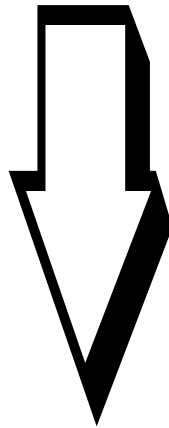
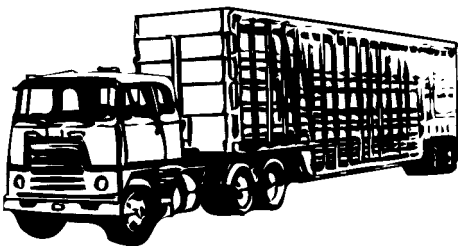
### The second step is called processing.

Milk, for instance, is processed to make it safe to drink when it reaches your table. Almost all food and agriculture products are processed or packaged in some way. Processing is taking a raw material and making a finished product out of it. The finished product may take many forms. For example, milk can be made into butter, cheese, ice cream or yogurt.



## 2. PROCESSING

### 3. DISTRIBUTION



### The third step is distribution.

Food and other agriculture products must be moved from the processing plant to the store where you buy it. Trucks, planes, ships or rail cars can be used. Usually, products are first taken to a wholesale center and then taken to retail outlets.

### 4. RETAILING



### The fourth step is retailing.

Retailing is shoppers buying products. This may be at a grocery store, department store, lumberyard, florist, cafeteria or a nursery.



**GLOBAL AGRICULTURE, WHEW!**

**That sounds like a BIG subject.**

**What is GLOBAL?**



**O**ur friend Webster says global is: "Of or relating to the entire earth." Not only do we get our food from around the nation, but we also get food from around the world. This is known as Global Agriculture.

By the year 2010, the world will add 1 billion people for a total world population of 7.0 billion people. That's a lot of people to feed, clothe and provide shelter. Providing for them won't be easy.

Thanks to our good climate, soil and water resources and new technology, American farmers and ranchers are the best producers for food the world has ever known. Millions of workers depend on agriculture for their incomes and all of us depend on them for our food. In fact in the United States Agriculture employs more people than any other industry over 22 million people.

Did you know that one American farmer or ranchers can feed 129 other people - 101 in the United States and 28 abroad. This means the U.S. produces enough food to feed our country plus extra to sell to other countries. When we buy and sell products with other countries it is called INTERNATIONAL TRADE.

**SELL SELL SELL ~ EXPORTS ~ SELL SELL SELL**



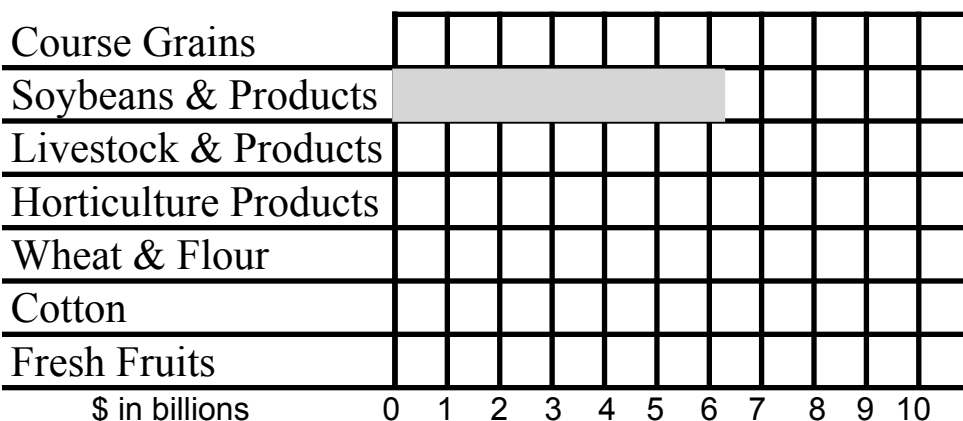
When a product is sent to another country for trade or sale it is called EXPORTING. The U.S. exports many products. It is important that we sell (export) American products to other countries. Exporting helps feed hungry people around the world and creates many jobs here at home. The United States has provided more food aid to other countries than all other countries combined.

Agriculture is the U.S.'s leading industry. Exports creates jobs and income for worker in transportation, banking, warehousing, manufacturing, and many more industries.

Finish the graph below

**U.S. AGRICULTURE EXPORTS**

<u>Products Exported</u>	<u>Amount of Money in Billion \$</u>
Course Grains	\$9.3 Billion
Soybeans & Products	\$6.3 Billion
Livestock & Products	\$7.0 Billion
Horticulture Products	\$4.0 Billion
Wheat & Flour	\$6.9 Billion
Cotton	\$3.0 Billion
Fresh Fruits	\$2.0 Billion



**BUY BUY BUY ~ IMPORTS ~ BUY BUY BUY**

About one-sixth of what we eat comes from other countries. Can you think of some kinds of food that would come from another country? (Hint: unscramble the letters)

- AOCCO \_\_\_\_\_
- EAT \_\_\_\_\_
- SANNBAA \_\_\_\_\_
- PLEASENIP \_\_\_\_\_

These are just a few of the many world agriculture products we IMPORT from other countries. They add spice to our life.



When we buy food and products from other countries, it is called IMPORTING. Think about it: every time you eat a banana or chocolate, or add vanilla, pepper or cinnamon to your food... when you buy rubber tires for your bike or wear something silk, you are a part of agriculture trade. These and many other agriculture products used in the U.S. are produced in another parts of the world and imported to the United States. Some products won't grow in our climate. Others are imported so consumers can have more variety. Importing cucumbers, tomatoes and melons, for example, means we can enjoy them fresh year round. By exporting grains, meats, packaged foods, and other agriculture products out of the United States, it makes it possible to import Japanese electronics, German cars and many other products.

Modern methods have made it possible to ship large amounts of food from one part of the world to another. Those methods include up-to-date refrigeration and faster transportation both over land and water.

# EXPORTS FROM WYOMING

Wyoming exports \$95,000,000 (that's ninety-five million dollars!) worth of products a year. In Wyoming \$1 of every \$6 comes from exports.

For this activity, you may need a Wyoming map and a world map to help you locate the places. Getting to know our world can be fun and interesting!

There are many agriculture products produced across our state. Below are six products Wyoming exports. Using this information and the Wyoming and world maps, complete the exercise.

- Cattle from Niobrara County to Mexico
- ☆ Dry beans from Hot Springs, Washakie and Big Horn Counties to Japan and Canada.
- ✕ Sugar beets from Goshen County to Canada, Japan, Korea, China and Mexico.
- ◇ Potato Chips from Laramie County to Mexico
- ✓ Wheat from Laramie County to Russia (former U.S.S.R.).
- Sheep and lambs from Johnson and Sweetwater County to Mexico.

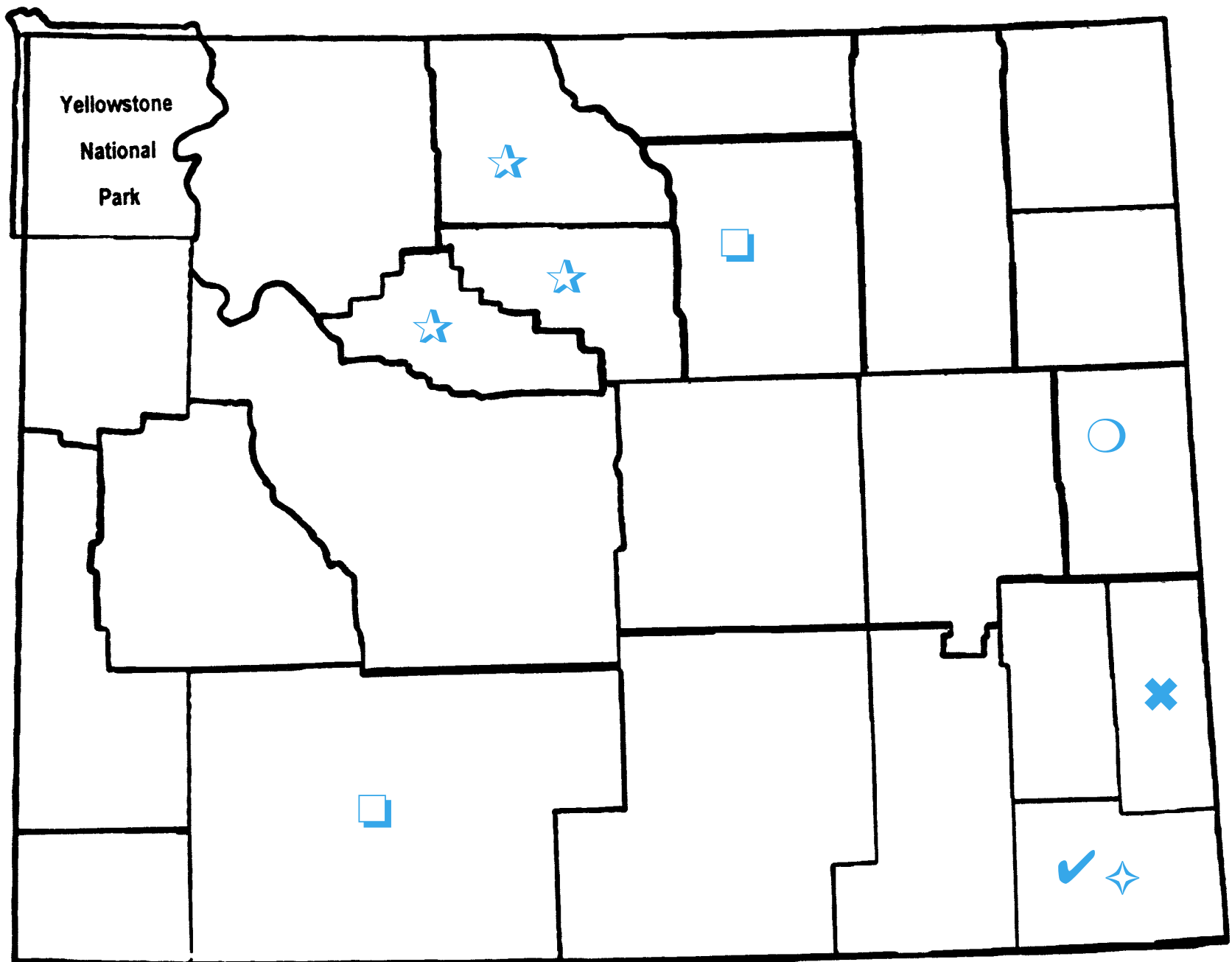
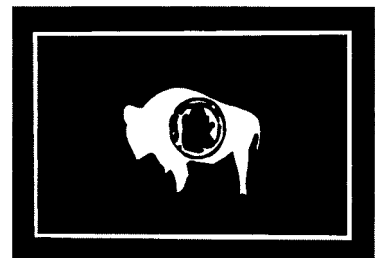
## (1) Label these counties on the Wyoming Map:

Niobrara County  
Hot Springs County  
Washakie County  
Big Horn County  
Goshen County  
Laramie County  
Johnson County  
Sweetwater County

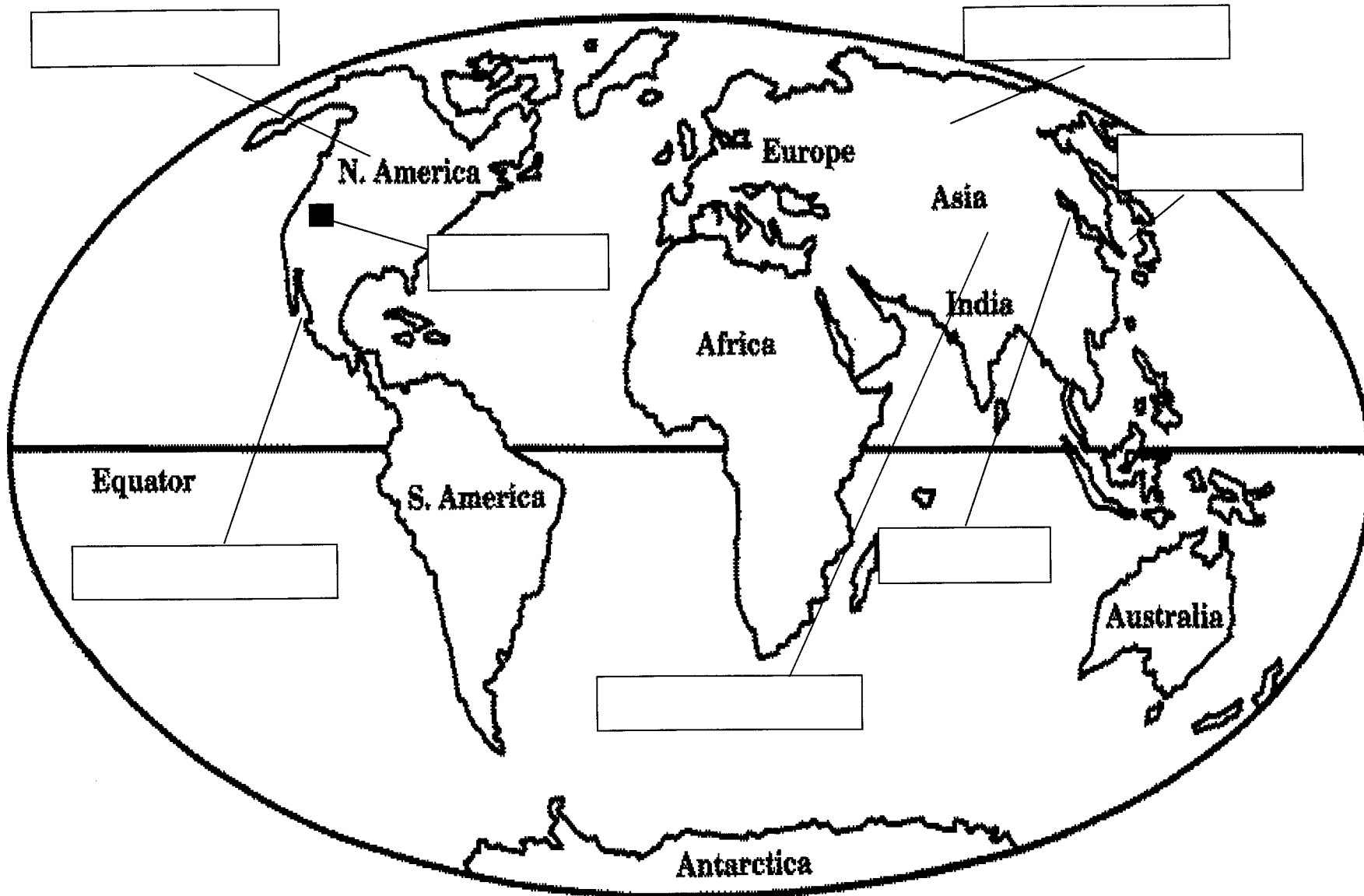
## (2) Color the symbol for :

Cattle ○ red  
Dry beans ☆ yellow  
Sugar beets ✕ blue  
Potato chips ◇ brown  
Wheat ✓ green  
Sheep □ orange

# WYOMING



# ...TO THE WORLD



(3) Color the symbol for :

- Cattle ○ red
- Dry beans ☆ yellow
- Sugar beets ✕ blue
- Potato chips ◇ brown
- Wheat ✓ green
- Sheep □ orange

(4) Label the map with the correct names:

- Wyoming
- Russia
- Mexico
- Canada
- Korea
- China
- Japan

## Your County Name

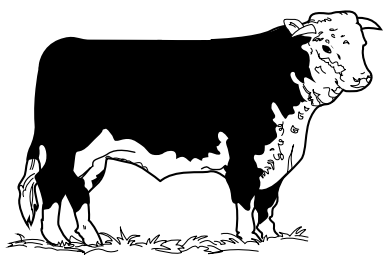
List four agriculture products produced in your county.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

## South America

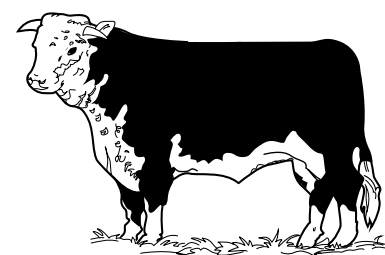
List four agriculture products produced in South America that you find in your county.

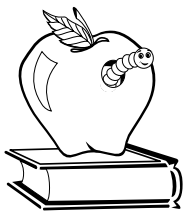
1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_



## DID YOU KNOW...

Cattle are produced in every county in Wyoming.





# Supply & Demand



## DEFINITIONS

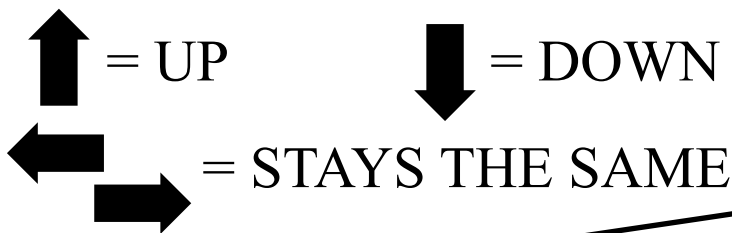
**Supply** = The amount of a product or commodity that is available for sale.

**Demand** = The need or desire to buy a certain product or commodity.

**BUYERS** and **SELLERS** are the keys to supply and demand.

The most important thing in buying or selling is usually the price of whatever is being bought or sold.

What happens? Draw arrows to show your answer.



Pepsi and Coca-Cola switch from sugar to corn sweeteners. They had been using 600,000 metric tons of sugar each year; now they use almost none.

Sugar Supply _____	Corn Supply _____
Sugar Demand _____	Corn Demand _____
Sugar Prices _____	Corn Prices _____

Severe winter weather in North and South Dakota and Montana causes a shortage of range grass and hay. Ranchers will need to buy extra hay to feed their livestock during the winter.

Hay Supply _____
Hay Demand _____
Hay Price _____



A drought in the Southwest forces many farmers and ranchers to sell their cattle. There is an over supply of beef.

Beef Supply _____
Beef Demand _____
Beef Prices _____



Flooding in California, Washington and Oregon causes damage to homes and business. People need more lumber to rebuild.

Lumber Supply _____
Lumber Demand _____

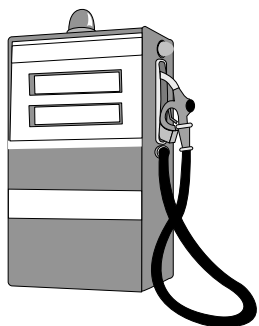
Russia has been buying millions of bushels of U.S. wheat, but they think the price is too high. They decide to buy from other countries who will sell it to them cheaper.

Wheat Supply _____
Wheat Demand _____
Wheat Prices _____



An insect invasion moves into hundreds of thousands of acres of corn fields. Farmers hire crop dusters to spray the fields, but yields are cut by 20%.

Corn Supply _____
Corn Demand _____
Corn Prices _____
Farms _____



Diesel fuel and gas prices go up because of high demand. Farmers have to pay more to fill their tractors.

Crop Supply _____
Crop Demand _____
Crop Prices _____
Farmer Production Costs _____

## Supply & Demand How does it Work?

*Generally...*

**Supply** of something gets large.  
**Demand** stays the same or goes down.  
**Prices** go down.

**Supply** of something gets small.  
**Demand** stays the same or goes up.  
**Prices** go up.

**Demand** for something gets large.  
**Supply** stays the same or goes down.  
**Prices** go up.

**Demand** for something gets small.  
**Supply** stays the same or goes up.  
**Prices** go down.

Agriculture is heavily affected by supply and demand. For example, a large wheat harvest around the world (Supply goes up), demand stays steady then the U.S. wheat prices will go down.

# Careers in Agriculture

Many occupations are related to or depend on agriculture. Can you find the names of 25 jobs that go hand in hand with agriculture? The words go up and down and across only)

S	C	I	E	N	T	I	S	T	R	U	C	K	E	R	L	B
T	H	N	L	A	W	Y	E	R	E	P	I	L	O	T	N	O
A	E	S	R	E	F	L	O	G	C	D	B	A	K	E	R	O
R	M	U	C	H	E	F	D	S	O	M	C	R	D	E	K	K
C	I	R	E	P	O	R	T	E	R	C	L	M	N	O	S	K
U	S	A	J	R	K	T	H	L	G	M	B	E	H	K	L	E
A	T	N	A	M	L	E	U	F	O	Q	S	U	V	Y	Z	E
E	C	C	M	A	N	U	F	A	C	T	U	R	E	R	L	P
R	S	E	N	R	E	K	L	I	M	E	D	I	C	I	N	E
U	N	R	A	I	M	S	O	L	T	T	E	A	C	H	E	R
B	U	T	C	H	E	R	O	T	R	M	D	A	L	V	K	B
A	T	X	E	L	S	T	M	E	C	H	A	N	I	C	L	D
N	L	B	G	J	R	L	V	R	T	N	A	H	C	R	E	M
K	N	U	R	S	E	R	Y	M	A	N	A	G	E	R	U	L
E	Q	U	I	P	M	E	N	T	D	E	A	L	E	R	Q	P
R	O	S	S	E	C	O	R	P	T	A	X	A	G	E	N	T

The average person works 2,000 hours a year and 80,000 hours in a lifetime. That means the average person works from the time he or she is 20 until the time he or she is 60, for an average of 40 hours a week, 50 weeks a year. As you have already discovered in this issue, Agriculture is involved in production, processing, distribution, and retail industry. And agriculture is Global. But did you know that agriculture is the largest industry in the United States, employing more people than any other industry. Since you probably will spend the greater part of your adult life working, you may want to familiarize yourself with all kinds of career possibilities.

Answers: Baker, Banker, Bookkeeper, Bureaucrats, Butcher, Chef, Chemist, Equipment Dealer, Gopher, Grocer, Insurance, Lawyer, Manufacturer, Medicine, Merchant, Mechanic, Milk, Nursery, Manager, Pilot, Processor, Reporter, Scientist, Tax Agent, Teacher, Truckee.



Many job titles end with the suffix “er”. When you see an “er” suffix added to a verb it usually describes someone (a noun) who performs a specific action. Read the agriculture root words in the box on the right, and add “er” to each to form nouns in the space provided. **Challenge: One of the root words needs an extra “e” to form an “er” word.** See if you can find the word. Match the words to their definitions. Check your words by looking them up in the dictionary.

Job Title	Definition
1. _____	A person who owns or operates a ranch
2. Banker	A person who owns or serves as an officer of a bank.
3. _____	A person who works in, operates or owns a mill.
4. _____	A person who runs or works on a farm.
5. _____	A person trained in forestry.
6. _____	A person who works in a garden.
7. _____	A person who conducts an auction.
8. _____	A person who gathers food to eat.
9. _____	A person who grows or produces goods or services for sale.
10. _____	A person who shears sheep.
11. _____	A person who hunts for food to eat.
12. _____	A person or machine that harvests a crop.
13. _____	A person who drives a truck.
14. _____	A person who bakes.

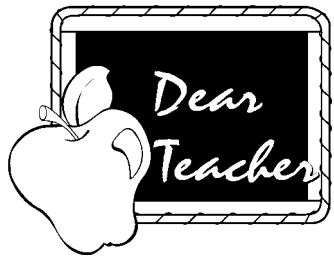
Root Words	
1	fArm
2	Garden
3	gatheR
4	auctIon
5	produCe
6	hUnt
7	mill
8	foresT
9	trUck
10	bank
11	Ranch
12	shear
13	bake
14	harvEst

Use the upper case letters to complete the sentence below.  
The largest industry in the United States today is \_\_\_\_\_

# Wyoming Agriculture In The Classroom

## TEACHER GUIDE

Volume 6



Dear Teachers,

Wyoming Agriculture in the Classroom will be undergoing large changes in the next year, and we need your input on how to make our offerings better. We are in need of professional educators to help us with this project. If you are interested, please contact our office.

As a way to celebrate agriculture, Wyoming Agriculture in the Classroom will again hold its Annual Bookmark Contest. A flyer will be sent to all teachers the first part of the school year. New changes are being made to the program to make it a more rewarding and educational experience for teachers and students. All entries are due to the WAIC office by February 1, 2006. WAIC's Annual Bookmark Contest is a great way to showcase student learning and a great assessment tool for teachers. The bookmark contest is also a way to introduce students to professional publication and good work practices. If you are interested in more information about our bookmark contest or how to serve on our selection committee, please contact our office.

Sincerely, *Sarka J. White, M.Ed.*  
Education Coordinator WDA/WAIC

If you want to continue your study on agriculture and need more information to enhance your classroom studies, please contact Sarka J. White with Wyoming Agriculture in the Classroom, 2219 Carey Ave., Cheyenne, Wyoming 82002, and (307) 777-6618. Wyoming Agriculture in the Classroom has an extensive resource library and training that is free to all Wyoming teachers. Visit our website at [www.wyomingagclassroom.org](http://www.wyomingagclassroom.org) for information and links to other agriculture literacy sites for educators and families.

### Potpourri...Discussion Prompters and Projects

Some additional projects and ideas to extend the use of the "Country to Classroom" magazine.

★ Every state in the United States has some kind of agriculture. For this activity you will need to break students into small groups and assign each group several states. The groups will need to draw or cut out pictures of agriculture products grown or raised in those states. Ask the students to share their information with the class. Display the agriculture product pictures on a wall map.

★ Give students old magazines and cut out pictures to staple on a bulletin board for a collage of occupations related to or dependent upon agriculture.

★ Have students use highway, city, and state maps to identify specific roadways, waterways, railroads, airports, and other modes of transportation that might be used to deliver food to your area. Select some of the students' favorite foods and trace a path each of these foods might travel to get to your community. How might grapes from Chile or chocolates from Switzerland get to your town? Call local wholesalers and retailers to learn more.

★ Have students write and produce television or radio advertisements for chosen food products. They can write jingles, make up dramatic skits, and more, but should limit their productions to the 1 - minute or 30-second time slots usually allotted for commercials.

★ Have students interview a local rancher or farmer about the path of production involved in producing his or her consumer products. Tour a local ranch or farm, to learn more about careers and products grown in Wyoming.

★ For more information on careers in agriculture, check out these web sites: [www.cast-science.org/careers.htm](http://www.cast-science.org/careers.htm), [www.ageducate.org/careers/careers.html](http://www.ageducate.org/careers/careers.html), and [www.ffa.org](http://www.ffa.org).

### Wyoming Content and Performance Standards 4<sup>th</sup> and 8<sup>th</sup> grades

Language Arts: 1. Reading; 2. Writing; 3. Speaking and Listening.

Science: 1. Concepts and Knowledge; 2. Science as Inquiry; 3. History and Nature of Science in Personal and Social Decisions.

Social Studies: 2. Culture/Cultural Diversity; 3. Production, Distribution, Consumption; 4. Time, Continuity and Change; 5. People, Places and Environment.

Mathematics: 1. Number and Operation,

Career/Vocational Education: 1. Resources; 5. Technology; 6. Careers.

## The Trading Game

**Learner Objective:** The students will play a game aimed at teaching how relationships with other communities affect our agriculture system. The game simulates the unequal distribution of natural resources which creates the need for interdependent relationships between communities.

**Activity:** Step - By - Step Instructions

1. Prepare four large manila envelopes, using the information as follows:

#### Envelope #1

Two pair scissors

One ruler

20 paper clips

Two pencils

Two four-inch squares of red paper

Two four-inch squares of white paper

One task card, on which you have written these instructions:

"Make four strips of gold paper, each three inches by one inch."

#### Envelope #2

One pair scissors

One bottle of glue

Two sheets of blue paper

Two sheets of white paper

Two sheets of gold paper

One task sheet, on which you have written these instructions:

"Make a green "T" four inches high."

#### Envelope #3

Two felt pens

Two sheets of green paper

Two sheets of white paper

Two sheets of gold paper

One task sheet, on which you have written these instructions: "Make a four-Inch link paper chain, with each link a different color."

#### Envelope #4

One sheet of green paper

One sheet of gold paper

One sheet of blue paper

One sheet of red paper

One sheep of purple paper

One task sheet, on which you have written these instructions: "Make a two-inch white square. Attach a gold triangle to one side of the square."

2. Divide the class into four groups, representing for different communities. Instruct each group to give itself a name. List the communities on the board. Have each community select a leader.

3. Give each leader one of the envelopes you have prepared. Instruct students not to open their envelopes until told to do so. Tell students that each community should complete the task sheet, even though all the resources needed to do so won't be in the envelope. Tell students they must trade with the other communities in any way necessary to complete the task sheets. The first community to complete the task sheet is the winner.

4. Give the signal to begin. Watch the communities as they complete their tasks. Note comments community members make as they try to complete their tasks. Post on the board the order in which each community completes its task.

5. After student have completed the activity, lead a discussion, using the following questions:

1. Could you have completed your tasks without trading resources with another community? Why, or why not?

2. How did your community solve the problem of not having all the resources it needed?

3. Were there any conflicts between communities? Why, or why not?

4. How did you feel when you realized the resources were unequally distributed?

5. Give some examples of innovative or unusual ways in which your community completed its task.

6. How do our relationships with other communities affect our agriculture system?

"COUNTRY TO CLASSROOM" is a publication of WYOMING AGRICULTURE IN THE CLASSROOM.

Wyoming Agriculture in the Classroom is a cooperative effort of many Agriculture organizations and individuals around the state. Materials are compiled from the following sources: Wyoming Department of Agriculture, United States Department of Agriculture, Wyoming Beef Council, Wyoming Ag in the Classroom, Montana Ag in the Classroom, Minnesota Ag in the Classroom, National FFA, Oklahoma Ag in the Classroom.

Funded by Wyoming beef producers through their \$1-per-head beef checkoff.

