Elementary History, Economics, & Virginia Studies

A collection of lessons and activities for the elementary classroom highlighting Virginia products and regions as well as historic figures and economics concepts.

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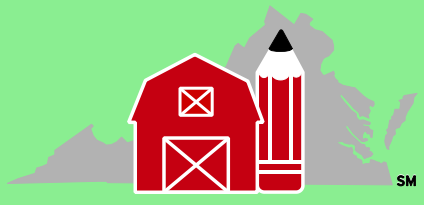


Ag across the Nation

Standards of Learning
Social Studies: 1.6, 1.7, 2.6, 2.9

Objective
The student will be able to:
- Utilize a map legend
- Understand the impact of geography on the production of goods
- Recognize interdependence
- Identify the location of different states

Materials
- *Ag Across America* worksheet, attached
- Markers
- Map of US with states labeled
- Construction paper

Background Knowledge
Where did your lunch come from? Some of the ingredients may have come from within Virginia, but others most likely came from other states. Geography greatly influences the types of crops that can be grown in different places. Some states produce so much of a particular crop or animal that they have become well known for their agricultural goods.

Procedure
1. Ask students to list items that they ate for breakfast or lunch. Ask them if they know where these items came from.
2. Point out that while Virginia produces many agricultural products, we also rely on the agricultural goods of other states.
3. Pass out *Ag Across America* worksheet and markers.
4. Read aloud the key at the bottom of the worksheet. Discuss the products that are made from each of the agricultural goods listed. Example: wheat is used to make bread and pasta, while dairy is used for milk or cheese.
5. Point out that these products are goods rather than services.
6. Assign each product on the legend a different color. Have students color on the line next to each product with the correct color.
7. Have students use the legend to place dots within the states. For example, if tomatoes were assigned the color red, then Florida, California, Virginia, Ohio, Georgia, and Michigan should get red dots. Point out that some states may have multiple dots. *You may choose to allow students to use a textbook or classroom map to correctly locate the states. You may also choose to do this activity as a whole class rather than individually.*
8. When the maps have been colored correctly ask students if they notice any patterns among the states and products. Point out that states with a similar climate may be well suited to growing similar products.
9. Discussion Questions: Can one state produce everything it needs for everyone that lives there? Why not? How do people in different parts of the country depend on each other?
10. Have students choose one of the states that have been colored on their maps. Instruct students to create a poster for the state advertising the agricultural good(s) produced there.

Extension
After students present their advertisements, have them consider what resources/agricultural products are lacking in their chosen states. What effect does the geography of their state have on this? What state should they barter with in order to compensate for this scarcity?

References
Lesson adapted from Utah Agriculture in the Classroom

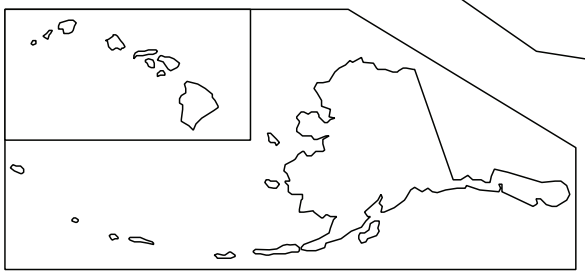
Where in the United States did my food come from?

Where did your lunch come from?

Some of the foods you eat every day are produced here in Utah. Most states produce their own milk, eggs, fruits, vegetables, and grains. Some states produce so much of a particular crop or animal that they have become famous for that product. Fill in this map to see some of the most productive states in the U.S.

1. Color code the map legend by filling each of the small squares with a different color.
2. For each product listed in the legend, draw a small circle in the states listed next to that product using the corresponding color. Some states are listed more than once.

Do you see some regional patterns?



- ❑ Corn: Illinois, Iowa, Nebraska, Indiana, Minnesota, & Ohio.
- ❑ Dairy Products: Wisconsin, California, New York, Pennsylvania, & Minnesota.
- ❑ Beef: Texas, Nebraska, Kansas, Colorado, Iowa, Oklahoma, & California.
- ❑ Soybeans, major oil crop used in salad dressings and mayonnaise: Illinois, Iowa, Nebraska, Indiana, Minnesota, & Ohio.
- ❑ Pork: Iowa, Illinois, Minnesota, Nebraska, Indiana, North Carolina, & Missouri.
- ❑ Chickens: Arkansas, Georgia, Alabama, North Carolina, Mississippi, & Texas.
- ❑ Wheat: North Dakota, Kansas, Montana, Oklahoma, Washington, & Minnesota.
- ❑ Eggs: California, Georgia, Arkansas, Indiana, Pennsylvania & Texas.
- ❑ Potatoes: Idaho, Washington, California, North Dakota, Maine, & Wisconsin.
- ❑ Tomatoes: Florida, California, Virginia, Ohio, Georgia, & Michigan.

Bartering for a Balanced Lunch

Standards of Learning
Social Studies 1.7, 1.8, 1.9, 2.7, 2.8, 2.9, 3.8, 3.9
English 1.1, 2.1, 3.1

Objective
Students will:

- Barter to exchange goods and resources
- Make economic choices due to scarcity
- Show interdependency in obtaining goods

Materials
The goal of the activity is for each student to ultimately obtain one of each of the products listed below in order to have a balanced lunch. Prior to the start of the activity gather enough of each of the following items so that you have one per student (1 milk/student, 1 bread/student, etc.) You may choose to use the actual items or pictures of the items.

- Milk
- Bread
- Turkey
- Cheese
- Apples
- Cookies

Background Knowledge
Once you have gathered all materials, sort them in the following way:

1. Split the supply of each of the items into six equal groups.

4 milk 4 bread 4 turkey 4 cheese 4 apples 4 cookies	4 milk 4 bread 4 turkey 4 cheese 4 apples 4 cookies	4 milk 4 bread 4 turkey 4 cheese 4 apples 4 cookies	4 milk 4 bread 4 turkey 4 cheese 4 apples 4 cookies	4 milk 4 bread 4 turkey 4 cheese 4 apples 4 cookies	4 milk 4 bread 4 turkey 4 cheese 4 apples 4 cookies

2. Shift the amounts of each product so that each group contains not enough of one item and more than enough of another item.

2 milk **7 bread** 4 turkey 4 cheese 4 apples 4 cookies	**6 milk** 4 bread 4 turkey **3 cheese** 4 apples 4 cookies	4 milk 4 bread 4 turkey **5 cheese** 4 apples **2 cookies**	4 milk 4 bread **3 turkey** 4 cheese 4 apples **6 cookies**	4 milk 4 bread **5 turkey** 4 cheese **1 apples** 4 cookies	4 milk **1 bread** 4 turkey 4 cheese **7 apples** 4 cookies

Procedure

1. Divide the class into 6 equal groups.
2. Distribute the products to the groups. Each group member will get the entire supply of one product. The item they get will represent the product they specialize in.
3. Instruct the students that each person in the group will represent a producer specializing in the production of an item needed to help build a balanced lunch. A balanced lunch includes foods from all of the major food groups. Discuss the five major food groups and what the students will need to build a balanced lunch.
4. Ask the students the following questions:
    - Can you build a balanced lunch with just the product you specialize in producing?
    - How can you get the other goods needed to build a balanced lunch?
5. Discuss with students the ways people get the things they need and want. Compare the process of getting needs and wants today with the process used in the past. Review the concept of specialization and how we depend on the specialties of others to get everything we need or want.
6. Instruct the children that they will need to barter with other members of their group for the items they need to complete a balanced lunch. Allow time for trade.
7. After bartering, ask the students the following questions:
    - Was everyone in your group able to build a balanced lunch?
    - What happened that prevented some people from getting the goods they needed for a balanced lunch? (there was not enough of some items within the group)
    - What term describes a situation where there are limited resources? (scarcity)
8. Discuss events that might lead to the scarcity of a good or service (natural disasters, limited human resources, inadequate growing conditions—climate, topography, soil, etc.—demand being higher than the supply, etc.).
9. Discuss with students how one producer usually can't produce enough of a good to accommodate everyone. Therefore, we rely on producers in other places to help with the production of goods. Discuss how this leads to interdependence and review the meaning of this term.
10. Allow those students who were unable to build a balanced lunch barter with students from other groups.
11. Once everyone has built a balanced lunch, discuss other examples of interdependence between communities, states, countries, continents.

Activity adapted from:
Lessons In Economics: An Interactive Program for Economics Education
Ohio Farm Bureau Federation

Connecting to the Past

Standards of Learning
Social Studies 2.2, VS. 2, VS.1
English 4.7, 4.8, 4.9

Objective
Students will:

- Describe how American Indians interacted with the climate and environment to meet their needs.
- Compare and contrast agriculture as it has changed from the time of the Native Americans, to the colonists, and to the farmers of today.
- Write a narrative on their compare/contrast ideas.

Materials

- Background information (handout provided)
- Prewriting chart worksheet (handout provided)

Background Knowledge

This lesson focuses on how agriculture in Virginia has changed from the time of the Native Americans, to the colonists, and finally, to today. Students will learn about the major crops from each time period, as well as technological advancements that impacted agriculture. Additionally, they will learn about Virginia's regions and natural resources.

Procedure

1. Ask the students to think about something that they know has changed throughout their lives, such as going from being an only child to having a younger brother or sister.
2. Ask a few students to share their thoughts.
3. Ask the students:
   - How have these changes impacted you?
   - What is different now than it was before the change?
4. Tell the students that changes impact the world every day in many ways. Remind them that their lives are very different than the lives of children who lived a long time ago due to change.
5. Tell the students that one aspect of life which has changed a lot is agriculture, or farming. These changes have not only impacted the environment, but many people as well.
6. Hand out the background information sheet to each student.
7. Tell the students to take some time to read it over.
8. Ask them to then talk to another student about what they learned from the reading.
9. Tell the students to read over the information again, this time paying close attention to the ways agriculture in Virginia has changed from the time of the Native Americans, to the colonists, and to today.
10. Tell the students they will be writing a paper comparing and contrasting agriculture of the different time periods and how it has changed over time.
11. Hand out the prewriting chart to the students.
12. Ask them to fill it out with ideas they can use in their paper.

- Their ideas should include information on what natural resources and technology were available to each population of people.

13. Tell the students that their papers should contain information from each category listed on the chart.
14. Once the students have completed their charts, ask them to start writing their papers.
15. Tell them that their writing should compare and contrast the characteristics of agriculture from the time of the Native Americans, the colonists, and the farmers today.
16. Ask a few students to share one piece of information that they put in their paper.
17. Ask the students:
    - Do you think the agricultural changes that have occurred have been beneficial or hurtful? Why?
    - What are some benefits and drawback of the changes that have occurred?
    - Would you like to live in the time of the Native Americans or the colonists? Why or why not?
18. Tell the students that for homework, they should choose one time period and sketch a basic food web.

Extension

Ask students to research Virginia agriculture in another time period, such as the 1900's.

References

Acton Public Schools. *Powhatan Indian Village: Culture*. http://ab.mec.edu/jamestown/gljpivcc.html

Acton Public Schools. *Powhatan Indian Village: Village Life*. http://ab.mec.edu/jamestown/villagelife.html

The Claude Moore Colonial Farm. *The farm crops.* http://www.1771.org/crops.htm

Commonwealth of Virginia Department of Agriculture and Consumer Services. *Virginia agriculture- Facts and figures.* http://www.vdacs.state.va.us/agfacts/index.html

Virginia Farm Bureau Federation. *Virginia agriculture.* http://www.vafb.com

Virginia's Natural Resource Education Guide. Chapter 1. http://www.vanaturally.com/guide/agriculture.html

Instructions: Read the following nonfiction piece about how agriculture has affected people living in different time periods in Virginia. Notice how things have changed over time.

Agriculture and the Native Americans

Natural Resources

Since the Native Americans did not have the technology that we have today, they depended heavily on their surrounding **environment** for **resources**. Virginia's land was covered by forests, rivers, hills, and mountains. The Native Americans living in the state had to adapt to this type of environment in order to survive.

Due to the large number of forests in the area, the Native American tribes in Virginia used parts of trees to make most of their belongings. They used wood to make weapons and tools for hunting, fishing, and eating. Their homes were also made of wood. They lived in longhouses called "yehakins." The wood provided the frame for the **shelters** and was useful in keeping out bad weather.

Like today, Native American tribes lived in different parts of the state. Some tribes of the **Powhatan** people lived in what we today call the **Tidewater** region. Since they lived on the coast, fishing became an available and important food source. Other tribes living in the **Piedmont** and southwestern parts of Virginia fished in lakes and streams. Due to weather conditions, spring was the ideal time for fishing. The Powhatan men fished using spears, traps, and nets which they had made from cordage, or rope.

Farming

During the summer and fall seasons, the Native Americans of this region were also farmers. It was the job of the women and children to do the farming, as the men were often off hunting or fishing. The women planted and cared for the crops while the children played a helpful role by chasing away animals who may eat the vegetables. The three main crops they grew were corn, beans, and squash. These three vegetables were often planted very close to each other, as they worked together in a cooperative relationship to aid in the growth of one another. These crops and other vegetables were grown in large sections of land which the people had cleared for this purpose. However, since successful growth is dependent on the weather, farming alone did not provide enough food for the families to survive. Therefore, the Virginia Native Americans gathered nuts, berries, and wild plants for food during late winter and early spring, before the summer crops could be planted.

Hunting

Hunting provided the people with food all year round. The Native American men hunted small animals, such as deer, squirrels, rabbits, and turkeys. They hunted with bows and arrows which were made from the wood of the forest trees. Although the hunts, like farming and fishing, were not always successful, the meat from the hunted animals provided the Native Americans with a good source of food. The other parts of the animals, aside from the meat, also provided the people with many resources. The Native Americans never wasted any part of the animals and used their fur and skin as well as their meat. The furs, or pelts, were used to make clothing and protect the people's homes from cold weather.

Agriculture and the colonists

Cash Crops

During the 18th century, many Virginians lived and worked on farms. While crops grown for food were essential, crops grown to sell to others, called **cash crops**, also become an

important resource for many farmers. The main cash crop in Virginia during this time period was tobacco. Since many farming families did not own the land they lived on, but rented it from someone else, they needed a way to pay rent to their landowners. The money these families received from selling their tobacco plants was used to pay this rent, as well as for taxes and to buy products they could not grow or make themselves. Since tobacco proved to be such an important resource for the farmers, they watched the plants carefully throughout the growing season. The farmers developed ways to help protect them from outside environmental factors, small animals, and insects. Other important cash crops included wheat and rye, which also had to be carefully tended to. Without the money they received from selling these crops, many farming families would not have had enough money to survive the rest of the year.

Vegetable Farming

The people also had to grow crops for food. During this time, corn was the primary food crop for residents of Virginia. The farmers had to let the corn dry out and then the kernels could be cooked and eaten for many months. Since corn was such an essential crop, other crops were grown around it as protection and as additional food sources. Squash and melons were commonly grown surrounding the corn plants and beans were grown next to the corn stalks. Many farm families also planted small gardens which were taken care of by the wife and daughter of the family. These gardens provided the majority of the food the family ate throughout the year. While tobacco, wheat, and rye were sold to buyers for cash, the garden consisted of the vegetables which the family members ate to survive. Some examples of the vegetables which were grown in these gardens included beans, lettuce, carrots, cucumbers, peas, and potatoes. Since different crops grew at different climates, the women had to plant different types of vegetables at different times of the year.

Another important crop grown by farm families in the 18th century was apples. Apple orchards were grown close to the farming crops and provided people with the ability to make many different types of food, including apple sauce and apple butter.

Agriculture and today's farmers

Technology's Impact

Like years ago, the agriculture and farming of today is dependent on the environment and **climate** of Virginia. Today, most farms focus on one or two main crops or types of agricultural products. This is mostly due to the advancements made in technology and machinery since the 18th century. With these changes, farmers are able to produce more food than their families need to survive so they are able to sell the rest to the general public. Technology has also had a large impact on the agricultural industry by developing ways to grow better tasting crops and animals for meat.

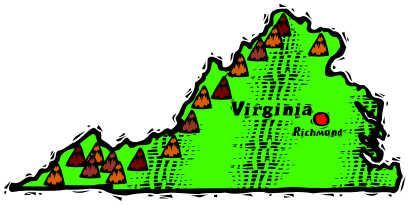
Virginia Regions

The state of Virginia is broken up into five regions based on different land characteristics, which affect crops which are grown in these areas. The **Appalachian Plateau** is located in the western part of Virginia. Due to the mountainous land and fairly cold climate, most farmers in this area raise cattle rather than grow crops. The **Valley and Ridge** region of Virginia is located between the Appalachian Plateau and the **Blue Ridge Mountains**. The southern part of this region is home to many tobacco crops, as well as sheep farms. As you move north in the Valley and Ridge region, the area is characterized by poultry farms, which raise hens, chickens, and turkeys. Dairy farming is also an important resource of this region.

The Blue Ridge Mountains are a small strip of land located between the Valley and Ridge and the Piedmont regions. Due to the mountainous conditions, the majority of farms are located on the outskirts of this region rather than in the mountains. The Piedmont region is home to many different types of agricultural products. The region's clay-based soil is good for growing tobacco crops, particularly in the southern part. As you move north, there is more variety in the agricultural products. Farmers often grow wheat, corn, peaches, apples, and tomatoes in this area. Dairy farms, cattle farms, horse farms, and poultry farms are also located in the Piedmont region.

There are a number of crops grown in the sandy soils of the Tidewater region. These products include wheat, corn, soybeans, cotton, and peanuts. The eastern shore of the region, located on the **Chesapeake Bay** and **Atlantic Ocean**, is home to potato, tomato, squash, and soybean crops. Due to its location on the water, fish and clams are also important products of this area.

Although today's farms tend to focus on the production of one main agricultural product, agriculture continues to be an essential industry of Virginia. Today, there are 49,000 farms operating in the state of Virginia, covering 26,091,000 acres of land (statistics from 2000). Ninety-eight percent of these farms are owned and run by families. While this may seem like an impressive amount of farms, the number has decreased a lot in the past few years. Today, there are only half as many farms in Virginia as there were in 1960. It is important to understand new technological advances in farming and how these changes may affect the farms and the farming families in the state of Virginia.



Native Americans ***Colonists*** ***Today's Farmer***

Similarities

Corn Prints

Standards of Learning
Social Studies: 1.1, 1.2

Objective
The student will be able to:
- Compare and contrast the uses and varieties of corn today versus those of the Native Americans and the Jamestown colonists
- Create an ear of corn using hand prints

Materials
- Yellow construction paper
- Green construction paper
- Finger paint
- Glue
- Scissors

Background Knowledge
Called "maize" by the Native Americans, corn was a completely new food for the colonists, as it is native only to the Americas. In fact, in the early 1600s the Native Americans introduced the settlers to this crop and taught them how to grow and prepare it. Similar to today, the colonists ate corn both as a vegetable as well as ground it up into a grain. Thus, corn was a very important crop and appeared in multiple ways on many colonial tables. Benjamin Franklin even called it "one of the most agreeable and wholesome grains in the world."

Today, corn for grain or silage (a mixture of grains that is fed to animals) is raised in nearly every Virginia county. Virginia farmers harvest about 340,000 acres of corn for grain each year! This type of corn, called field or dent corn, is different from what you buy at the grocery store, which is sweet corn. Field corn is grown for animal feed and harvested by large combines. The corn is ground into feed which is fed to cows, chickens, and other animals. Some field corn is also chopped up into silage for cows. Sweet corn is grown for people. There is more sugar in this corn which makes it tasty to eat. This is the type of corn grown in gardens, sold at vegetable stands, or in the market.

While we often think of corn kernels as being white or yellow, the Native Americans grew several different types. Colors included red, white, blue, and black. There are many varieties of corn. Some are better suited for people to eat while others are best for animals. Discuss the types children are familiar with.

Procedure
1. Trace students' hands (fingers closed) once on a piece of yellow construction paper and twice on a piece of green construction paper. Cut out.
2. Arrange the two green leaves at the base of the yellow corn to form the husk and glue together.
3. Add the "kernels" by dipping your fingers into the paint and stamping onto the cob. *You may also use Q-tips to dab and paint the kernels.*

Variation
Instead of painting the corn cobs, turn the corn and husks in a Venn diagram by listing the ways

that Native Americans used corn on the left husk and the ways we use it today on the right husk. List shared ways on the cob.

Extension
Glue real Indian corn seeds to the “corn cob.”

Create several large corn stalks on the bulletin board and attach each child’s ear of corn to form a display.

Down on the Farm: Concentration

Standards of Learning
Social Studies: K.6, 1.7

Objective
The student will be able to:
- identify different farm jobs
- match the farm product with the good it produces

Materials
- Down on the Farm: Concentration cards, attached
- Farming, by Gail Gibbons

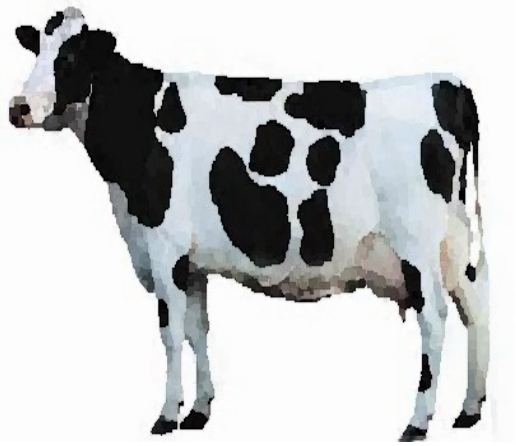
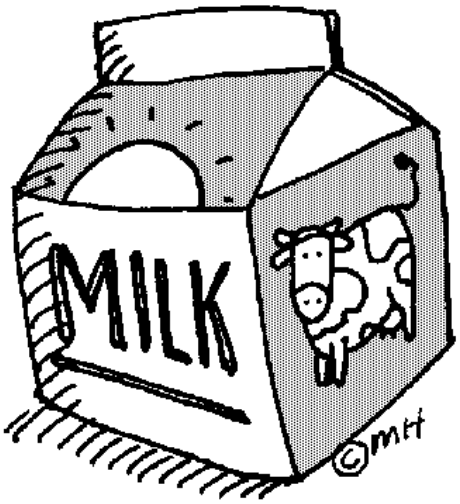
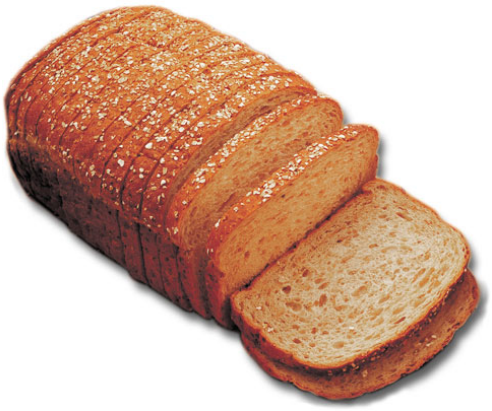
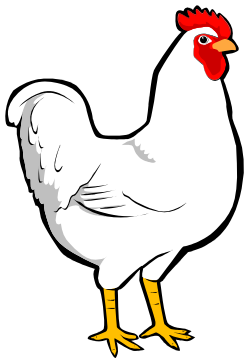
Background Knowledge
Agriculture is Virginia and the nation's largest industry, thus, it provides many people with jobs. These jobs may range from producer (farmer) to large animal veterinarian, to scientist. All of these people play a vital role in feeding and clothing the nation. Down on the Farm Concentration will review the concept of goods versus services while introducing students to the many different jobs that take place on a farm.

Down on the Farm Concentration may be played by students in pairs or as a whole class. To play as a whole class, enlarge the attached cards, cut, shuffle, and tape (you may also choose to laminate cards and use reusable adhesive) to the board. Split the class into teams with students coming forward to take turns turning over cards. *You may choose to play by matching words to pictures or print a second copy of the cards and match pictures to pictures, then label as a class.*

Procedure
1. Review with students the difference between goods and services. Ask for examples.
2. Read, Farming by Gail Gibbons. Discuss the various jobs on the farm as well as goods that come from the farm.
3. Play game with class.
4. Review by flipping over all cards. Classify each card as either a good or a service. Point out that producers provide a good and/or a service to the community. Consumers are those who use or buy these goods or services.

Extension
Use a large sheet of bulletin board paper to have students create a class farm mural. The mural should include the many different goods that are produced on a farm as well as the different people that provide services on the farm.

Resources
In lieu of reading a book, show the video Vrrrooommm1: Farming for Kids by Rainbow Communications at www.farmkidvid.com .

 cow	
wheat 	bread 
hen 	eggs 

sheep 	wool 
apples 	applesauce 
pumpkins 	pumpkin pie 

farmer	
scientist	
veterinarian	

truck driver	

Farm Web

Standards of Learning
Social Studies: 2.7, 3.7

Objective
The student will be able to:
- identify images of human, natural, and capital resources
- understand that human, natural, and capital resources work together to produce goods

Materials
- farm web images for each group of students, attached
- post-its

Background Knowledge
Goods and services are produced using human, natural, and capital resources. Human resources are people at work; natural resources are water, soil, wood, and coal; and capital resources are machines, tools, and buildings. Farms provide excellent examples of different resources working together. The farmer (human resource) farm the land (natural resource) using a tractor (capital resource) to produce a good, such as food and/or fiber.

You may choose to do the following activity as a whole class, or to place students in groups.

Procedure
1. Review with students the difference between human, natural, and capital resources.
2. Hold up the large farm web card with the image of a farm on it. Ask students to identify the various resources at work on the farm.
3. Place students into groups of 4 or 5. Pass out the remainder of the farm web images, with the *exception* of the finished products (apple pie, newspaper, cereal).
4. First, have students group the images in three groups according to the good involved (apple, corn, trees).
5. Have students place these around the large image of the farm to create a web.
6. Next, have students use post-its to label each of the pictures as a human, natural, or capital resource.
7. Create a large web on the board so that students can check their work.
8. Next pass out the finished products and have students match them to the appropriate group.
9. Discuss how for each good, human, natural, and capital resources were employed. Ask students what would happen if one of the resources were taken out of the web.

Extension
Split the class in half (or have 12 volunteers come to the front of the class). Instruct students to stand in a circle and give one student the “jeans” index card. Explain that jeans are a product, and that many resources are involved to produce them for consumers. Pass out the remainder of the cards so that each student has a card with a necessary resource. The “jeans” card begins by rolling a ball of string to any student. That student explains why their card is needed to make jeans and identifies their resource as human, capital, or natural.

Extension Cards

jeans	**cotton plant**
soil	**farmer**
tractor	**factory**
factory worker	**truck**
truck driver	**mall**
sewing machine	**water**

Food Source Sequence

Standards of Learning
History and Social Science: K.6, 2.7

Objective
Students will:
- Identify the natural, human, and capital resources required to get food from the farm to the grocery store
- Correctly sequence the steps involved in food production

Materials
- Templates, attached
- Yarn
- Tape
- Markers/crayons
- Empty cereal boxes or other product with corn in it, such as an empty bag of corn chips

Background Knowledge
Many people enjoy sweet corn on the cob, especially in the height of summer time as it ripens. Corn, however, is used in a wide variety of both foods and products that we enjoy in different forms throughout the year. Corn flour, cornstarch, cornmeal, corn oil, corn syrup and cereal are all made from corn. Other products made from corn include baby foods, margarine, detergents, sandpaper, chewing gum, road de-icers, antibiotics, potato chips, plastics, cosmetics and rubber tires. The majority of corn produced in Virginia is harvested for use as animal feed.

There are many different steps involved in getting the corn from the field to the good on the grocery store shelf. Virginia farmers generally plant their corn in April and May and harvest in September and October. Corn is cut and harvested using a combine. The kernels are shelled, or, taken off the cob. The corn is then processed to make products we enjoy everyday. After the product has been made and manufactured, a truck will pick it up to be taken to the grocery store where it can be purchased by the consumer.

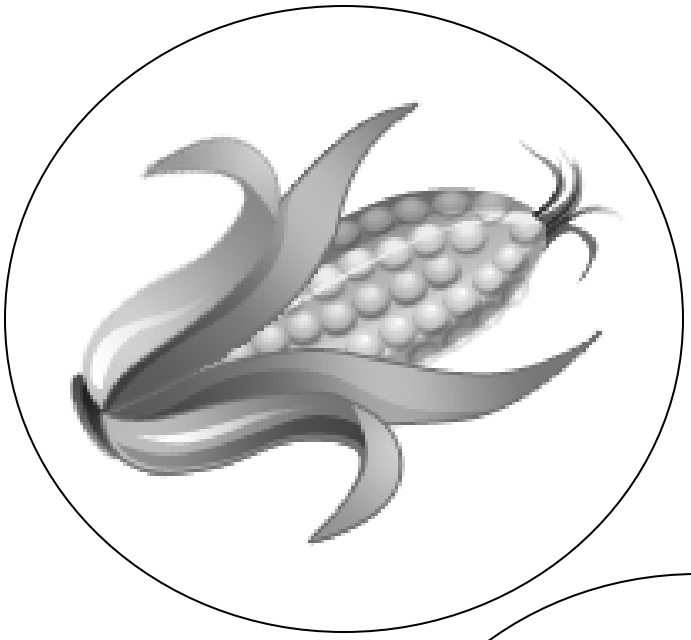
Prior to beginning the lesson have students bring in an empty cereal box, corn chip bag, soda can or other food product containing corn.

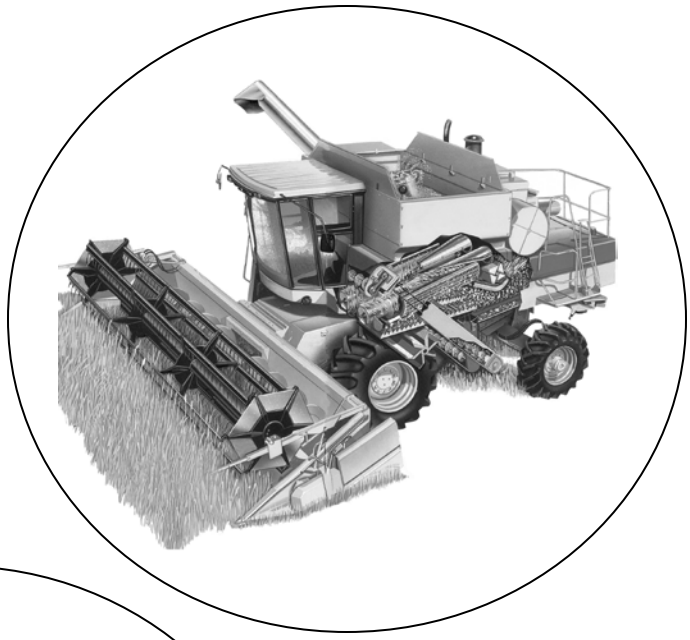
Procedure
1. Discuss the process by which food is grown and manufactured into products. The following books provide excellent overviews:
   Corn in the Story of Agriculture by Susan Anderson and JoAnne Buggey
   From Wheat to Pasta by Robert Egan
   Journey of a Bowl of Cornflakes by John Malam
2. Distribute the attached templates as well as the corn food product containers. Have students cut out the pieces of the template and sequence them in the correct order on their desks: Corn – Combine – Factory – Truck – Grocery Cart. On the back of each piece they can label 1st, 2nd, 3rd, 4th, and 5th.
3. Next have them tape the template pieces to a piece of yarn and then affix to the cereal box. The grocery cart should be closest to the cereal box with the corn furthest away. The steps in the chain can be placed inside the cereal box and then pulled out in order to tell the story of corn from field to store.

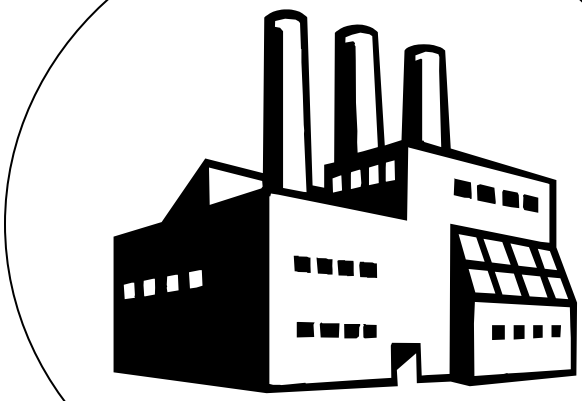
4. After students have completed their sequencing chain, have them list the natural, human, and capital resources that were involved in producing the good for the consumer. *Alternatively: for younger students you may have them list the name of the job on the back of each card (farmer, factory worker, truck driver, grocer).*

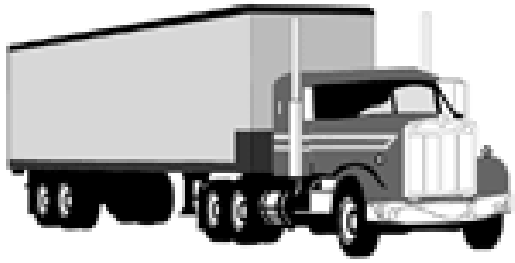
Credit

Lesson adapted from Illinois Agriculture in the Classroom.









George's Journal

Standards of Learning
History: 2.11, 3.7, VS.5
Language Arts: 2.12, 3.9, 4.7

Objective
Students will:
- Create a journal depicting events in the life of and contributions by George Washington

Materials
- Brown paper bags
- Hole punch
- Yarn
- Scissors
- Markers/crayons
- Farmer George Plants a Nation by Peggy Thomas (optional)

Background Knowledge
While most people can identify George Washington as the Commander of the Continental Army and first president of the United States, few realize that Washington was also a farmer. He inherited the Mount Vernon plantation from his half-brother Lawrence and worked to make it a highly productive, self-sufficient farm.

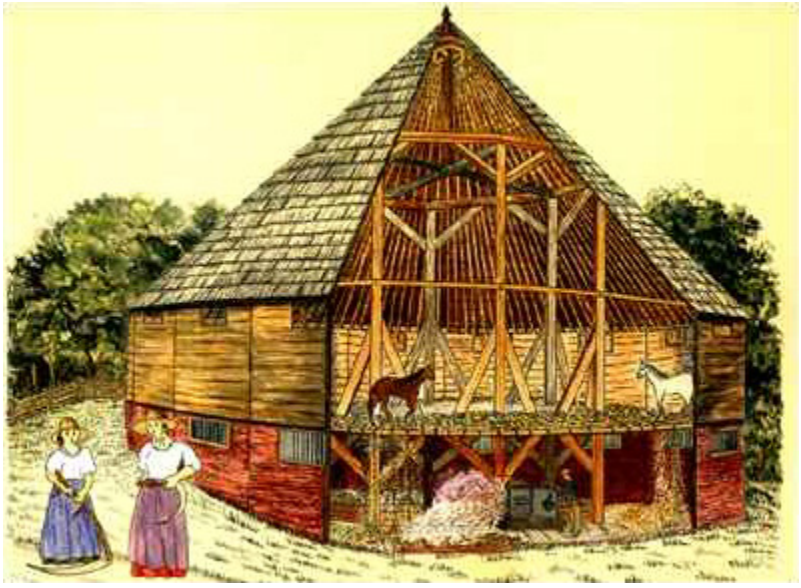
Washington was actively involved with the running of his farm and experimented with various plants, crop rotations, and fertilizers. Additionally, he designed both a new plow as well as a 16-sided barn. The purpose of this unique barn was so that wheat could be tread inside. In the mid-1700s Washington had transitioned his main cash crop from tobacco to wheat and corn. He knew that wheat did not deplete the soil as much as tobacco and could be sold in many markets including Europe and the West Indies.

For additional information, see the attached supplemental notes sheet.

Procedure
1. Read and discuss Farmer George Plants a Nation by Peggy Thomas. Point out how the book includes excerpts from entries to Washington's journal. Discuss the purpose of diaries and journals.
2. Tell students that they will be re-creating Washington's journal. They will begin by first identifying significant events (you may determine the number necessary) and contributions in his life. Sequence these events in order from earliest to latest.
3. Next pass out paper bags to students (number of bags is dependent upon how many facts/pages you want your students to include).
4. Fold the bags from end to end. Hole punch 2 holes near the fold (it is suggested that you do this with a 3-hole punch prior to beginning the lesson) about 2 inches apart.
5. Thread yarn through the holes to bind the bags together.
6. Write the title, "George's Journal" on the outside.
7. Next, have students make entries into the journal using the events and contributions identified in step two.
8. Use the pouches of the bags to insert pictures or other "artifacts" to illustrate the entries.
9. Have students share their journals with the class.

Farmer George: Supplemental Notes

- George Washington inherited Mount Vernon from his half-brother Lawrence in 1759
    - It was an 8000 acre plantation
    - He divided it into 5 farms
- In 1760 he invented a new plow that saved time and energy
- In 1766 he switched his main cash crop from tobacco to wheat and corn
    - He recognized that tobacco soaked up all of the soil's nutrients
    - Wheat could be sold in many different markets
- He developed a crop rotation that included planting grasses, in order to manage the soil's nutrients
- He experimented with different fertilizers such as cow manure, sheep manure, plaster of Paris, black muck from the swamp, and even fish heads
- He tested over 60 different types of crops and tried many different planting techniques
- In 1785 he received the gift of a prized male donkey from the King of Spain. He called it Royal Gift.
    - He bred the male donkeys with female horses to create mules
    - He believed that every farmer should have a mule because they were stronger than horses and able to move more quickly than oxen
- Even as president he was concerned with his farm, in 1792 he designed and began building a 16-sided barn
    - It was 2-stories tall
    - It was made so that wheat could be tread during bad weather



George Washington: Pioneer Farmer

Standards of Learning
Science: K.7, K.9, 2.4, 2.8, 3.4, 3.8, 4.4
History: 2.11, 3.7, VS.5

Objective
Students will:
- Investigate seed requirements for germination
- Identify at least two crops grown by George Washington at Mount Vernon

Materials
- Template, attached
- Jewelry-sized plastic baggies
- Cotton balls
- Water
- Wheat, corn, and/or vegetable seeds
- Scissors
- Tape
- Farmer George Plants a Nation by Peggy Thomas (optional)

Background Knowledge
While most people can identify George Washington as the Commander of the Continental Army and first president of the United States, few realize that Washington was also a farmer. He inherited the Mount Vernon plantation from his half-brother Lawrence and worked to make it a highly productive, self-sufficient farm.

Washington was actively involved with the running of his farm and experimented with various plants, crop rotations, and fertilizers. Additionally, he designed both a new plow as well as a 16-sided barn. The purpose of this unique barn was so that wheat could be tread inside. In the mid-1700s Washington had transitioned his main cash crop from tobacco to wheat and corn. He knew that wheat did not deplete the soil as much as tobacco and could be sold in many markets including Europe and the West Indies.

Procedure
1. Begin the lesson by reading and discussing Farmer George Plants a Nation.
2. Pass out template. Have students cut the two rectangles out.
3. Pass out jewelry bags, seeds, and cotton balls.
4. Review the requirements for seed germination – water, air, warmth.
5. Wet the cotton balls using a spritz bottle. Place one cotton ball in each bag. Place 2-3 seeds on top of each cotton ball. Zip the bags shut.
6. Tape the bags behind the “windows” on the template.
7. Hang in a warm place.

Extension
Have students observe, measure, record, and graph the rate of germination of the different seeds.

George Washington: Pioneer Farmer

Interdependency Web

Standards of Learning
Social Studies 1.7, 3.8

Objective
Students will:
- Investigate specialization and interdependency in the production of goods and services
- Model interdependency by forming a web

Materials
- Interdependency Web Tags (laminated and hung on string for wearing around the neck)
- Ball of yarn

Background Knowledge
Most students believe that the food they eat and the clothes they wear are made and bought at the grocery store, supermarket, department store, and produce stand. They are not aware of the fact that goods that go in clothes and are sold in the market grow on farms and go through a process of production, processing, distribution, and consumption. It is important to explain to your students what these steps mean and the time that goes into them. Production is the growing or making of a good like cotton. This is usually where specialization comes into play because a farmer or producer usually focuses on one good that they produce because it is more profitable that way. Producers choose what they are good at. Processing is the step cotton has to go through when it is picked, cleaned, and made into the blue jeans that we wear. Distribution is when the clothes that your students wear come to the stores that your students buy them in. Lastly, the consumption step is when students come to the store and buy the clothes or food that they want. They consume them. It is important to explain to students how the process that goods go through can be seen as a cycle because the consumers buy the products so that producers can continue to grow. The farmer cannot afford to grow cotton if the consumer does not buy the blue jeans. The consumer cannot get their blue jeans if the farmer does not grow the cotton. The farmer cannot sell his cotton if the processing plant or the distribution trucks do not do their job of cleaning and carrying the cotton. Consumers cannot get their blue jeans either.

This lesson serves as a great way to strengthen your students team building skills as they work together to produce blue jeans from cotton. They are able to experience working in groups and relying on each other so that the whole group can succeed. Students explore complex economic concepts while learning about cotton production and products. The hands-on “economic web” will aid in student understanding.

Procedure
1. Have students brainstorm all of the places that they can get the goods and services that they need and want. (Grocery store, department store, produce stand, etc.)
2. Pose the question—How do these goods and services get to the stores we shop at? Accept reasonable answers.
3. Read the book from *Plant to Blue Jeans* and discuss the steps that goods go through to get from farm to you. (production—processing—distribution—consumption)

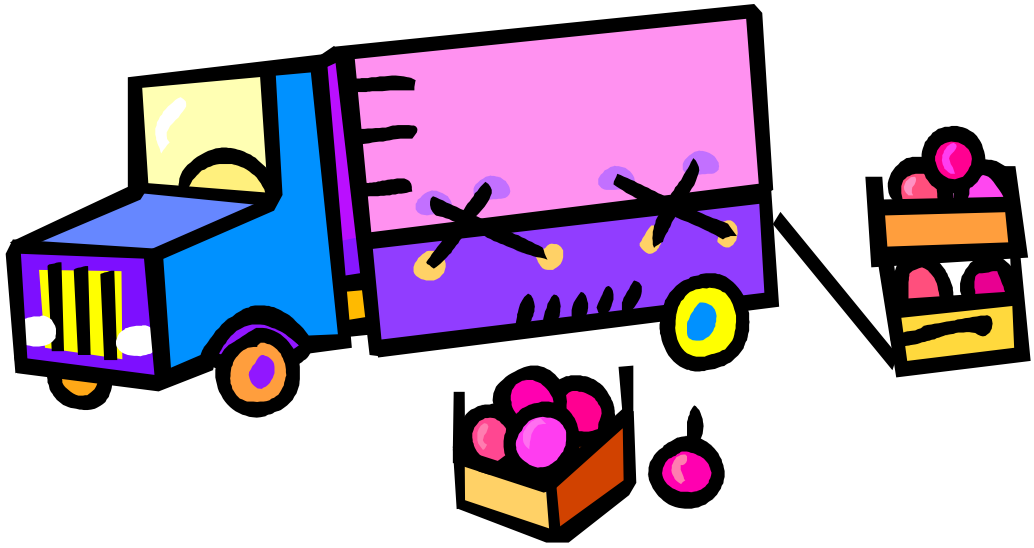
4. Discuss with students how producers usually focus on the production of one particular good. Connect the concept of being an expert in one product with the term "specialization."
5. Pose the question—Was the producer in the book *From Plant to Blue Jeans* able to do everything he needed to do to make his cotton into what the consumer wanted by himself? (No. He relied on the processing plant to take the seeds out of the cotton, process the cotton into yarn, turn the yarn into the fabric for our clothing, etc. He also relied on the distributors to carry the cotton from his farm to the processing plant and then from the processing plant to the stores where consumers get them.)
6. Have students stand in a large circle.
7. Distribute the Interdependency Web tags to the students and have them read over their card to themselves.
8. Tell the children that they are going to receive the ball of yarn and their job will be to hold onto a piece of the yarn then toss the ball of yarn to someone else in the group that they depend on to be successful at their job. They identify those people who help by reading the back of their tag. Give the ball of yarn to one student and let the process begin.
9. Once everyone has had a chance to receive the yarn and toss the yarn, discuss with the students how producers and consumers and everyone in between depend on each other for the things they need and want. The web created from the activity demonstrates how we are all connected. This dependency can be best described by the term "interdependency."
10. Pose the following question—what would happen if one of the people in our circle no longer existed? Accept all reasonable answers.
11. Instruct the students that represent the producers to drop their yarn. Have the students observe what happens to the web. Then have another group of students drop their yarn and observe what happens.
12. Pose the following question—Based on what we have seen through this activity, what can we conclude about the importance of everyone in our economy (producers, consumers, processors, distributors)? Reinforce the idea that we have the things we need and want because we depend on others and others depend on us. This makes everyone in our economy important.
13. Discuss how the students will make a difference in the future of our economy based on the career choices they make, the goods and services they value, and the decisions they make as voting citizens.

Extension

- Read other books about the sequence of events that a good goes through to get to the consumer.

- Show examples of interdependency between states, countries, continents.
- Research the amount of money a producer actually received after his/her good goes through the phases of production to get to the consumer.
- Look in *Farm Facts* (provided in workshop) for examples of interdependency.

DISTRIBUTOR



Distribution is a crucial step in bringing goods and services to the consumer. Truck drivers, pilots, train conductions, and ship captains make sure that goods are transported from the producer to the processor and then to the consumer.

Producers rely on distributors to carry goods from the farm to the processing plant and from the processing plant to the consumer.

Processors rely on distributors to carry goods from the farm and then to the consumer.

Sellers depend on distributors to bring them the products they sell in their stores.

Consumers are grateful for distributors. Without the distributor, consumers would have to go directly to the producer or processing plant to get the goods they want or need.

STORE/MARKET

Stores are where we go get the good we want and need. Consumers rely on stores and markets to provide them with the freshest product at a location that is convenient.

What would stores do without **producers?** Stores/markets rely on producers to provide them with the goods to sell to the consumer. Likewise, producers rely on stores to sell their goods to the consumer.

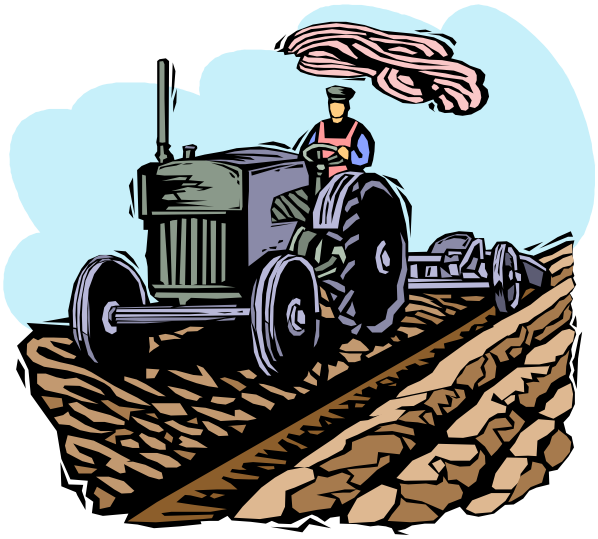
Processors provide stores and markets with goods that are fresh and ready for the consumer.

Distributors deliver the goods that stores need for sale to the counter.

Consumers are grateful for stores. Without stores conveniently located where consumers can quickly and easily shop for items, the consumer would have to do a lot more work to get the good they need and want. Likewise, stores and markets are grateful for the consumers. Consumers are the ones who buy the products and keep a store in business.

The **marketing** industry really helps stores and markets advertise the products they are selling to the consumer. With attractive marketing, consumers are drawn to purchase products from certain stores.

PRODUCER



Producers are the foundation of almost every industry. Producers make, raise or grow the goods we rely on in our everyday lives. Producers have a very important role in the future of our lives and our economy.

Producers send their goods to **processors** who make sure that the goods are packaged appropriately, preserved, and at their freshest for the consumer.

Distributors carry the goods from the producer to the processor and then from the processor to the stores and markets.

The **marketing** industry creates advertisements for the goods raised or grown by the producer. This helps the producer's goods sell.

Consumers drive the decisions that producers make about their goods. In other words, producers make decisions about the goods they raise or grow based on what the consumer wants or needs.

Stores and markets are where the goods that the producer raises and grows are sold to the consumer.

CONSUMER

Consumers are an important part of our economy. Consumers buy the goods and services that producers make or grow. Based on the wants and needs of the consumer, important decisions are about how goods are produced, processed and sold.

Producers rely on the consumer to buy the goods they raise or grow. It is the consumer that determines how a producer grows the goods they produce.

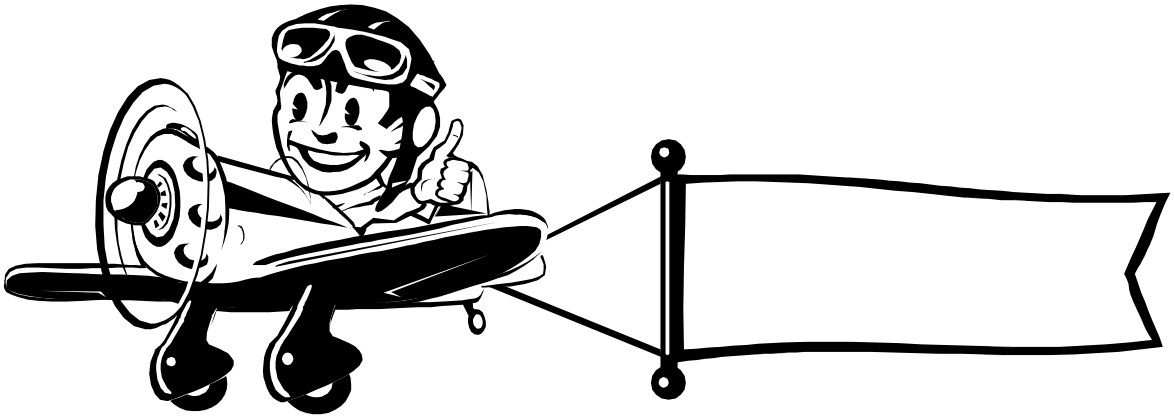
Distributors bring goods to the consumer so they don't have to travel far and wide to get the goods they need and want.

The **marketing** industry helps sell goods and services to the consumer. Through advertisements and marketing campaigns, consumers learn about products so they can make informed economic choices.

Processors make sure that goods are cleaned, packaged and preserved just the way the consumer likes it! The processing of goods makes them more appealing to the consumer.

Stores and markets are where the goods that the producer raises and grows are sold to the consumer. Consumers spend a lot of money at stores!

MARKETING



Marketing agencies spend a great deal of time coming up with creative ways to tell consumers about products. The marketing industry can help or hurt the sale of a certain good or service.

Consumers trust marketing agencies to provide them with information about goods and services that will help them make informed economic choices.

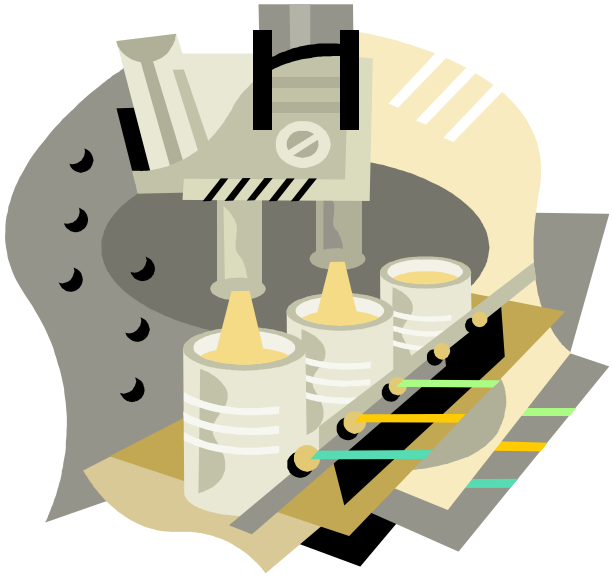
Distribution vehicles can sometimes be used for advertising.

Producers rely on the marketing industry to make their goods appealing to the consumer. The more a good is marketed, the more it will sell and earn the producer money.

Processors help create a product that is easy to market. By cleaning, packaging, and preserving goods, processors provide marketing agencies with many ways to sell the consumer on a product.

Stores and markets definitely depend on the marketing industry to make their store a success! By promoting the goods that are sold in a store, more consumers will shop in the store.

PROCESSING



Processing is an important part of making any good consumer friendly. Processors provide the consumer with goods that are clean, fresh and conveniently packaged.

Consumers want to spend their money on goods that are clean, fresh and conveniently packaged. Processors help prepare goods to satisfy the consumer.

Distributors help bring goods from the producers to the processing plants and then carry goods that have been processed to stores and markets.

Producers trust that processors will take their goods and prepare them for market. If the processor prepares the goods correctly, it can help the producer sell more of the product because it will be more appealing to the consumer.

Marketing agencies help create the design that appears on the packaging that processors use.

Stores and markets rely on processors to prepare goods in a way that is appealing to the consumer. After all, appealing to the consumer helps a store sell more and make more money.

Mapping Virginia Agriculture

Standards of Learning
Social Studies K.4, 1.4, 2.6, 3.5, VS.2
Mathematics 6.11

Objective
Students will:
- Increase map skills by using coordinate points and symbols
- Identify important geographic features on a Virginia map
- Identify important Virginia resources

Materials
- Outline map of Virginia's five regions made into an overhead (found at http://www.pen.k12.va.us/VDOEInstructionsol.html#history)
- White or cream shower curtain
- Wide permanent markers
- Construction paper
- scissors
- glue
- Laminator or contact paper
- ruler
- *Map of Virginia Agriculture* (provided in workshop)

Background Knowledge
Map skills are very important for your student to learn, not only for testing purposes but also for everyday life. A compass rose is a figure on a map used to display the layout of cardinal directions, north, south, east, and west. This is something you are going to want to point out to your students and ask them questions about. Coordinate planes are also something valuable for your students to know, not only for map skill but also for math. Your student should be able to locate a Virginia product, region, or river on the map just by following a designated horizontal and vertical line until they cross over one another. The rivers and lakes found in Virginia need to be pointed out to your students so that they know where they are located, which is mostly along the east coast. The Virginia regions from left to right are Appalachian Plateau, Valley and Ridge, Blue Ridge Mountains, Piedmont, and Tidewater, which are all something your students should know so make sure to have them on your map along with the rivers. There are numerous products grown and raised in Virginia that each have a designated area to grow in. For example, sheep are grown in the north and southwest of Virginia while soybeans are grown mainly along the east coast. This map of Virginia allows students to explore map skills and coordinate systems on a large-scale model. This activity can be adapted to cover a variety of map skills and geographic locations, and includes the whole class in the lesson.

For a great introduction or review to this activity, check out the interactive Virginia Regions Map on AgInTheClass.org where you can watch a 2-3 minute video highlighting each region.

Procedure
1. Enlarge the outline map of Virginia's five regions using an overhead projector and trace it onto the shower curtain. Be sure to mark the borders for the five regions, draw in the rivers, and place a star at Richmond and Washington, D.C. but *do not* label anything.
2. Using a ruler, create a coordinator graph on top of the map. Determine the size of the grid squares based on the size of your map. Label the X (horizontal) axis with letters

and the Y (vertical) axis with numbers.

3. Photocopy and enlarge the commodity symbols located in the map legend on the *Map of Virginia Agriculture* (distributed in workshop). Back these symbols with construction paper and laminate for durability.
4. At this point, you may choose to do one of the following:
    - Leave the map completely empty and have students place commodity symbols on the map using specific coordinate pairs
    - Place some of the symbols on the map and have students place the rest using coordinate pairs
    - Place all of the symbols on the map and have students provide you with the coordinate pairs for each symbol

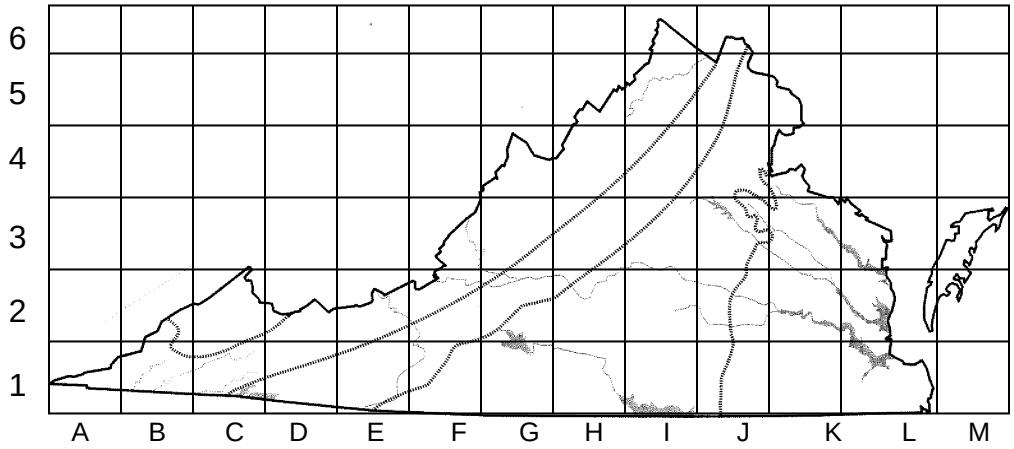
Sample Questions for *Mapping Virginia Agriculture*

These questions will vary based on the grid you have placed over the map of Virginia.

- Place the symbol for corn at (G, 11).
- At what coordinate pair would I find turkeys?
- What river flows between (R, 5) and (S,5)?
- What American Indian Language group lived in the region located at (A,2)?
- What coordinate pair is located south of (K,9)?
- Place a pumpkin at the coordinate pair located two spaces north and one space west of (N,12).
- Give me a coordinate pair that sits along the Fall Line.
- What neighboring state would be to the west of (D,11)?

Extension

- Create handouts of the map grid of Virginia. Provide each student with a copy of the map grid. Group students in pairs. Have them place a triangle on a coordinate of their choice. Students can then play a version of battleship using their map grid.
- Have students research and report on the various commodities raised throughout the state.



Meet Alex from Ancient Greece

Standards of Learning
Social Studies 3.4, 3.6
English 3.1, 3.3, 3.4, 3.5, 3.7, 3.9

Objective
Students will:

- Locate Greece on a map
- Explain how the people of Greece adapted to their environments to meet their needs
- Interpret geographic information from maps
- Compare and contrast agriculture in Greece to that in Virginia

Materials

- Map of the Mediterranean (handout provided)
- Letter from Alex (handout provided)
- Agriculture Map of Virginia (a class set is distributed during your AITC workshop)
- Compare/contrast worksheet (handout provided)

Background Knowledge

This lesson focuses on the agricultural products grown and used by the Ancient Greeks and compares them to those currently produced in Virginia. The geography of Greece is central to its culture. Greece is located among numerous mountains and rocky hills and on the Mediterranean Sea. Its location on the Mediterranean Sea meant that the people of ancient Greece were excellent sailors, fishermen, and traders. The mountains caused Greece to develop as separate city-states, rather than a unified nation. Additionally, the people of Ancient Greece had to adapt by farming on hillsides. The climate consists of hot, dry summers and rainy winters. Farming was difficult for the people of Ancient Greece because there was very little fertile soil. The Ancient Greeks used plows pulled by oxen and walked behind, spreading the seeds. The Ancient Greek farmers plowed every spring and fall. The Ancient Greeks grew wheat, beans, barley, peas, lentils, grape vines, and olive trees. Additionally, they ate a lot of fish due to Greece's location on the Mediterranean Sea. Many of the families owned hens to make eggs and goats for milk and cheese. The Ancient Greeks ate little meat, but sometimes hunted wild boar, deer, and hare.

Procedure

1. Ask the students if they have ever heard of the country of Greece.
2. If so, ask the students if they can tell you anything about Greece. (You might prompt students by asking them if they know where the Olympics began)
3. Tell the students that people lived in Greece thousands of years ago.
4. Tell them that today they will be talking about the lives of the Ancient Greeks.
5. Hand out the map of Ancient Greece to each student.
6. Ask the students to locate Greece on the map.
7. Ask them to make observations about the location of Greece. (For example, the fact that Greece is located on the Mediterranean Sea.)
8. Ask how Greece's location may affect the people who live there now or lived there many years ago.

Access to the Mediterranean Sea made them excellent fishermen, sailors, and traders. While the mountains and lack of large rivers discouraged unification.

9. Hand out the letter from Alex to each student.
10. Ask the students to read the letter to themselves.
11. After they have all read, ask the following questions:
    - What was the landscape of Ancient Greece like?
    - What were the seasons like?
    - Was farming an easy task for Alex and others living in Ancient Greece?
    - Name some of the crops Alex planted.
    - How did living by the Mediterranean Sea impact the foods available to the Ancient Greeks?
12. After fully discussing the letter from Alex, tell the students they are now going to decide how agriculture in Ancient Greece compares to Virginia agriculture of today.
13. Give each student an agriculture map of Virginia.
14. Go over with the students how to read the map.
15. Hand out the chart comparison sheet to each student and place one on the overhead.
16. Ask the students to look at the map and name a similarity between the agricultural products in Virginia and those Alex talked about.
17. Ask some students to share their observations with the class.
18. As the students list their observations, write them on the overhead sheet and tell the students to write them on their worksheet.
19. After the class has listed some similarities, ask them to list some differences. Write these on the chart as well.
20. When the comparison chart is complete, tell the students to take out a piece of paper.
21. Ask the students to write a letter to Alex, describing the similarities and differences between his agricultural products and those from Virginia.
22. Ask a few students to share their letters.
23. Ask the students the following questions:
    - Would you have liked to live in Ancient Greece? Why or why not?
    - Did you find more similarities or differences?
    - Alex lived thousands of years ago across the world from you. Why do you think there are similarities between his farming products and those in Virginia?

Extension

Ask the students to create a poster on the differences in farming and food between the wealthy people of Ancient Greece and the poorer people.

References

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Pearson, A. (1992). *Ancient Greece.* New York: Alfred A. Knopf.

Suzanne, B. (2001). *Plato and His Dialogues.*
http://plato-dialogues.org/tools/images/bigmaps/east_med.gif

Dear student,

Hi, my name is Alex. The year is 800 B.C. and I live in Ancient Greece. While your job is to be a student, my job is to be a farmer. I am going to share with you a little

bit about my country and my life. Since Greece is covered with mountains and hills, our communities are separated from each other. This makes planting a difficult job because we must farm on hillsides and there is very little fertile soil to plant on. Our weather also makes farming hard because we have hot, dry summers and rainy winters. Due to this, we farm in the spring and fall months.

I farm my land using a plow pulled by two oxen. I follow behind the plow and spread the seeds by hand. It is a long, hard job. And in order to keep the land healthy, I must plow every spring and fall. I have a lot of crops on my land, including wheat, beans, peas, lentils, and barley. I also grow grape vines and olive trees. Dried grapes are my favorite. What do you call dried grapes?

Since farming is a difficult job, we have other ways of getting food as well. Since Greece is located on the Mediterranean Sea, we are able to catch fish for food. Also, almost all the families I know keep hens to make eggs, which we eat very often. Many families also have their own goat to make milk and cheese. We don't eat meat often, but sometimes we will hunt for food. When we hunt we usually catch wild deer, wild boar, and rabbit.

I need to get back to work, but thanks for letting me share some information about myself with you. Write back and tell me about farming where you live.

Sincerely,
Alex

Name: _____ **Date:** _____

Complete the following chart comparing agriculture in Ancient Greece to that in Virginia.

Similarities	Differences

The Tortilla Factory

Standards of Learning
Social Studies: 1.7, 2.7

Objective
Students will:
- identify natural, human, and capital resources
- understand job specialization

Materials
- The Tortilla Factory by Gary Paulsen
- Construction paper
- Scissors

For extension lesson:
- Hot plate (with skillet or frying pan) or electric skillet
- Water
- Gallon sized plastic bags
- Measuring cup
- Masa harina corn flour (sold in the Hispanic aisle of grocery stores, Maseca is a common brand)
- Spatula
- Ice cream scoop
- Rolling pin (can also use produce cans)
- Salt, optional

Background Knowledge
Corn is grown on every continent except Antarctica. In Virginia, most corn that is grown on farms is used for animal feed. In addition to food for animals, corn is found in numerous foods that we eat on a daily basis. Corn can also be used to make inedible products such as plastic mugs or even diapers.

Procedure
1. Begin by reviewing the definitions for natural, human, and capital resources.
2. Pass out a sheet of construction paper to each student. Instruct them to first fold it in half "hot dog" style. Next fold each side in so that they overlap and create 3 sections. Crease and open.
3. Place the paper (still with the hot dog fold in place) on the desk with the fold at the top. Next, open the paper enough to cut just the top piece of the paper along the 2 creases. (see images below for examples)
4. Label the front of each section with natural, human, and capital resources.
5. Open each flap and on the back of each flap instruct students to write the definition for that resource and to draw a picture of it that will help them remember it.
6. Read the book, The Tortilla Factory, aloud to students.
7. Have students brainstorm the many different resources listed and illustrated in the book that are used in order to create a good – tortillas.
8. Have students sort the brainstormed resources into the correct categories on their foldables.
9. Ask students to consider a popular pair to tortillas – salsa. Is it likely that salsa would be made at the same factory as the tortillas in the book? Why or why not? Introduce the

topic of job specialization.

Extension

Take the story a step further by making your own tortillas in the classroom. As you make them have students identify the natural, human, and capital resources you are using. As an alternative to the method described below you may decide to divide students into teams. Have each team be responsible for a step in the tortilla making process (the teacher should always be in charge of the cooking!). Discuss job specialization and how it makes your classroom tortilla factory more efficient.

Each batch of tortillas will serve about 15, depending on the size of your tortillas.

In a large plastic bag place 2 cups of corn flour, one cup of water, and a pinch of salt (optional). Have students take turns kneading the bag to create a soft dough (the consistency of play dough). You may have to add a bit more water, but be careful to not make it too wet as it will then be too sticky.

Pass out a large plastic bag to each student. Have them write their name in permanent marker along the edge. Next cut the plastic bag on all but one side, so that it will open like a book.

Once the dough is ready, use an ice cream scoop to place an egg-sized scoop of dough inside each student's bag. Have students take turns using a rolling pin (cans will work too) to roll their dough into a thin, flat circle.

Heat your electric skillet or frying pan on hot plate over medium heat. Have students take turns bringing their tortillas to you. Open the bags and place the tortillas on the skillet. Cook for about a minute, until the ends begin to curl up. Flip, and cook for about another minute until golden brown. When finished transfer back to their plastic bags and let cool.

Bring in salsa and/or cheese and have a tortilla tasting party!

Virginia Pizza Assembly Line

Standards of Learning
Social Studies: 2.9, 3.8, VS.10

Objective
The student will be able to:
- identify Virginia products and resources
- define "producers" and understand the necessity of job specialization

Materials
- Pita bread or tortillas
- pizza/tomato sauce
- cheese
- chicken strips/cubes
- ham slices
- green peppers

Background Knowledge
Producers use natural, human, and capital resources to produce goods and services. Producers depend on consumers to use their product, and consumers depend on producers to make the goods and services they need and want. It would be impossible for every producer to be able to make everything, therefore each producer specializes in a certain good or service.

Farmers are an example of producers. They grow and raise food and fiber to feed and cloth people. Like other producers, farmers typically specialize in a product, such as dairy or poultry. While they may raise more than one crop (and in fact, most farmers are diversified this way), they cannot possible raise all types of fruits and vegetables. Virginia's mild climate allows farmers to raise many diverse crops such as soybeans, corn, wheat, tobacco, tomatoes, apples, Christmas trees, and much more.

Procedure
1. Review with students that a producer is one who makes a good or provides a service. Have students brainstorm examples of goods, and then identify the producer of each good. For example, the carpenter makes the chair and the farmer produces the apples. Ask students if one producer would be able to make all of these goods? Review the concept of job specialization.
2. Tell students that Virginia's climate allows many different products to be grown by farmers (producers); however, as mentioned before, one farmer cannot grow or raise all different types of food. Discuss how much of the food they eat involves multiple ingredients.
3. Place students into 6 teams. Assign each of the teams one of the following Virginia products: grain (pita bread or tortillas), tomatoes, dairy (cheese), green peppers, poultry (chicken strips), hogs (ham slices).
4. Now have each team count off by 6, then regroup students into mixed groups. Each person in the group is responsible for one component of the pizza. Have each group line up and begin to make their pizza.
5. Discussion: what would have happened if people in your group didn't do their job? What would have happened if you all were responsible for the same thing?
6. Last step – consume and enjoy!

Extension
Have students identify the Virginia region where each of the Virginia Pizza products is grown.

Visiting a Farmer's Market

Standards of Learning
Social Studies: 1.8, 1.9, 2.9, 3.9
Math: 1.7, 2.10, 3.8

Objective
Students will:
- Count and determine the value of a collection of bills and/or coins
- Make economic choices and understand opportunity cost

Materials
- Real or artificial products found in Farmer's Markets
- Labels with prices on them
- Sealed envelopes with different amounts of play money

Background Knowledge
People make economic decisions every day. Scarcity can cause consumers to make choices and many times other items have to be given up. By providing money for students, they have to make a decision for what they can buy. Their funds might be "scarce" and choices have to be made.

Procedure
1. Describe what a farmers market is and the various items that are found for sale there. Brainstorm the similarities and differences between a farmers market and a typical grocery store.
2. Throughout the room, set up produce found at a farmer's market (real or artificial). Ask students how much they believe each item costs, and then display the actual price. Discuss any large discrepancies between their guesses and the actual cost.
3. Ask students to make a list of what they would like to buy.
4. Pass out the sealed envelopes and ask the students to decide what item(s) they can buy with their money.
5. Ask them whether or not they can afford to buy all of their wants. Which item(s) will they buy? Which will they have to forgo? Identify the opportunity cost of each decision.
6. Discuss the choices consumers have to make with the money they have and what cost of that can be. Ask the students either/or questions: Would you want the strawberries *or* the blueberries? Would you want the honey *or* the soap? What are the opportunity costs when you make a choice?
7. Discuss that one way to purchase more of your wants is to save your money.

Extension
Ask students to complete simple mathematics problems such as: "If I buy a pound of strawberries for $3.75 with a $5 bill, what is my change?"

Have representations of all of the food groups and ask students to create a meal with their "paycheck."

Provide scissors, glue, construction paper, and markers and give students time to create advertisements for different market vendors.