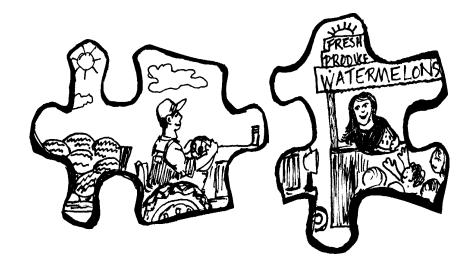
# An Economy at Work: The Production and Consumption of Goods and Services



A Staff Development and Teaching Module for the Economics Strand

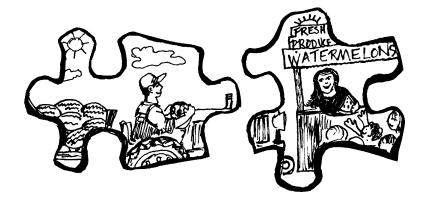
History and Social Science 2001 Standards of Learning Grades K-5

February 2002

Provided by: Office of Elementary Instructional Services Virginia Department of Education PO Box 2120 Richmond, VA 23218-2120 804 225-2865

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A Staff Development and Teaching Module for the Economics Strand

History and Social Science 2001 Standards of Learning Grades K-5

February 2002

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# **Introduction**

Virginia's Standards of Learning (SOL) for kindergarten through fifth grade include economic content in two main areas: (1) the role of money in an economy, and (2) production and consumption. Many teachers have not had a great deal of exposure to content and teaching methods in either of these areas. An earlier teacher's guide, *The Role* of Money in an Economy, covered the first of these two major areas. This guide is designed to help elementarygrade teachers with the second major area, production and consumption. The overall goal of the guide is to help teachers:

- understand the importance of students learning economics
- understand production and consumption in the economy, as embodied in the K-5 History and Social Science Standards of Learning
- implement appropriate instructional strategies for teaching the relevant economic concepts
- identify resources available to assist with teaching the identified economics concepts, and
- learn how economics can be integrated with other core disciplines to enhance student learning and increase student retention of the content learned.

Each section of this guide begins with a "Content Briefing," a guide to the important content that you should read before considering how to implement the concepts in your classroom. The briefing is followed by information on instructional strategies, brief activities, worksheets and transparency masters ready for use in your classroom. At the end of each section is a list of additional resources that you can use.

Fully detailed activities are listed in the additional resources. Within the body of this guide are some "hit-andrun economics" activities: quick things to do in a classroom without the extensive setup sometimes required by a fulllength activity. As in the first teacher's guide, it is important to understand that the "hit-and-run" terminology comes from baseball. In the baseball strategy



called the "hit-and-run," you get a quick start and swing at any pitch that comes your way. In a similar way, economics is often better understood by students if it is taught in quick small sections rather than extended blocks. Besides being short, the primary feature of the "hit-and-run" activities is that they have been customized to be directly applicable to the Virginia SOL. They can easily become the core of longer and more ambitious units, but from the beginning their focus is on the Virginia standards (unlike some of the additional resources listed at the end of each section, most of which were prepared for national audiences).

#### Why Economic Education?

Why do we want elementary students to learn economics? When we study production and consumption in the economy, we are not studying Wall Street or investments or how to make money. In fact, one of the best definitions of economics is

#### the study of choice under scarcity

with scarcity defined as

the inability to satisfy all wants at the same time.

In this light, it is important for elementary students to study economics. They face scarcity in their young lives, as they realize they cannot satisfy all their wants at the same time. They cannot have that new CD and a new game. They cannot play soccer and still have the same amount of free time. Therefore they have to choose. By studying economics, they can learn to make better choices in their personal lives.

Beyond personal choices, the community must make choices. Whether the community is defined as local, state or national, no government can afford to satisfy all wants at the same time. Here the choices are collective and democratic rather than individual, but the need to choose is ever present. Students who have studied economics can be more responsible citizens as they participate and vote.

As students learn about economics, they will become more comfortable with the specialized vocabulary of choice making. Terms like "scarcity" and "opportunity cost" are no



more difficult to learn than the specialized vocabulary of other elementary school subjects. Experience shows that when the vocabulary words are introduced positively and then applied consistently in the classroom, students enjoy using these words. More importantly, as they use the vocabulary of economics, students will learn to make better choices.

#### A Note About Virtual Economics

Many of the resources listed in this guide are available in Virtual Economics. Virtual Economics is a collection of lesson plans and teaching materials on a single CD-ROM disk that has been supplied to all public schools in Virginia. Version 1.0 of the program was provided in 1996; then, in January 1999, the Virginia Department of Education purchased and distributed copies of the updated Version 2.0 of the program to public school divisions. This newer version is enabled to run over a Local Area Network (LAN). Whether by disk access to Version 1.0 or network access to Version 2.0, you should be able to get access to this resource. Usually, your librarian or media specialist will know about your school's arrangements for access to *Virtual Economics.* The grant that provided the CD-ROM disk to all Virginia public schools also provided for training, and there are hundreds of teachers trained in the use of Virtual Economics. To find the person at your school, start with the person who was designated "SOL Training Initiative Coordinator," beginning in January 1999 or later. If after checking local resources you need additional help with *Virtual Economics*, contact the Virginia Council on Economic Education (designated to offer training in the Virtual Economics grant) at (804) 828-1627 or http://www.vcee.org

### A Note About the Curriculum Framework

The content of this guide has been coordinated with the Virginia Department of Education's *History and Social Science Standards of Learning Curriculum Framework*. The framework goes through, standard by standard, outlining the essential understandings, questions, knowledge, and skills associated with each standard. The framework has been widely distributed and is also available at <u>http://www.pen.k12.va.us/VDOE/Instruction/sol.html</u>



### Integration with Other Disciplines

If production and consumption were to be taught in standalone fashion, it would be hard to imagine fitting it into the already busy elementary school day. With an appreciation of the fact that economics concerns choice under scarcity, however, you can see that economic concepts are everywhere and can be integrated with the teaching of other disciplines.

Some of the best children's literature, for example, concerns the choices that the characters make. These choices can be used to teach economics – and the other social sciences as well. Some of the best and most motivating math problems concern scarcity, choice and money. Some of the most interesting science problems have important relationships to scarcity and choice.

An Economy at Work was produced for the Virginia Department of Education and may be reproduced for educational purposes within Virginia classrooms.





# <u>Section 1: Choices and</u> <u>Resources</u>

# K.6

The student will match simple descriptions of work that people do with the names of those jobs.

# K. 7

The student will a. identify the difference between basic needs (food, clothing, and shelter) and wants (things people would like to have); b. recognize that people use money to purchase goods.

# 1.8

The student will explain that people make choices because they cannot have everything they want.

### 2.7

The student will describe the differences between natural resources (water, soil, wood, and coal), human resources (people at work), and capital resources (machines, tools, and buildings).

### 2.9

The student will explain that scarcity (limited resources) requires people to make choices about producing and consuming goods and services.

### **Content Briefing**

All economics starts with scarcity, or *the inability to satisfy all wants at the same time*. Because we face scarcity, as individuals and as a society, we can not have all of everything we want. Therefore we have to choose.

It is hard to imagine living in a world without scarcity, but consider for a moment what that would be like. Economies would not have to decide *what to produce*; they would just produce anything anyone wanted. More prescription drugs for everyone? No problem! More housing or better food? Since



we could satisfy all our wants at the same time, there would be no economic challenge.

In the absence of scarcity, no one would have to worry about *how we produce* goods and services. Would we produce with a lot of machinery and a few laborers? In contrast to today's necessity of carefully choosing production techniques, in a world without scarcity it would not matter. There would be enough machines and enough labor for anything that anyone wanted to produce.

Finally, in the absence of scarcity there would be no issue about *for whom to produce*. Today's complex issues about distribution of income would disappear. Are the rich becoming "too rich"? How can we help the poor? In the absence of scarcity there would be no poor people.

When we come back to the real world of scarcity, all of those problems are still waiting for us. Because of scarcity, we must work for a living. Because of scarcity, we must carefully spend in order to get the most for our money. We cannot satisfy all our wants at the same time, so we seek to satisfy our basic needs and then the most compelling of our wants.

Just as all economics starts with scarcity, it quickly comes to the concept of opportunity cost. Opportunity cost can be defined informally as "what you give up." Every time you make a choice between one alternative and another, you give something up. "What you give up" represents the opportunity cost of the decision.

For example, if a first grader has time to play soccer or basketball but not both, something must be given up. If that first grader chooses soccer, the opportunity cost is giving up basketball. (If that same first grader decides to play both sports regardless, then time for other activities must be given up).

Economics textbooks point out that opportunity cost is "the benefit expected from the highest valued alternative forgone." Still, that comes down to "what you give up." A teacher volunteers to work for a local food bank. Is there any cost involved in that action? We might say, "no, she does not have to pay to work there." Still, there is an opportunity cost. It is what she gives up. If she decides to work at the food bank instead of going walking with a friend, the opportunity cost is giving up the companionship and fitness benefits of walking. Or she might work at a part-time job if she did not volunteer, meaning the opportunity cost would be measured in dollars not earned. In either case, opportunity cost is "what you give up."



In a world of scarcity where people consider opportunity costs in making decisions, it is natural that people specialize in their jobs. Instead of doing a little bit of everything to be self-sufficient, for example, people become firefighters. They specialize in it, they take advanced training, and they become quite effective at putting out fires. They then use their incomes as firefighters to buy the things they need and want – purchasing apples at the grocery store, instead of growing their own orchards. The kindergarten SOL recognize this specialization and the standards call on students to see the importance of people at work. Standard K.6 asks students to "match simple descriptions of work that people do with the names of those jobs."

Kindergarten students are not too young to recognize the existence of scarcity and the importance of choice. Standard K.7 asks students to distinguish needs from wants and to recognize how people satisfy those needs and wants: by exchanging money for goods.

In the early elementary grades, students are capable of classifying the resources used in production as human, natural or capital. Human resources are straightforward enough, consisting of all sorts of labor - from unskilled to professional, from temporary to career. Capital resources, as equipment, structures, and all produced aids to further production, also are easy to identify. Sometimes an issue arises about natural resources. Purists would say that a natural resource is a gift of nature such as a tree. To these purists, when the tree is cut and becomes lumber, it is no longer a gift of nature and therefore does not clearly fall into one of the three categories (natural, human or capital). Although this point is technically correct, following up on it requires introduction of the term "intermediate good," which is advanced for second graders and adds little new understanding. The SOL do not require the introduction of the term at the second grade level.

### Instructional Strategies

Primary students cannot fully understand choices and resources unless they actually make some choices among alternatives. They can learn the vocabulary by repeating definitions or filling out worksheets, but they will not retain the material as well unless they actually make choices. Everyday classroom decisions present an opportunity for teachers to help students learn the vocabulary by modeling its proper use.



For example: "We do not have enough bulletin board space to leave our pictures and also add our newspaper stories. We have a scarcity of space." This is a correct application of scarcity because there is an inability to satisfy all wants at the same time. You can help your students develop decision-making skills by leading them through identifying alternatives and considering costs. Then come to a decision, remembering that "costs" refers to all the drawbacks of an action, not just those measurable in money. ("Would your parents like to see your pictures? We can send them home with you and that will give us enough space to put up our newspaper stories before the Open House.")

Division of labor (K.6) can be taught through the standard classroom practice of assigning different jobs to different students. Teachers can emphasize that when one student is taking weather observations or helping with handing out forms, that student is working *for the entire class*. This can lead to the natural connection that a firefighter (to continue an earlier example) is working for the entire community, or that a grocery store manager is ordering food for the community.

Needs and wants can also be modeled in the classroom, but here teachers have to pay attention to their own vocabulary. In ordinary English, "need" has come to be applied to a number of situations that clearly are not economic needs. Economic needs are essential to survival, but it comes so naturally to say, "You *need* another pencil at this table." There are at least two possibilities:

- 1. The teacher can emphasize the term "needs" as essential to survival only when talking about the economic topic "wants vs. needs," and use "needs" in the ordinary way at other times.
- 2. The teacher can try to maintain economic usage by saying "should have" and "ought to have" instead of "need." Changing such a basic vocabulary pattern is not an easy task, however.

Every classroom has human, natural and capital resources, so in the classroom there are ordinarily many opportunities to model the use of the vocabulary. The human resources consist of the labor and effort of teachers,



students, and school staff. The capital resources include the school building and teaching equipment. Natural resources are a little harder to see, but students will readily understand that the wood in a pencil comes from natural resources. When a class goes to the cafeteria at lunchtime – or any time on a field trip – there are additional opportunities to identify human, capital and natural resources.



### Hit-and-Run Activities



Activity 1: People and Jobs (SOL K.6; adaptable to grades K-3)

MATERIALS: Job descriptions (Transparency Masters 1-1 through 1-6, copied onto transparency stock; or use card stock for card display).

SAY: Today we are going to look at some people and the jobs they do. I am going to have someone stand up here while I read what a person in this job does.

CHOOSE a student to come up front.

SAY (to volunteer student): When I read what a person in this job does, you may act it out silently. If I say this person digs in the ground, you can pretend to use a shovel.

SAY (to class): If you have a guess about what the person's job is, raise your hand. Do not say anything until I call on you. We will try to see who can guess the job.

READ the job descriptions (transparencies or cards), pausing after each sentence to allow for guesses. Encourage guesses from students. Read additional sentences in sequence until students guess what the job is. If no one guesses correctly by the time you read the last sentence, go ahead and give students the answer.

ASK: **People have different jobs. How do you think people decide what job to do?** (They pick jobs they are good at, they pick jobs that pay good money, they pick jobs they like. Encourage a variety of answers).

ASK: Do you think it would be good if everybody wanted to do exactly the same job? What if everyone wanted to be a firefighter? (Not a good idea; we have to have farmers, doctors, factory workers, and every other job done; we could not all be firefighters.).



OBSERVE: Every job is important. It is good that not everyone wants to do the same job.

(Optional extension activity: SAVE the job descriptions (Transparency Masters 1-1 through 1-6) and have students answer the following questions:

In which of the pictures do we see someone working with natural resources?

In which of the pictures do we see examples of human resources?

In which of the pictures do we see examples of capital resources?

In which of the pictures is someone working alone?

In which of the pictures is someone working as part of a team?





Activity 2: A Survival Checklist (SOL K.7; adaptable to grades K-adult)

MATERIALS: Blackboard or overhead projector and screen; blank overhead transparency or Transparency 1-7 at the end of this section.

SAY: Today we are going to pretend that we are going to be living on an island for a week. This island is in the middle of the ocean. There are no buildings on the island and no other people live there.

ASK: How many of you would like to live on an island in the middle of the ocean for a week instead of where you live now? (Show of hands.)

ASK: What would be different about living there? (Would not have a bed to sleep in, would have to find food, would not have to go to school.)

SAY: Pretend that we are on a big ship now. We get to put five things onto a raft and then we will go to the island for a week. We only get five things for the whole group.

**DISPLAY Transparency 1-7** 

SAY: Here are the things we can choose from. Is there anything on the list we know that we do not need? Try to pick one thing that we will not take (compact disk collection, perhaps).

ASK students for suggestions on what not to take. Cross those things off the list. Continue until there are only five things.

EXPLAIN: Things we have to have are called *needs*. The crate of food and the barrel of water are needs. Things we would like but do not have to have are called *wants*. The music collection is a want. When we cannot have everything we would like, we have to choose.



ASK: Why did we take the water? (Because it is a need; people have to have water).

ASK: Why did we not take the music collection? (Because it was not a need; did not have electricity or a CD player.)

EXPLAIN: To make good choices, we have to remember what we *need* and what we *want*. If it is something we must have for survival, we need it. Everything else is a want. Now be glad that we do not have to live in an island in the middle of an ocean.



#### **Activity 3: Natural, Human or Capital?** (SOL 2.7; adaptable to grade 1-adult)

MATERIALS: Cards, duplicated on card stock from Card Master 1-1, only one per student.

SAY: Today we are going to learn about resources. A resource is anything used for production.

ASK: Can you tell me some of the resources used to make grape jelly? (grapes and sugar; some students may think of labor or glass for jars.)

SAY: There are three kinds of resources. The first kind is human resources, or people at work. Who can tell me some kinds of human resources? (farmers farming, doctors caring for patients, factory workers working, for example).

SAY: Another kind of resources is called natural resources. They come from nature, like water from a lake. Who can tell me some kinds of natural resources? (soil, coal, wood; may have to prompt students by SAYING, for example: "What resource comes from trees?")

SAY: Another kind of resources has a special name. These resources are called capital resources. They include machines and tools. Who can name a capital resource for me? (trucks, tractors, equipment).

DISTRIBUTE resource cards to students. TELL students: **Do not show anyone your card, just look at it.** 

SAY: When I say "go," I am going to ask you to act out what is on your card. If you had a cow, for example, you might say "moo" and pretend to eat grass. I want you to find the other people in the class that are acting out the same thing as you. When you have found those people, stand together. Any questions? (Check to make sure everyone understands.) Go!



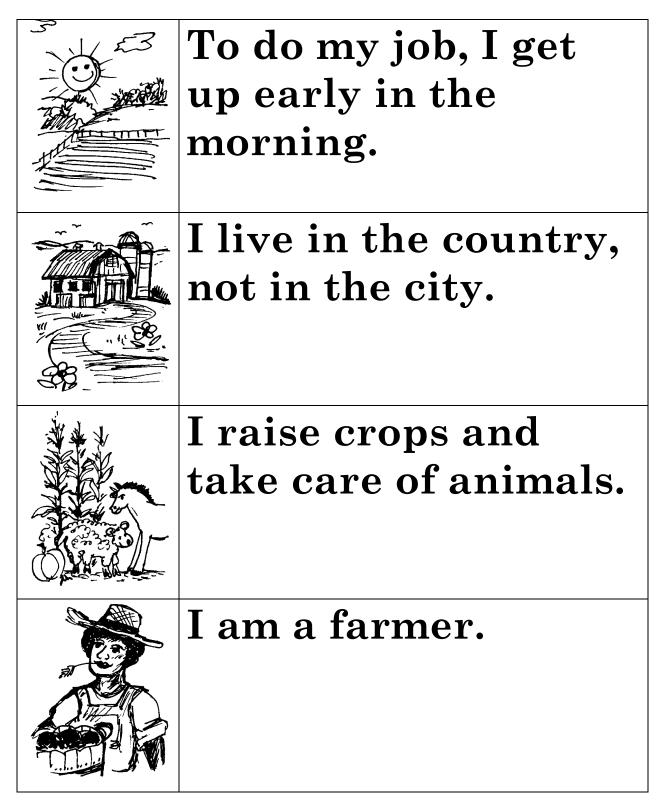
MONITOR students as they find others with the same card.

ASK each group: What picture was on your card? (Truck, painter, or lake, for example.) What kind of resource is that: human, natural, or capital? Why?

SAY: Today we have seen some examples of human, natural and capital resources. We will keep looking for examples of those kinds of resources.

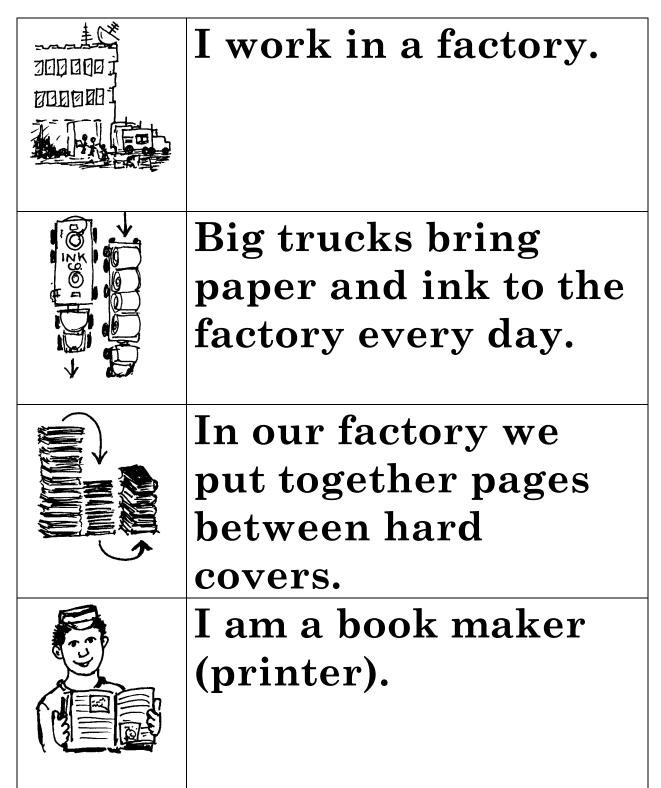


Transparency and Card Masters Transparency Master 1-1 Activity 1: People and Jobs





Transparency Master 1-2 Activity 1: People and Jobs



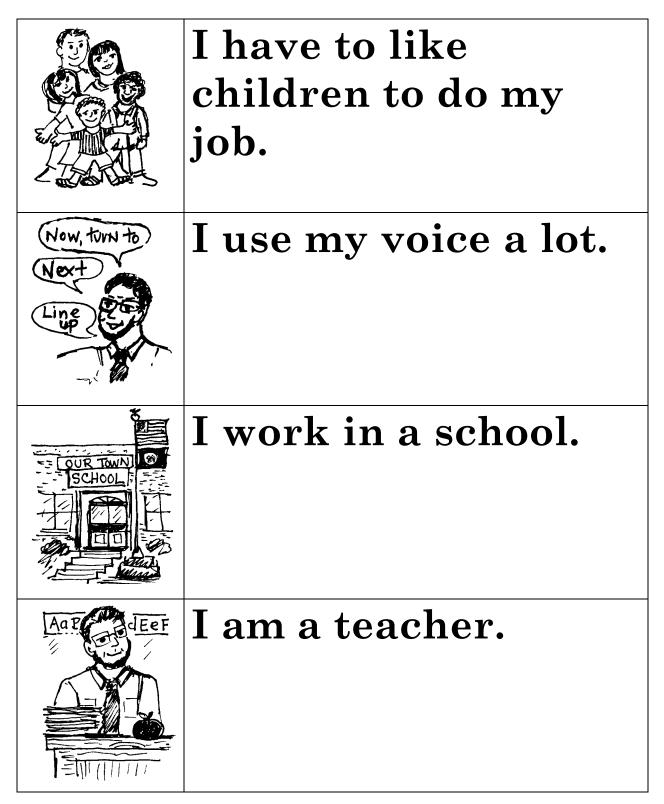


Transparency Master 1-3 Activity 1: People and Jobs





Transparency Master 1-4 Activity 1: People and Jobs





Transparency Master 1-5 Activity 1: People and Jobs

I work in a place that many people visit.
The store where I work has many shelves.
People come to my store when the refrigerator is empty.
I am a grocery store worker.



Transparency Master 1-6 Activity 1: People and Jobs

	I work in a factory.
FRAGILE	My factory uses a lot of metal and glass.
	My factory uses a lot of tires, wheels and engines.
	I am an auto worker (car maker).



# Transparency Master 1-7 Activity 2: A Survival Checklist Island Supplies

You may take five, but only five, of the following things on the raft to the island. Cross out the things you *do not* want to take until only five are left:

Č.	TV
<u>e</u> EIX	First aid kit
	Dog
	Large container of water
	Waterproof matches
	Hair dryer
e Alt	Computer
J.O.O.S.	Music collection (compact disks)
and the second second	Large tent
	Box of food



### One Class's Version of Transparency 1-7 Activity 2: A Survival 'Checklist Island Supplies

You may take five, but only five, of the following things on the raft to the island. Cross out the things you *do not* want to take until only five are left:

	Ŧ¥
	First aid kit
	Dog
	Large container of water
A REAL PROPERTY OF THE REAL PR	Waterproof matches
(O) (O) (O) (O) (O) (O) (O) (O)	<del>Hair dryer</del>
	Computer
<u>zooz</u>	Music collection (compact disks)
and the second second	Large tent
E E E E E E E E E E E E E E E E E E E	Box of food



# Card Master 1-1 Activity 3: Natural, Human or Capital?

Truck	Truck	Truck	Lake	Lake
Lake	Singer	Singer	Singer	
		Forest	Forest	Forest
Painter	Painter	Painter	Rainstorm	Rainstorm
Rainstorm	Baseball Player	Baseball Player	Baseball Player	(Note: There are three of each resource)



# Worksheet 1-1

Name \_\_\_\_\_

Look at the pictures below. Write an "H" next to each human resource, an "N" next to each natural resource, and a "C" next to each capital resource.

Tractor	Farmer	Field	Apple Tree	Barn
Miner	Coal	Truck	Driver	Cart
Computer	Clean Air	Programmer	Secretary	Telephone
Cook	Lettuce	Waiter	Tomatoes	Oven
Tree	Paper Factory	Paper Maker	River	Wood Cutter



# Answers to Worksheet 1-1

Name \_\_\_\_\_

Look at the pictures below. Write an "H" next to each human resource, an "N" next to each natural resource, and a "C" next to each capital resource.

С	н	N	Ν	С
<b>E</b>			Annala Tana	
Tractor	Farmer	Field C	Apple Tree	Barn
H	N			c
Miner	Coal	Truck	Driver	Cart
С	Ν	н	Н	С
e Computer	Clean Air	Programmer	Secretary	Telephone
Н	N	Н	N	С
Cook	Lettuce	Waiter	Tomatoes	Oven
N	с	н	N	н
	HAILA RA			
Tree	Paper Factory	Paper Maker	River	Wood Cutter



### Additional Resources on Choices and Resources

#### **Online resources**

Lesson (Grades 1-3): *The Goat in the Rug* Concepts: producers, resources (natural, human, capital), intermediate goods, language arts From *Economics and Children's Literature* <u>http://ecedweb.unomaha.edu/lit-goat.htm</u>

Lesson (Grades 1-3): *Busiest People Ever* Concepts: unlimited wants, goods, services, language arts From *Economics and Children's Literature* http://www.umsl.edu/~econed/busiestpeople.htm

# **Printed lesson plans**

Lesson (Grades K-3, adaptable to K-adult) People Make the Economy Go Concepts: work, jobs, employment, goods, services From Economics for Kids: Ideas for Teaching in the Elementary Grades (New York: National Council on Economic Education, 1992, viewable and printable in Virtual Economics).

Lesson (Grades K-3) *Production and Resources* Concepts: producers and resources (natural resources, human resources, and capital resources) From *Kids Town Club* (Lawrence, KS: University of Kansas Center for Economic Education, 1992, viewable but not printable in *Virtual Economics*)

Lesson (Grades K-2): Learning Center: Producer Pigs (based on The Three Little Pigs) Concepts: consumers, goods, services, producers, resources, natural resources, capital resources, human resources From Master Curriculum Guide in Economics: Teaching Strategies K-2 (New York: National Council on Economic Education, 1992, viewable and printable in Virtual Economics).



Lesson (Grades 1-3) *Little Nino's Pizzeria* Concepts: natural, human and capital resources From *Economics and Children's Literature* (St. Louis: SPEC Publishers, Inc., 1993, viewable but not printable in *Virtual Economics*). (SPEC Publishers can be contacted at 1006 Regency Manor Dr., Ballwin, MO 63011 or at (636) 891-0043.)

**Video Resource** (with printed teacher's guide and accompanying lesson)

Lesson (Grades 1-4, but adaptable for K-5) *Lesson 1: Scarcity* 

From *Econ and Me* (Video series: Agency for Instructional Technology, 1989). Series description: Children learn how to work through economic problems guided by a friend that only they can see, Jeremiah E. Connery, who is known as "Econ" for short.

Note: Virginia was part of a consortium that funded production of *Econ and Me*. As part of the consortium, the state received a license to copy and distribute *Econ and Me* for educational use. Copies are available at many school and district media centers. In addition, school divisions may get new copies of the *Econ and Me* videotapes for the cost of blank tapes plus shipping. The contact for this service is Jim Calleran at the Virginia Department of Education, (804) 225-2972.





# <u>Section 2: Buyers</u> (Consumers) and Sellers (Producers)

# 1.7

The student will explain the difference between goods and services and will describe how people are both buyers and sellers of goods and services.

# 1.8

The student will explain that people make choices because they cannot have everything they want.

### 2.9

The student will explain that scarcity (limited resources) requires people to make choices about producing and consuming goods and services.

### 3.7

The student will explain how producers use natural resources (water, soil, wood, and coal), human resources (people at work), and capital resources (machines, tools, and buildings) to produce goods and services for consumers.

# **3.**8

The student will recognize the concepts of specialization (being an expert in one job, product, or service) and interdependence (depending on others) in the production of goods and services (in ancient Greece, Rome, the West African empire of Mali, and in the present).

# Content Briefing

Students understand what it is to be a buyer or consumer at a very early age. They learn that by spending money, they can get the things they want and need. By the time they enter



school, they may have taken part in many transactions as buyers.

They are not likely to have much experience as sellers, however. Their experience parallels that of real-world economic actors. How many times do you make a selling decision? Well, most teachers make a yearly decision about whether to return to teaching jobs the next academic year (whether to sell their labor) – but unless there is a yard sale or similar transaction, many people will go through the year with very little experience in selling.

SOL 1.7 can be a first step in getting students beyond limited experience as sellers and toward an understanding of the economic system as containing both buyers and sellers, both consumers and producers. It can also start students toward understanding the concept of an economic system, in which the parts are mutually related and interdependent.

SOL 1.8 is critical to students eventually developing good decision-making skills. Students need to understand that they have choices and that they can make choices. What makes choices necessary is, as the standard indicates, limited resources. First graders from different backgrounds may have different problems understanding this point. Affluent students who have not had to face difficult choices, or students shielded from choices by their parents, may not truly realize that resources are limited. On the other hand, students from less privileged backgrounds may be prone to underestimate the choices that they can make to determine their own futures.

By the second grade, students are ready to begin study of the background of the market system. Although you will not teach students demand theory, it is useful for you to know the factors that influence consumer demand for products:

- **Price:** The higher the price, the lower the quantity demanded, if the product remains the same.
- Income: When income goes up, people demand more of most goods (referred to by economists as "normal" goods because of their normal response to income), but will buy less of generic or money-saving items (referred to by economists as "inferior" goods).



- Prices of related goods: For goods used together (complements), a change in the price of either good affects both. For example, a sale on hot dogs increases the sales of hot dog buns, too. For goods used in place of each other (substitutes), demand shifts depending on prices. For example, an increase in prices of oranges would shift demand toward tangerines.
- Number of consumers: Naturally, when the number of consumers increases, the demand for everything bought by those consumers also increases. Many students are "echo boomers," children of the "baby boomers." Their numbers are large, and so their demand for goods and services appropriate to their ages are also large.

Consumers cannot get these demands satisfied, however, without the cooperation of producers. Therefore consumers and producers are interdependent. Third graders are in a position to make real progress on understanding interdependence by studying specialization and production in societies as diverse as ancient Greece and the West African empire of Mali (SOL 3.8). Although they will not explore the role of profit at the third grade level, they will be well on the way toward understanding the characteristics, strengths and weaknesses of a market system.

# Instructional Strategies

Development experts tell us that children readily comprehend the idea of a transaction: exchanging money for a toy, for example. Asking questions about such an exchange usually yields accurate answers. What is harder is to understand the concept of an economic *system*. For example, many primary students cannot give a good answer if asked, "Where does the toy store get the money to buy its toys?" The idea of customer spending as providing the money to restock toys will not come naturally to most elementary children.

Therefore it is important to get students thinking in system terms at an early age. SOL 1.7 helps students to see themselves both as buyers (consumers) and sellers (producers) of goods and services. This is a natural followup to kindergarten exploration of people and jobs (SOL K.6). Teachers can help students develop a systems



perspective by taking advantage of "teachable moments" that arise in the elementary school day. Any time that you get the opportunity to ask where something came from or where it went, you help students develop a systems perspective. It can be as simple as asking where a stamp came from (the post office) and asking where the letter will go after you drop it into the mailbox.

A systems perspective also leads students to understand the circular flow of economic activity: the movement of money and products from consumers to producers and back. Try to get students to begin to understand that money never really stops flowing in our economy. It goes to the store to buy things, to be sure, but then the store uses the money to restock, pay its workers, and so on. Everyone who then receives money also spends or saves it.

Fortunately, authors in children's literature have written a number of books that help students think using a systems perspective. Lessons referred to at the end of this section can help your students begin to think about the bigger picture.



# **⊃**Activity

### Hit-and-Run Activities

Activity 1: Sellers (Producers) and Buyers (Consumers) (SOL 1.7, adaptable to grades 1-5)

MATERIALS: Blackboard or overhead projector and screen; Producer and Consumer Cards from Card Master 2-1; Transparency 2-1.

SAY: Now we are going to learn about the difference between consumers and producers. A consumer is somebody who buys something to use. A producer is somebody who makes something to sell.

ASK: If a farmer grows an apple and sells it to me, who is the producer? (the farmer.) Who is the consumer? (the teacher.)

DISTRIBUTE Producer and Consumer Cards.

SAY: Now we are going to look at some examples of consumers and producers. I am going to show them to you and I want you to hold up a card. Hold up a "consumer" card if I am showing you a picture of a consumer. Hold up a "producer" card if I am showing you a picture of a producer.

DISPLAY first picture of Transparency 2-1 (use a piece of cardboard or paper to keep other pictures covered); or, write a description on the blackboard.

OBSERVE student responses and DISCUSS whether each picture represents a producer or a consumer.

SAY: Remember how we started by thinking about a farmer who sold me an apple? We said the farmer is a producer.



ASK: Do you think that farmer will ever be a consumer? (yes, when the farmer buys something). Do you think all producers become consumers? (Yes)

SAY: So we are all consumers, one time or another.





Activity 2: The Airplane Factory (SOL 1.7, 3.8, adaptable to grades 1-5)

MATERIALS: Play money (See Card Master 2-1), Copies of "How Airplanes are Made" (Worksheet 2-2), airplane patterns (Pattern 2-1), duplicated to equal the number of students, crayons or colored pencils.

SAY: Today we are going to learn about how producers depend on consumers. And we are going to learn about how consumers depend on producers. We are going to do this by pretending we have an airplane factory right here in the classroom. Some of you will be making airplane parts, some of you will be making airplanes, and some of you will be buying airplanes.

DIVIDE the class into thirds.

SAY (to all students): When you are not working on the airplanes, you should be reading "How Airplanes are Made" and answering the questions.

SAY (to the first third): You will be making airplane parts. You start with these patterns (DISPLAY patterns). Then you color three of them right where it says "COLOR THIS TRIANGLE." Then, color them to add any decorations you would like – <u>but do not fold</u> <u>it; that is not your job</u>. You have just produced airplane parts. Now you will sell your airplane parts, getting money in exchange from the airplane makers.

SAY (to the second third): You are airplane makers. You will use your play money to buy three pages of airplane parts from the parts makers. Then you will fold the paper into airplanes and sell them to the airplane buyers, getting money in exchange from them.

SAY (to the final third): You are airplane buyers. You will use your play money to buy the finished airplanes from the airplane makers. Then, when I



say "go," you get to fly them across the room. We will fly them several times. Finally, I will have you bring me all the airplanes and we will answer some questions.

REMIND students that when they are not working on the airplanes, they are to be completing Worksheet 2-2.

DIRECT the airplane parts makers to begin making parts with their duplicated sheets. When all are finished, then have them exchange their parts for money from the airplane makers. If you use the included money templates, the price should be \$1 million per page of parts.

DIRECT the airplane makers to fold the pages into paper airplanes. Wait until all are finished, then have them exchange their finished airplanes for money from the airplane buyers. If you use the included money templates, the price should be \$2 million per completed airplane.

DIRECT the airplane buyers to test-fly each airplane. When all have been test-flown. ASK students to collect all the airplanes and bring them to you.

SAY: Remember that today we are learning how producers and consumers depend on each other. "Depending on each other" is the meaning of a big word called "interdependence."

ASK: What would have happened to our airplane factory if no one had provided the parts? (Could not have made any airplanes without parts.)

ASK: What could the airplane buyers have gotten if no one had made airplanes? (Nothing.)

SAY: So we can see that buyers and sellers depend on each other. They are "interdependent."

ASK: How do you think the airplane part makers could buy the things they need and want, now that they have been paid? (Take the money to the store and purchase.)



ASK: If the airplane makers wanted to build some more airplanes now, would they have any money to buy parts? (Yes, the money that came from selling airplanes.)

SAY: In the real world, money never really stops flowing. It goes from producers to consumers to stores and back all over again. All along the way, producers and consumers are interdependent.



## Transparency and Card Masters Transparency Master 2-1

	Chris gets permission to buy a jacket before cold weather comes.
	Mr. Sanchez owns a company that builds new houses
A A F	Mrs. Richardson is a beekeeper. She prepares jars of honey and takes them to a roadside stand.
	Mr. Kelsey gets a cake and candles for Chris's birthday party.
	Ms. Moore has a family haircut shop where she cuts the hair of men, women, boys and girls.

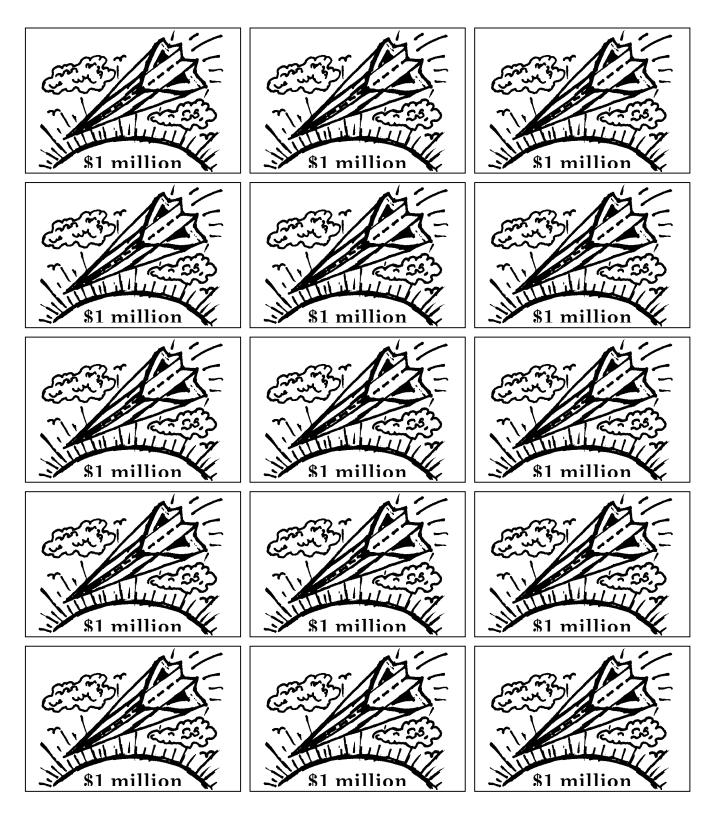


Card Master 2-1

PRODUCER	PRODUCER	PRODUCER	PRODUCER
PRODUCER	PRODUCER	PRODUCER	PRODUCER
	PRODUCER	STORE CONSUMER	CONSUMER
TRODUCER	TRODUCER	CONCOMEN	CONCOMEN
STORE	STORE CONSUMER	STORE CONSUMER	STORE CONSUMER
1	1	1	1
			CONSUMER
		PRODUCERPRODUCERPRODUCERPRODUCERPRODUCERPRODUCERPRODUCERPRODUCERPRODUCERPRODUCERSTORESTORESTORESTORECONSUMERCONSUMERSTORE	PRODUCERPRODUCERPRODUCERPRODUCERPRODUCERPRODUCERPRODUCERPRODUCERPRODUCERPRODUCERPRODUCERSTOREPRODUCERPRODUCERCONSUMERSTORESTORESTORECONSUMERSTORE



### Card Master 2-2

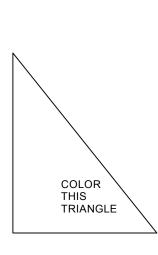




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Pattern 2-1 Paper Airplane Pattern

> COLOR THIS TRIANGLE





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### Worksheet 2-1

Name \_\_\_\_\_

Look at the pictures below. Decide whether a *consumer* or a *producer* is being described. Then check the correct box, "consumer" or "producer."

	Chris gets permission to buy a jacket before cold weather comes.	
Gulf *G	Consumer Producer	
	Mr. Sanchez owns a company that builds new houses.	
	Consumer Producer	
HONEY :	Mrs. Richardson is a beekeeper. She prepares jars of honey and takes them to a roadside stand.	
	□ Consumer □ Producer	
LLL .	Mr. Kelsey gets a cake and candles for Chris's birthday party.	
A Contraction	Consumer Producer	
	Ms. Moore has a family haircut shop where she cuts the hair of men, women, boys and girls.	
	Consumer Producer	



### Worksheet 2-1 Answers

Name \_\_\_\_\_

Look at the pictures below. Decide whether a *consumer* or a *producer* is being described. Then check the correct box, "consumer" or "producer."

	Chris gets permission to buy a jacket before cold weather comes.	
Gull * G	⊠Consumer □ Producer	
	Mr. Sanchez owns a company that builds new houses.	
	Consumer IProducer	
HONEY :	Mrs. Richardson is a beekeeper. She prepares jars of honey and takes them to a roadside stand.	
	□ Consumer	
All Income	Mr. Kelsey gets a cake and candles for Chris's birthday party.	
A Company of the second	⊠ Consumer □ Producer	
	Ms. Moore has a family haircut shop where she cuts the hair of men, women, boys and girls.	
	□ Consumer	



Name \_\_\_

Read the story below, then answer the questions.

Workers make airplanes in big factories. First, the parts are brought in. These parts have to be light. If they were too heavy, the airplane could not fly. These parts have to be strong. The airplane must take off and land many times.

Workers make airplanes in teams. The team members must work together. One team puts together the wings and outside parts. Another team puts the engines in place. Every team has a job to do.

Workers must be careful. Their work is checked many times. Mistakes might keep the airplane from flying as it should.

When the airplane is ready, workers paint the outside. They finish the inside. Now the airplane is ready for testing. Test pilots fly the airplane to make sure everything is right.

Finally, the airplane is ready to go.

- 1. Why do airplane parts have to be light?
- 2. Why do airplane workers have to be careful?
- 3. What is the job of a test pilot?
- 4. Would you like to make real airplanes someday?



Name \_\_\_\_

Read the story below, then answer the questions.

Workers make airplanes in big factories. First, the parts are brought in. These parts have to be light. If they were too heavy, the airplane could not fly. These parts have to be strong. The airplane must take off and land many times.

Workers make airplanes in teams. The team members must work together. One team puts together the wings and outside parts. Another team puts the engines in place. Every team has a job to do.

Workers must be careful. Their work is checked many times. Mistakes might keep the airplane from flying as it should.

When the airplane is ready, workers paint the outside. They finish the inside. Now the airplane is ready for testing. Test pilots fly the airplane to make sure everything is right.

Finally, the airplane is ready to go.

1. Why do airplane parts have to be light?

So the airplane can fly; cannot be too heavy.

2. Why do airplane workers have to be careful?

Mistakes might keep the airplane from flying as it should.

3. What is the job of a test pilot?

Fly the completed airplane to make sure everything is right.

4. Would you like to make real airplanes someday?

(Open-ended; answers will vary.)



### Additional Resources on Producers and Consumers

### **Online resources**

Lesson (Grades 1-2): *Going To Town by Laura Ingalls Wilder* Concepts: resources, trading, interdependence, consumers, producers <u>http://www.mcps.k12.md.us/curriculum/socialstd/grade2/Going\_Town.html</u>

Comic Book (Grades 2-7): *Wishes and Rainbows* Concepts: scarcity, resources, opportunity cost <u>http://ecedweb.unomaha.edu/ve/library/WISH.PDF</u> (color Adobe Acrobat file)

Online story: *King Midas and the Golden Touch* Concept: limited resources <u>http://www.uexpress.com/ups/features/ts/archive/ts970817.html</u> Note: This online version does not include material featuring the economic content of the story; however, you can make the point with students that when King Midas was granted the golden touch, making his resources limitless, he had to give up the things he valued most. See also the printed lesson on the story of King Midas below.

### **Printed lesson plans**

Lesson (Grades 1-3): Ox-Cart Man

Concepts: goods, producers and consumers, businesses, resources, market, circular flow of economic activity. From *Economics and Children's Literature 1994 Supplement* (St. Louis: SPEC Publishers, Inc., 1994). (SPEC Publishers can be contacted at 1006 Regency Manor Dr., Ballwin, MO 63011 or at (636) 891-0043.)

Lesson (Grades K-2): Lesson 6: Mystery Workers Concepts: goods, services, consumers, resources, human resources, workers, producers, natural resources, capital resources. From Master Curriculum Guide in Economics: Teaching Strategies K-2 (New York: National Council on Economic Education, 1992, viewable and printable in Virtual Economics).



Lesson (Grades 1-3): *Mr. Cookie Baker* Concepts: intermediate goods, natural resources, human resources, capital resources From *Economics and Children's Literature* (St. Louis: SPEC Publishers, Inc., 1993, viewable but not printable in *Virtual Economics*). (SPEC Publishers can be contacted at 1006 Regency Manor Dr., Ballwin, MO 63011 or at (636) 891-0043.)

Lesson (Grades 4-6): *The Adventures of King Midas* Concepts: scarcity, goods, services, resources From *Economics and Children's Literature 1994 Supplement* (St. Louis: SPEC Publishers, Inc., 1994). (SPEC Publishers can be contacted at 1006 Regency Manor Dr., Ballwin, MO 63011 or at (636) 891-0043.)

#### Video resource

Reading Rainbow: Ox-Cart Man From the PBS Reading Rainbow series, this video introduces students to Ox-Cart Man. <u>http://mall.unl.edu/gpn/index\_rr.ihtml</u> (Note: There is an underscore character \_ between index and rr in the above address.)





# <u>Section 3: The Market</u> <u>Economy</u>

### 1.8

The student will explain that people make choices because they cannot have everything they want.

### 2.9

The student will explain that scarcity (limited resources) requires people to make choices about producing and consuming goods and services.

### 3.8

The student will recognize the concepts of specialization (being an expert in one job, product, or service) and interdependence (depending on others) in the production of goods and services (in ancient Greece, Rome, the West African empire of Mali, and in the present).

### 3.*9*

The student will identify examples of making an economic choice and will explain the idea of opportunity cost (what is given up when making a choice).

### VS.10c

The student will demonstrate knowledge of government, geography, and economics by c) explaining how advances in transportation, communications, and technology have contributed to Virginia's prosperity and role in the global economy.

### Content Briefing

The market economy is based on choice: consumers choosing what to buy and producers choosing what to offer for sale. Our economic system in all its complexity goes back to individual choices by consumers and producers. Children can learn a great deal about choice making, even beginning



in the primary grades.

Everyone makes choices, but there are many different ways of arriving at them. One possibility is to choose rashly, without thinking. Another possibility is to choose after a careful process of weighing alternatives and benefits and costs. Most of us fall somewhere between those two possibilities, giving some thought to alternatives but not researching them extensively. Economics can help us make better choices by guiding us into a thoughtful, even if brief, consideration of benefits and costs.

SOL 1.8 calls on students to understand that people must make choices because of scarcity. Implicitly it calls for students to begin learning about opportunity cost, although the term does not appear until SOL 3.9, which calls for students to "identify examples of making an economic choice" and "explain the idea of opportunity cost." These skills are important to students' future well being.

In addition to being important to students' decisionmaking abilities, opportunity cost and related concepts explain why we have specialization and interdependence. Why do we have people who specialize as plumbers, instead of just fixing pipes ourselves? Because the opportunity cost for most people would be so high - training, practice, and bungled repairs. Instead, it pays for most of us not to *be* plumbers, but to *hire* plumbers when the occasion calls for it. (It also pays for a small number of people to specialize in being plumbers. make their income that way, and use that income to get the things they want and need.) But then, in the presence of specialization, we have to depend on plumbers to get our pipes fixed; we cannot do the job ourselves. SOL 3.8 and 3.9 describe a common pattern in economics: Opportunity cost leads people to specialize, which makes them interdependent. This is such a basic pattern of human behavior that it has applied across history and applies today.

As people consider opportunity cost and make their choices, it becomes clear that being able to choose goods and services from a wider area is favorable. It also becomes clear that being able to sell one's specialized skill to a wider area also provides advantages. For most of our history as a nation, many markets were local because people could not communicate over a wide area in order to make a deal. Even if they could have, they could not ship the output economically when the deal was made.

SOL VS.10c reflects the broadening of markets made possible by transportation and communication. This process has continued with few pauses in our history. Whether it was



the Erie Canal or the invention of the telephone, each advance in commercially applicable technology has made it easier to conduct both parts of an economic trade:

- 1. Making a deal with someone else
- 2. Shipping the output to complete the transaction.

In fact, the technology and services boom that began in the 1990s meant that increasingly there was not any output to be shipped. Consider, for example, how low the shipping cost of a movie is relative to the value of admissions revenues it can generate – or the tiny cost of offering a financial service delivered over the Internet. This is far different from the heavy-industry model of the earlier 1900s, in which a factory would produce an industrial product like steel and ship it by railroad.

Although SOL VS.10c deals mainly with history, the impact of improved transportation and communication are continuing to be felt all around us. Current events provide new examples every day.

### Instructional Strategies

The intuition of choice making rarely comes easily to students. Students live in a world that pressures people to make up their minds quickly, everywhere from the athletic field to the service line at a fast-food restaurant. Even our entertainment stresses quick or impulsive decision making by the hero. As a result of all these influences, some students will have very little exposure to a model in which a decision-maker carefully weighs alternatives before coming to a conclusion. If you ask such students, "What would we need to think about before coming to a decision?" they may jump ahead to what the choice should be.

One method to promote good choices in such a setting is to take students, step by step, through a structured model for decision making. You can model good decision making in the classroom as you guide students through choices that they face, individually or (preferably) as a class. One such model, referred to as "**PACED**" for the first letters of the steps, calls for the decision maker to:

- define the **P**roblem
- state the Alternatives
- determine the Criteria for making a decision



- Evaluate the alternatives in light of the criteria, and
- **D**ecide on one of the alternatives.

Although this specific order and wording are not important, the idea is: actually considering the problem and alternative solutions before coming to a decision.

The first step may be the most important. Think about a school deciding on how to improve its computer access for students. If teachers and administrators begin working on the question as, "How can we get more computers into classrooms?" then they may already have foreclosed highly relevant alternatives such as computer labs. If teachers and administrators refine the question before starting, they leave possibilities for creative thought open. The question might really be, "How can we enhance our students' technology education?"

The second step is stating alternatives. Alternatives are different choices that could actually be made by the decision maker. Remember not to be too critical when alternatives are being stated. It is easier to narrow down a too-long list of alternatives than it is to expand a narrow set. At the same time, the alternatives must be choices that are open to the decision maker. In the school computers example, "Congress allocates more money for computers" is not a well-framed alternative for local decision makers. It would be nice if it happened, but local school officials cannot decide to make it happen. They can decide to lobby, they can write their members of Congress; those are all alternatives for them, but "Congress allocates more money for computers" is not.

The third step is determining criteria for making a decision. Many younger students do not naturally have the mental discipline to think about criteria; if you ask them "what to think about when choosing a pet," their response will be, "I want a dog." They have to be guided into thinking, for example, that space, companionship and cost are the criteria people think about when they are deciding on a pet. In the school computers example, criteria might include student access, availability of space, availability of staff and cost.

The fourth step is to evaluate the alternatives using the criteria. Even now, you are still not saying what alternative is best. The focus is on how well each of the alternatives meets the criteria. A school computer lab, for



example, might score moderately well on student access but low on availability of space.

The fifth and final step is to choose an alternative. Only now is it appropriate to close out the process by choosing one alternative over the others. There will generally be a runner-up – the next best alternative. This is a good time to remind students about the concept of opportunity cost, or "what you give up." You give up the benefits of the runner-up when you choose. You get the benefits of the alternative you consider the best. A school committee choosing a computer lab gives up the benefits of the alternative it considers next best, such as rolling computers on carts assigned to classrooms.

One final note about decision making: Some people would be astounded at how defining a problem and discussing criteria and alternatives would improve the quality of decision making in adult meetings. You may notice that some of your most unproductive decisionmaking meetings as an adult are those in which the discussion goes around and around without ever defining the problem. We can do better than that, just as our students can.



# **⊃**Activity

### Hit-and-Run Activities

Activity 1: Why Do We Have to Choose? (SOL 1.8, adaptable to grades 1-5)

MATERIALS: Blackboard or overhead projector and screen; Transparency 3-1.

SAY: Every day we have to make choices. For example, you might decide to go on a campout Friday night or you might decide to go to the football game.

ASK: **Why can you not do both?** (Cannot be in two places at the same time, do not have enough time.)

SAY: Often we do not have enough time to do all that we want to do. Time is then a limited resource – we only have so much of it and no more. In fact, every resource we can think of is limited.

DISPLAY the first choice on Transparency 3-1. (use a piece of cardboard or paper to keep other choices covered); or, write a description on the blackboard.

SAY: Now we are going to look at some choices. In each case I want you to tell me why we have to choose. That is, what is the limited resource in each choice?

DISCUSS each choice with the students and what the limited resource is.

ASK: Can you imagine what it would be like to live in a world where we all could have anything we wanted? What would that be like? (INVITE student responses.)

SAY: If we lived in a world of unlimited resources, things would be different. Then there would not be any scarcity. But because we face limited resources, we have to choose. (Redefine scarcity – the inability to satisfy all wants at the same time.)





### Activity 2: Trade-a-Bag

(SOL 1.8, 3.9, VS.10c; adaptable to grades 1-5)

MATERIALS: One bag for each student with a few small goodies inside, such as wrapped pieces of candy or toys of the kind found in fast-food kids' meals; blackboard or overhead projector and screen; Transparency 3-2. Be prepared to divide your classroom in half.

SAY: Today we are going to see how transportation and communication affect people. Transportation is moving things or people from place to place.

ASK: **Can you give some examples of transportation?** (getting to school on the bus, trucks moving things)

SAY: Communication is moving ideas or information from place to place.

ASK: Can you give me some examples of communication? (a television broadcast, talking with friends in the hall).

SAY: I am going to give each of you a bag. The bag and everything in it will be yours to keep. Do not do anything with it yet, though; hang on to everything and – this is important – do not show anyone what you got. Your bag is your secret.

DISTRIBUTE bags, one to a student. Give students a moment to see what is in the bags.

ASK: Would you like to know what is in everyone else's bag? What would it be called if we learned about what is in other people's bags, transportation or communication? (communication, since nothing moved).

SAY: You may now show each other what is in the bags, but for now you must keep everything you have.

MONITOR students as they examine items.



SAY: It is interesting to see what is in other people's bags. In a minute, I am going to give you a chance to get up and trade, but only with the people in your half of the classroom. (DEMONSTRATE boundary). You may now trade with anyone in your half of the classroom, but only if that person wants to trade. Nobody has to trade.

MONITOR students as they trade.

ASK: When you took your bags around on your side of the classroom, was that transportation or communication or both? (transportation because goods moved, but there was communication too)

ASK: Do any of you like what you have better, now that you have traded? (yes, typically)

SAY: Now in a minute we are going to open up the whole classroom to transportation and communication. You may trade with anyone on either half of the classroom, but only if that person wants to trade. Nobody has to trade.

MONITOR students as they trade.

ASK: Do any of you like what you have better, now that you have traded across the whole classroom? (yes, typically)

SAY: That is the way transportation and communication work. At stores you can see what is for sale and trade money for things if you want. As there is more and more transportation and communication, you can see more things for sale and then make up your mind. In our country, for years the transportation and communication have been getting better. Today we can buy and sell things across the state, across the nation and around the world. But it is not that different from trading things in a classroom.



## *Transparency Masters* Transparency Master 3-1

	ГЧ
What is the limited resource?	
Answer:	
	Terry has to decide whether to buy new shoes or a new sweatshirt because there's not enough money for both.
What is the limited resource?	
Answer:	
	Yolanda has to decide whether to play softball or
	soccer because both teams practice at the same time.
What is the limited resource?	
Answer:	ARE TO A AREA AREA AREA AREA AREA AREA AREA A
	Mr. Davis has to decide whether to plant pumpkins or watermelon because he only has a small area left in his garden.
What is the limited resource?	
Answer:	
	Nicolas has one flower but would like to give a flower to both his teacher and his bus driver.
What is the limited resource?	
Answer:	
	The Kohen family would like to spend a day at the theme park and a day at the baseball game, but there is only one day available for a trip.



Transparency Master 3-2

Transportation is moving things or people from place to place.

Can you give some examples of transportation?

Communication is moving ideas or information from place to place.

Can you give some examples of communication?

Step 1. Look at what is in your bag, but keep it secret.

Step 2. You may trade with people in your half of the classroom.

Step 3. You may trade with people anywhere in the classroom.



Name \_\_\_\_\_

Look at the pictures below. Each time, someone has to make a decision because a resource is limited. Think about what the limited resource is, and write your answer in the blank.

What is the limited resource?	
Answer:	E for our work
	Terry has to decide whether to buy new shoes or a new sweatshirt because there's not enough money for both.
What is the limited resource?	
Answer:	
	Yolanda has to decide whether to play softball or soccer because both teams practice at the same time.
What is the limited resource?	
Answer:	ARE TO A CONTRACT OF THE AREA
	Mr. Davis has to decide whether to plant pumpkins or watermelon because he only has a small area left in his garden.
What is the limited resource?	•
Answer:	
	Nicolas has one flower but would like to give a flower to both his teacher and his bus driver.
What is the limited resource?	
Answer:	
	The Kohen family would like to spend a day at the theme park and a day at the baseball game, but there is only one day available for a trip.



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### Answers to Worksheet 3-1

Name \_\_\_\_\_

Look at the pictures below. Each time, someone has to make a decision because a resource is limited. Think about what the limited resource is, and write your answer in the blank.

What is the limited resource?	
Answer: <u>Money</u>	Terry has to decide whether to buy new shoes or a new sweatshirt because there's not enough money for both.
What is the limited resource?	
Answer: <u>Time</u>	
	Yolanda has to decide whether to play softball or
What is the limited resource?	soccer because both teams practice at the same time.
Answer: <u>Garden space</u>	Mr. Davis has to decide whether to plant pumpkins or watermelon because he only has a small area left in his garden.
What is the limited resource?	
Answer: <u>Flower</u>	Nicolas has one flower but would like to give a flower
What is the limited resource?	to both his teacher and his bus driver.
Answer: <u>Time</u>	The Kohen family would like to spend a day at the theme park and a day at the baseball game, but there is only one day available for a trip.





### Worksheet 3-2 (optional)

Name \_\_\_\_\_

We can learn about transportation and communication by keeping track of what is in our bags and what we do with them.

1. What was in your bag when the teacher gave it to you? Write in the box to the right.			
2. Did you trade for anything on your half of the classroom? Write what it was in the box to the right.			
3. Were you happier, less happy or the same after you traded with someone on your side of the classroom? Check a box under one of the symbols in the box to the right.	Happier	Less Happy	□ The Same
4. Did you trade for anything when you could go to the entire classroom? Write what it was in the box to the right.			
5. Were you happier, less happy or the same after you traded with someone on your side of the classroom? Check a box under one of the symbols in the box to the right.	☐ Happier	Less Happy	□ The Same





### Sample Filled-in Worksheet 3-2 (optional) Name

We can learn about transportation and communication by keeping track of what is in our bags and what we do with them.

<ul> <li>1. What was in your bag when the teacher gave it to you? Write in the box to the right.</li> </ul>	Pencil, one piece of candy, small empty bottle
2. Did you trade for anything on your half of the classroom? Write what it was in the box to the right.	Traded pencil for a sticker
3. Were you happier, less happy or the same after you traded with someone on your side of the classroom? Check a box under one of the symbols in the box to the right.	Image: Weight of the same
4. Did you trade for anything when you could go to the entire classroom? Write what it was in the box to the right.	Did not trade
5. Were you happier, less happy or the same after you traded with someone on your side of the classroom? Check a box under one of the symbols in the box to the right.	Image: Happier       Image: Less Happy       Image: Less Happy



### Additional Resources on the Market Economy

### **Online resources**

Lesson: *For Rent* Concepts: production, opportunity cost, decision making, scarcity <u>http://www.mcps.k12.md.us/curriculum/socialstd/grade2/For Rent.</u> <u>html</u> (Note: There is an underscore character \_ between For and Rent in the above address.)

Lesson: *Homer Price (The Doughnuts)* Concepts: capital resources, increasing productivity, law of demand, quantity demanded <u>http://ecedweb.unomaha.edu/litdough.htm</u>

Lesson: *Lesson 4: Why Do I Want All This Stuff?* Concepts: demand, determinants of demand, tastes and preferences, substitutes, complements, advertising <u>http://ecedweb.unomaha.edu/lessons/want3-5.pdf</u>

### **Printed lesson plans**

Lesson (Grades 3-4): Lesson 4: People's Wants Stimulate Production Concepts: producer, consumer, supply, demand, profit, advertising. From Children in the Marketplace (New York: National Council on Economic Education, 2d ed. 1986, viewable and printable in Virtual Economics).

Lesson (Grades 3-4): *Lesson 4: Olympic-Minded Decisions* Concepts: decision making, opportunity cost, alternatives, criteria (illustrates a variant of the PACED model referred to as PACE).

From Master Curriculum Guide in Economics: Teaching Strategies 3-4 (New York: National Council on Economic Education, 1994, viewable and printable in Virtual Economics).



Lesson (Grades 1-3): *Something from Nothing* Concept: opportunity cost.

From *Economics and Children's Literature – Supplement 2* (St. Louis: SPEC Publishers, Inc.: 1998) (SPEC Publishers can be contacted at 1006 Regency Manor Dr., Ballwin, MO 63011 or at (636) 891-0043.)

### Lesson (Grades K-3): What If?

Concepts: specialization, interdependence, goods, services, resources.

From *Economics and Children's Literature – Supplement 3* (St. Louis: SPEC Publishers, Inc.: 1998) (SPEC Publishers can be contacted at 1006 Regency Manor Dr., Ballwin, MO 63011 or at (636) 891-0043.)

# **Video Resource** (with printed teacher's guide and accompanying lesson)

Lesson (Grades 1-4, but adaptable for K-5) *Lesson 3: Consumption* and *Lesson 4: Production* 

From *Econ and Me* (Video series: Agency for Instructional Technology, 1989). Series description: Children learn how to work through economic problems guided by a friend that only they can see, Jeremiah E. Connery, who is known as "Econ" for short.

Note: Virginia was part of a consortium that funded production of *Econ and Me*. As part of the consortium, the state received a license to copy and distribute *Econ and Me* for educational use. Copies are available at many school and district media centers. In addition, school divisions may get new copies of the *Econ and Me* videotapes for the cost of blank tapes plus shipping. The contact for this service is Jim Calleran at the Virginia Department of Education, (804) 225-2972.





# <u>Section 4: Production</u> <u>and Consumption</u> <u>in Virginia History</u>

VS.3 The student will demonstrate knowledge of the first permanent English settlement in America by f) describing the hardships faced by settlers at Jamestown and the changes that took place to ensure survival.

VS.4 The student will demonstrate knowledge of life in the Virginia colony by a) explaining the importance of agriculture and its influence on the institution of slavery.

VS.7 The student will demonstrate knowledge of the issues that divided our nation and led to the Civil War by

a) identifying the events and differences between northern and southern states that divided Virginians and led to secession, war, and the creation of West Virginia.

VS.8 The student will demonstrate knowledge of the reconstruction of Virginia following the Civil War by c) describing the importance of railroads, new industries, and the growth of cities to Virginia's economic development.

VS.9 The student will demonstrate knowledge of twentieth century Virginia by a) describing the economic and social transition from a rural, agricultural society to a more urban, industrialized society, including the reasons people came to Virginia from other states and countries.



VS.10 The student will demonstrate knowledge of government, geography, and economics by c) explaining how advances in transportation, communications, and technology have contributed to Virginia's prosperity and role in the global economy.

### **Content Briefing**

At key points in Virginia's history, knowledge of economics is critical to understanding that history. Nowhere is this clearer than in the study of the Virginia colony. Recall that economics is the study of choice under scarcity. It is difficult for students today even to imagine the degree of scarcity under which the Virginia colonists lived. However, it is important for them to understand the scarcity of the time and the choices colonists made.

Beginning with the primary grades, students have been taught that needs must be satisfied while wants are optional. The original Jamestown settlers faced a daily struggle to provide just the basic needs – a struggle that ended in death for the large majority of those present in the winter of 1609-1610 (the "Starving Time").

Years later, after the initial problems of survival had been met, the Virginia colony became a strong economic contributor based on the economic principle of comparative advantage: that all parties to a trade can be better off if each specializes in activities that can be done at a lower opportunity cost. (An area, region or nation is said to have a comparative advantage in producing a good if it can do so at a lower opportunity cost than a trading partner.) Although the standards do not introduce directly the comparative advantage principle, knowing the theory will help you teach Virginia's economic development.

Virginia's comparative advantage was in tobacco production and, to a lesser extent, production of raw materials such as timber for manufacturing. The relationship was mutually beneficial to Virginia and to England, and England grew to depend on raw materials from the Virginia colony even as the colony continued to depend on England for manufactured goods.

Even a mutually beneficial relationship, however, can develop strains, and over time conflict grew between England and the Virginia colony. Through taxation, England tried to appropriate a large share of the profit that comparative advantage made possible. England did this without allowing the colonists representation in the taxation decisions.



"Taxation without representation" was one of the strains that led Virginians to participate in the events that resulted in war with England.

Economics also is critical in understanding Virginia's transition from a rural, agricultural society to a more urban, industrialized society. The two key concepts are choice and opportunity cost. The transition to a more urban, industrialized society occurred not because some General Assembly decreed it would happen, but rather because of the combined effects of Virginians' individual choices. Rural Virginia offered a familiar lifestyle, but (by modern standards) at a relatively low standard of living and a great deal of risk. Life in an agricultural economy depends to a great extent on factors such as weather that are beyond the individual farmer's control. The newly urbanizing sections of Virginia offered a different way of life with higher material standards that were, nonetheless, also low by modern standards.

The history of Virginia, economically, is one of increasingly broad markets over time. Transportation and communication at the time of the Virginia colony permitted only limited trading relationships, and British restrictions reduced the scope of trade further at times. Trading relationships broadened during the early national period and, interrupted only by the Civil War, continued to expose Virginia consumers and producers to a wider marketplace throughout the 19th century. In the 20th century there were major advances in technology. Freight ships increased in cargo capacity by a factor of ten, while the ability to communicate around the globe became commonplace. Virginians entered the 21st century with the ability to (1) make a deal to supply goods or services almost anywhere on the planet and (2) ship the output to complete the deal. At the same time, the mass of what Virginians ship has decreased dramatically. At the time of the Virginia colony, selling output meant shipping large quantities of tobacco. Today, selling output can mean shipping a tiny but high-value semiconductor product - or even shipping nothing at all, as with Northern Virginia-based America Online's Internet service.

### Instructional Strategies

In teaching economic history Standards of Learning, Virginia teachers face a lack of Virginia-specific materials. In many cases, historical sources are sketchy on just how the economy of colonial Virginia worked. This lack of specific materials calls for teachers to follow several



strategies:

- carefully use the Virginia-specific materials that are available
- adapt U.S. history materials as suitable
- occasionally make inferences based on general knowledge of colonial times.

Learning history can help students learn economics, but it doesn't happen automatically. Sometimes the traditional materials used to teach history do not highlight economic factors, even when economic forces were vital in shaping the history. Here are some techniques that can promote simultaneously teaching history and economics, with both disciplines reinforcing each other:

- Emphasizing *choices* that people made in history. After the fact, history is linear in that people made the choices that they did and the consequences followed. But at the time they chose one alternative over another, people in history could have gone in different directions. Role-plays and writing assignments that put students into the position of historical figures can help them to better understand the motives of those figures. For example, the hitand-run activity below, "Go or Stay," calls for students directly to consider the choices faced by the three groups.
- Emphasizing reading from children's literature and followup on that reading. When students read historical fiction and nonfiction, they concentrate their reasoning abilities on characters in other places and times, and on the situations they faced. Followup can reinforce the intended lessons from a given piece of children's literature. An example is *The Double Life of Pocahontas*, along with activities in "The Virginia Company, Colonists and Indians," cited in the lesson plan section below.
- Emphasizing *reading of original sources*. Although archaic spellings and forms of expression challenge students, there is a sense of excitement in reading words actually written by historical figures that



cannot be matched in reading distilled text accounts by modern authors. The key for classroom teachers is to choose short selections on interesting topics, then have students answer questions that make them think about the world inhabited by the writer. The Internet has made original sources more widely accessible than ever before; for example, there is easy access to William Pitt's speech against the Stamp Act on Colonial Williamsburg's site (<u>http://www.history.org/</u>).

• Emphasizing the *limited knowledge* that historical decision makers had. Students can increase their analytical abilities when asked to do history writing projects if they are specifically reminded to use only information that would have been available at the time. For example, a student writing on whether or not Virginia should secede from the Union in 1860 should approach the question using, as much as possible, only the information available at the time. It is difficult for modern students, who know the outcome of the war, but it is worthwhile.

Throughout the study of history and economics, the teacher's attitude toward the subject is contagious to students. Treating Virginia's past as an interesting adventure by fascinating people will pay dividends in student enthusiasm.



# Hit-and-Run Activities

# Activity

# Activity 1: The Barn-Raising

(SOL 3.8, VS.3f; adaptable to grades 3-5)

MATERIALS: Barn Raising Cards (from Card Master 4-1), one per student.

SAY: Today we are going to imagine what it was like to live in Virginia long ago, when farming was the major occupation and most Virginians did not live in cities.

ASK: Is farming an easy job? (Answers may vary, but students should know that farming has always involved hard work and uncertainty of outcomes.) Is it easy to live in the country instead of the city? (Not always; less convenient, fewer services.)

SAY: In Virginia when most people farmed, they depended on their barns for sheltering animals and storing feed.

ASK: How do you think a farmer felt if the barn burned? (Sad, disappointed, frightened for the future.)

SAY: In Virginia and in other places, it was a terrible thing for a barn to burn. But to help the farmer, the whole community would sometimes come together for a barn raising.

ASK: **Does anyone know what a barn raising is?** (It is when a community gets together to rebuild a barn for a neighbor.)

SAY: Today we are going to pretend that we are having a barn raising. I am going to pass out cards that will tell you what your job is.

DISTRIBUTE Barn Raising Cards, without regard to student abilities. This activity works best if some students receive jobs at which they are not good.



ASK several students to read cards, then ASK: Do you think you would do a good job at what your card says? (varied answers, depending on abilities).

ASK: Do you think you would be better at doing somebody else's job? (some will say yes).

SAY: In a minute, I am going to ask you to get up, walk around, and trade your job for another. You can only trade if you find someone willing to trade. Does everyone understand? (Clarify if necessary.)

DIRECT students to trade cards.

ASK: Did some of you trade cards? (Yes, probably.) Did you get a job you can do better? (Yes, probably).

SAY: Now I will ask for a show of hands. Raise your hand if you kept the same card. (OBSERVE number.) Now raise your hand if you traded cards with someone (OBSERVE number.) Now raise your hand *if* you traded with someone and now have a job you can do better than your original job. (OBSERVE number.)

SAY: We have just seen an example of trade, specialization and interdependence. You traded because you have different abilities, and you may be able to find something you can do better than the job you first had. You specialize because the barn raising goes better if people take specific jobs rather than doing a little bit of everything. And we are interdependent because we rely on each other to make the barn raising happen.

(Possible extension question)

ASK: What does a farmer do if the barn burns today – do we still have barn raisings? (No, not commonly.) Today we have insurance. That is when we pay money to insure against risk. If a farmer has insurance and the barn burns, the insurance pays the loss.



# ⇒Activity

Activity 2: Go or Stay? (SOL VS.9a, adaptable to grades 4-5)

MATERIALS: Transparencies 4-1 and 4-2, chalkboard or overhead projector and screen.

SAY: In modern times, Virginia has gone from being mostly a rural farming state to a state with cities and industries. Nobody told us to do this, but many Virginians made decisions that caused it to happen. We are going to have a look today at a fable, and then talk about the decision a family would have had to make in Virginia's past.

READ "The City Mouse and the Country Mouse," from Transparency 4-2, or have students read it, taking turns.

ASK: What was the advantage of living in the country? (Peace and quiet, though with limited food.) What was the advantage of living in the city? (More luxury, better food, but with higher risk)

ASK: This story was just a fable. Is the decision Virginians faced about moving into Virginia's cities in any way comparable? That is, are cities richer or poorer than the country? (Standards of living still higher in cities, probably, though with greater congestion and other disadvantages.) Is it riskier to live in the city or in the country, or are there risks in both? (Risks in both.)

SAY: Now we are going to look at a decision made by the Richard Allman family from Pittsylvania County. I will put you into groups and you will pretend you are the Allman family deciding whether to stay on the tobacco farm or move to Richmond.

DISTRIBUTE Worksheet 4-1 to students in groups.

MONITOR groups as they read and discuss alternatives.

CALL ON groups to explain their decisions.



SAY: Although we have looked at just one family's decision, millions of Virginians have faced the same decision. In large numbers, they have decided to move to Virginia's cities and give up the country life. This is a major reason that most Virginians live in cities today.





Transparency and Card Masters Transparency Master 4-1

The Country Mouse and the City Mouse

Once there was a country mouse who lived quietly in an old farmhouse. He was happy until one day when his cousin, the city mouse, came to visit.

The city mouse looked around at the country mouse's little den. He joined his cousin in a meal of bread crusts. Then he told his cousin, "I live in the city where we eat fine food every night and we hardly have to work at all. Come live with me and you will see!"

Now the country mouse was unhappy with his humble home. He packed his little mouse-bag and set off to the city with his cousin the city mouse.

When they got to the city, the city mouse led his cousin into a large dining room where the leftovers of a great feast were still on the table. "Come on up for some cheese and sweets," called out the city mouse as he jumped up on the table. The country mouse jumped up too and began to feast on finer food than he had ever seen in the country.

Just then, there was a noise in the hall and through the door came a pair of snarling, vicious dogs. "Dogs! Run for your life!" called out the city mouse. Both mice jumped down and scampered across the floor, just ahead of the snapping teeth of the dogs.

Finally they reached the safety of a hole in the wall. "I am going back to the country," said the country mouse. "A crust in peace is better than a feast in fear."



# The Allman Family's Decision



The year is 1947 and the Allman family has a decision to make. Richard Allman and his wife Elizabeth are tobacco farmers. They own their small farm in Pittsylvania County, Virginia. They have three children: Richard Jr., Alice and Louise. Richard, Jr. recently returned from serving in World War II and is willing to work on the family farm. During the war, however, Richard, Jr. learned about opportunities off the farm. He has friends in Richmond and he and his father can get jobs working in a factory there.

In a good year, the tobacco farm provides enough money for paying taxes and for buying all the things they need that they do not make on the farm. They raise crops and animals, and Elizabeth does a lot of canning, preserving and sewing. In a bad year, the tobacco crop does not provide enough money and they have to count on getting loans or using savings to get through to the next year.

The family likes what it has heard of life in Richmond but it also likes the country. In Richmond, they would make more money but would have to spend more, too, because they would no longer grow their own food. In Richmond, they would not have to worry if the weather turned out to be bad for growing crops, but they would face the possibility of losing their jobs.

The family gathers for a conference. Below list the advantages and disadvantages of the family's alternatives.

1. Stay on	Advantages
the Farm	
**~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
~~~~	Disadvantages
2. Move to	Advantages
Richmond	
	Disadvantages

Finally, check a box to indicate your decision: 
Stay
Move to Richmond



Worksheet 4-1



Names

# The Allman Family's Decision

The year is 1947 and the Allman family has a decision to make. Richard Allman and his wife Elizabeth are tobacco farmers. They own their small farm in Pittsylvania County, Virginia. They have three children: Richard Jr., Alice and Louise. Richard, Jr. recently returned from serving in World War II and is willing to work on the family farm. During the war, however, Richard, Jr. learned about opportunities off the farm. He has friends in Richmond and he and his father can get jobs working in a factory there.

In a good year, the tobacco farm provides enough money for paying taxes and for buying all the things they need that they do not make on the farm. They raise crops and animals, and Elizabeth does a lot of canning, preserving and sewing. In a bad year, the tobacco crop does not provide enough money and they have to count on getting loans or using savings to get through to the next year.

The family likes what it has heard of life in Richmond but it also likes the country. In Richmond, they would make more money but would have to spend more, too, because they would no longer grow their own food. In Richmond, they would not have to worry if the weather turned out to be bad for growing crops, but they would face the possibility of losing their jobs.

The family gathers for a conference. Below list the advantages and disadvantages of the family's alternatives.

1. Stay on	Advantages
the Farm	
*5	
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Disadvantages
2. Move to	Advantages
Richmond	
	Disadvantages

Finally, check a box to indicate your decision: 
Stay
Move to Richmond





The year is 1947 and the Allman family has a decision to make. Richard Allman and his wife Elizabeth are tobacco farmers. They own their small farm in Pittsylvania County, Virginia. They have three children: Richard Jr., Alice and Louise. Richard, Jr. recently returned from serving in World War II and is willing to work on the family farm. During the war, however, Richard, Jr. learned about opportunities off the farm. He has friends in Richmond and he and his father can get jobs working in a factory there.

In a good year, the tobacco farm provides enough money for paying taxes and for buying all the things they need that they do not make on the farm. They raise crops and animals, and Elizabeth does a lot of canning, preserving and sewing. In a bad year, the tobacco crop does not provide enough money and they have to count on getting loans or using savings to get through to the next year.

The family likes what it has heard of life in Richmond but it also likes the country. In Richmond, they would make more money but would have to spend more, too, because they would no longer grow their own food. In Richmond, they would not have to worry if the weather turned out to be bad for growing crops, but they would face the possibility of losing their jobs.

The family gathers for a conference. Below list the advantages and disadvantages of the family's alternatives.

1. Stay on	Advantages
the	Own farm and home
Farm	Like country life
	Disadvantages Times difficult when weather bad for crops Little opportunity for luxuries
2. Move to	Advantages
Richmond	Make more money
	More opportunity
	Disadvantages
	Would have to spend more money
	Uncertainty about job, future employment

Finally, check a box to indicate your decision: 
Stay
Move to Richmond





Card Master 4-1 Barn Raising Cards

BARN RAISER Carpenter Hammering, sawing, nailing	<b>BARN RAISER Go-fer</b> Run various errands
BARN RAISER	BARN RAISER
Carpenter's	Morale
Helper	officer
Assist	Keep everyone
carpenter	happy
BARN RAISER	BARN RAISER
Roofer	Child care
Build roof	worker
support system,	Take care of
roofing	the kids all day
BARN RAISER	BARN RAISER
Roofer's	Cook
Helper	Prepare meals
Assist roofer	for all workers
BARN RAISER	BARN RAISER
Door fitter	Clean-up
Build, fit and	Clean up messes
finish all doors	as they occur
BARN RAISER	BARN RAISER
Building	Support
Supervisor	Supervisor
Manage	Manage non-
construction workers	construction workers

Adapted from Getting a Grip on Your Money, 2002 by William C. Wood



# Additional Resources on Virginia History

# **Online resources**

Lesson: (Upper elementary-high school, grade not indicated, but adaptable with good links to materials) Lesson Two: *Eighteenth-Century and Twentieth-Century Forms Of Resistance* Concepts: resistance, taxation, colonies, Stamp Act, Revolutionary War <u>http://www.history.org/other/teaching/tchcrtwo.htm</u> (Note: This is part of Colonial Williamsburg's excellent site at <u>www.history.org.</u>)

Shenandoah National Park History

The transformation of Virginia from largely rural to increasingly urban highlighted different belief systems. The 1935 controversy over evictions of families to create the Shenandoah National Park provides history students today with a unique view of rural life in the 1930s. This site includes teaching materials, maps and original newspaper articles from the period. <u>http://jefferson.village.virginia.edu/vcdh/va</u>history/shenandoah.html

. . .

Virginia Indians

A site with links to comprehensive resources on the American Indian tribes of Virginia, their history and their culture.

http://www.lva.lib.va.us/state/agencies/maryd/INDIANS.htm

Virginia Civil War Guide Useful web site for educators on the Civil War in Virginia, though originally designed for tourism. <u>http://www.civilwar-va.com/</u>

# **Printed lesson plans**

Lesson (Grades 3-5): *Proprietor Colony* Concepts: colony, opportunity cost, proprietor, natural resources. From *Kaleidoscope USA* (St. Louis: Center for Economic Education, University of Missouri-St. Louis, 1992 viewable but not printable in *Virtual Economics*.)



Lesson (Grades 4-6): *The Virginia Company, Colonists, and Indians* 

Concepts: investment and risk, natural resources, capital resources, human resources, production, consumption, barter and trade, incentives. (Includes discussion of *The Double Life of Pocahontas.*)

From Adventures in Economics and American History (Richmond: Econ Fun, Inc., 2000). (Econ Fun, Inc. can be contacted at 11920 Dalkeith Lane, Richmond VA 23233 or <u>econ.fun@verizon.net</u>.)

Lesson (Grades 4-6): *The Virginia Settlement: Why Did they Do It?* 

Concepts: choices, costs, benefits, consequences, incentives, economic systems, voluntary trade, profit, enterprise. From Adventures in Economics and American History (Richmond: Econ Fun, Inc., 2000). (Econ Fun, Inc. can be contacted at 11920 Dalkeith Lane, Richmond VA 23233 or <u>econ.fun@verizon.net</u>.)

Lesson (Grades 4-6): *The Colonial Worker's Web* Concepts: goods, services, producers, consumers, selfsufficiency, specialization, interdependence. From *Adventures in Economics and American History* (Richmond: Econ Fun, Inc., 2000). (Econ Fun, Inc. can be contacted at 11920 Dalkeith Lane, Richmond VA 23233 or <u>econ.fun@verizon.net</u>.)

# Video resources

# Taxes and Transportation

From the Virginia Pathways series, this 15-minute video episode integrates history, economics and geography connecting roads and highway construction with taxes. Available free for educational use; see Virginia Pathways home page at <u>http://www.vastudies.org/</u> for details.

# Making the Move

From the Virginia Pathways series, this 20-minute video episode continues integrating history and economics by discussing the effects of migration throughout Virginia, from the early settlers to the present. Available free for educational use; see Virginia Pathways home page at <u>http://www.vastudies.org/</u> for details.





# Section 5: Production and Consumption in United States History

# USI.5

The student will demonstrate knowledge of the factors that shaped colonial America by a) describing the religious and economic events and conditions that led to the colonization of America. b) comparing and contrasting life in the New England, Mid-Atlantic, and Southern colonies, with emphasis on how people interacted with their environment.

d) identifying the political and economic relationships between the colonies and England.

# USI.6

The student will demonstrate knowledge of the causes and results of the American Revolution by a) identifying the issues of dissatisfaction that led to the American Revolution.

# **USI.8**

The student will demonstrate knowledge of westward expansion and reform in America from 1801 to 1861 by

b) identifying the geographic and economic factors that influenced the westward movement of settlers.
c) describing the impact of inventions, including the cotton gin, the reaper, the steamboat, and the steam locomotive, on life in America.

# **USI.9**

The student will demonstrate knowledge of the causes, major events, and effects of the Civil War by a) describing the cultural, economic, and constitutional issues that divided the nation.



# Content Briefing

Academic economists have developed a way of viewing United States history that they call, somewhat immodestly, "the economic way of thinking" about history (as opposed to *an* economic way of thinking). This way of viewing United States history also has been applied widely, to other subjects as diverse as the environment and mathematics applications. Although a full-blown description of "the" economic way of thinking is not called for in the upper elementary grades, parts of it can illuminate United States history usefully at these levels. Here are the elements of this economic way of thinking, for your background rather than as material to be directly taught to students:

- 1. People in history economized. That is, they chose the course of action they thought the best after considering benefits and costs. They might not have been able to put the benefits and costs into money terms, but they did consider the advantages and drawbacks before making a choice. This principle means that people acted purposefully in history, though history often generated surprises. This general principle has been stated more recently by economic educators as, "People choose."
- 2. People's choices in history involved costs. Remember that, under the principle of opportunity cost, what people gave up when they made a choice was an important motivator. Patriots who joined the American Revolution gave up settled and profitable ways of life, but only because they saw independence as worth fighting for.
- 3. People in history responded to incentives in predictable ways. When people in history were rewarded for a course of action, that made them more likely to pursue it. When they were punished, that made them less likely to pursue it. When the American West was opened to expansion, people predictably responded to incentives and settled the West.



- 4. People in history have created systems that influenced individual choices and incentives. For most of our history, we have created systems that rewarded people for exercising initiative. The patent system, for example, rewarded inventors for new discoveries by protecting their exclusive rights to make and market inventions for a period of years. A stark example of systems, important in Virginia and United States history, occurred when John Smith declared at Jamestown that those who would not work would not eat. Smith's impromptu system surely influenced individual choices and incentives.
- 5. People in history have gained when they traded voluntarily. When the South traded its cotton to Europe in return for manufactured goods in the 1800s, both parties benefited. When the United States government threatened to intervene in that trade, differentially favoring the Northern states, that was a source of friction in the time leading up to the Civil War. In the 20th century, the nation's ports (and Virginia's) have prospered as people have taken advantage of the gains to voluntary trade.
- 6. People's choices in history have had consequences that lay in their futures. They had to make their best estimates of what the consequences would be, but naturally they continually made choices with less than perfect information. The Roaring 20s would not have roared so loudly had people known the Great Depression was coming; they would have saved and prepared for it, blunting the impact when the Depression came. Their actions might even have kept the Depression from happening.

Some instructors teach this way of thinking to upper elementary students by passing out the National Council on Economic Education's listing of these six principles, known as the Handy Dandy Guide (From United States History: Eyes on the Economy: New York, National Council on Economic Education, 1993). The Handy Dandy Guide was originally developed for a high-school level curriculum series. Not surprisingly, the Handy Dandy Guide is difficult to master in the upper elementary grades because of its level of



abstraction. Although teachers themselves should understand the principles, the jury is still out on whether it is best to directly teach the *Handy Dandy Guide*, or simply to understand the principles and inject the concept of choice into teaching about United States history. The resources listed at the end of this section include lessons specifically designed for fourth and fifth grades that explicitly incorporate the *Handy Dandy Guide*.

# Instructional Strategies

There is an abundance of materials for teaching United States history, so that the problem is not finding materials and lessons but rather getting the most suitable materials and lessons from the wealth of resources available.

Inevitably, the use of simulated governments and simulated societies comes up when United States history methods are being discussed. These simulations have a powerful advantage over more conventional teaching methods in involving and engaging students. Some of the simulations, however, have been short on historical content.

One example is the simulation of having a class write its own constitution. Some exercises of this type have been little more than fun time for students, as a few appointed students made up language and debated the result in class with no connection to history. More valuable exercises have included the drafting of constitutions with extended and detailed work by the teacher to draw the parallels and contrasts with the drafting of the United States Constitution.

In a similar way, "impeachment" exercises tend to spread among simulated societies when impeachment is in the news. No sooner do classes elect a president than they want to start impeachment proceedings. The worst of these exercises take up class time with little meaningful connection to real-world impeachment proceedings; the best help students to see the real political forces unleashed when policy makers have the ability to remove an executive branch member or judge.

A technique with great promise for connecting students with history, while developing language arts skills, is the original source interview. One example is



having students interview older adults about World War II. Students should be given a list of questions to ask; in the absence of guidance, some students will not have any good idea of what to ask. However, you should also encourage students to go beyond the questions on the list, depending on where the interview leads them. In addition to keeping notes on the interviews, students should write up their results and be prepared to present them in class. As time passes, however, there are fewer living survivors of events such as World War II and the technique must be adapted to more recent historical events.

There are valuable guidelines on oral history and interviewing on the Internet (see site listed with sources at the end of this section).





# Hit-and-Run Activities

Activity 1: Secede or Not? (SOL USI.9a; adaptable to grades 4-5)

SAY: After the election of President Abraham Lincoln, Virginia and other Southern states faced a difficult choice: whether or not to secede from the Union. Today we are going to try to understand that choice better by putting you into the position of the Virginia legislature after the election of President Lincoln.

ASK: Why was President Lincoln's election so important? (Made Southern states feel they would be dominated if they stayed in the Union.)

ASK: How do you think people reacted to the news that Lincoln had been elected president? (Some with fear; some with hope that war could still be avoided; some with regret; some with eagerness for war.)

**DISPLAY Transparency 5-1** 

REVIEW the historical background on the transparency. with students

SAY: Now we are going to get into groups and recreate decisions about seceding. You will be asked to examine the advantages and disadvantages of the two main alternatives: Staying with the Union or seceding to join the Confederacy. You are taking on the role of members of the Virginia legislature trying to decide what to do. Then we will get back together and see what you decided.

DISTRIBUTE copies of Worksheet 5-1.

MONITOR students as they work in groups.

ASK for student presentations and collect worksheets.



SAY: Today we have seen how legislators might have reacted as they faced some difficult decisions more than 100 years ago.

(Optional extension question: Did the Southern states face any realistic alternative other than seceding or staying with the Union? Was there an alternative that could have prevented or delayed the war?)



# ⇒Activity

### Activity 2: The Hole-Punch Race (SOL USI.8c; adaptable to grades 4-5)

MATERIALS: Hole-punch pattern (Pattern 5-1), copies of Worksheet 5-2, three-hole punch, single hole puncher, stacks of scrap paper.

SAY: Now we are going to see the effect of technology in history by demonstrating what happens when a new invention comes along. We have been studying about the effect of the cotton gin, the steamboat and the McCormick reaper. Today we are going to have a race showing the effects of technology.

ASK: What would it have been like to be relying on hand labor to prepare cotton when your competition had a cotton gin? (Difficult; pressured by low costs from superior technology.)

ASK: What would it have been like to compete with a steamboat if you had a hand-powered boat? (Difficult; impossible.)

ASK: How would you feel if you were still harvesting crops by hand when farmers around you were beginning to use reapers successfully? (Left behind; anxious.)

SAY: In our race, we are going to see how old technology (HOLD UP single hole-puncher) competes with new technology (HOLD UP three hole-puncher). We will have two teams of three each. Your team's job is to punch pieces of paper with this three-hole pattern (HOLD UP pattern). We will have two qualitycontrol inspectors to give each piece of paper a "pass" if the holes are punched according to the pattern or a "fail" if they are not.

INVITE teams and quality control inspectors to the front of the classrooms, INVITE questions so everyone is clear.

SAY: You will have two minutes to punch as many pieces of paper as you can. Go!



TIME for 2 minutes, then STOP and have quality control inspectors COUNT pieces of punched paper and fill in Worksheet 5-2.

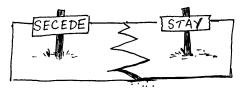
ASK: How many units of output did the single holepunch team produce? (Get number.) How many units of output did the three hole-punch team produce? (Get number.) How do you get the number of units per minute? (Divide by the 2 minutes during which production took place.) Was the single hole-punch team loafing, or just using slower technology? (Using slower technology.)

SAY: Sometimes we want to know how much more productive one process is than another. Then we can calculate the productivity ratio, as you did on the worksheet. For example, if one process can produce 10 units in the same time another process can produce 5 units, we would say the better process is "twice as productive."

ASK: What does "twice as productive" mean? That is, what would be the productivity ratio if one process can produce 10 units in the same time another process can produce just 5 units? (Productivity ratio = 2.0).

SAY: This little exercise helps us understand how difficult it is to compete with new superior technology – and so, why the steamboat, cotton gin and McCormick reaper changed history. New technology, with all its benefits to the standard of living, also creates conflict and stress. This was true in our past and it is true today.





It is 1860 and Abraham Lincoln has just been elected President. Differences between the North and South have been building for some time:

- Cultural differences: The North is industrial and urban; the South is agrarian.
- Economic differences: The north favors tariffs; the South opposes tariffs. The north has manufacturing; the South is primarily a farming region.
- Philosophical differences: Daniel Webster leads Northern opinion in favoring a strong national government; John C. Calhoun leads Southern thinking in favor of states' rights.
- Expansion of slavery into new territories: The North opposes expansion and the South favors expansion.
- Fugitive slave laws: The North opposes these laws; the South favors them.

On all these issues, the South is losing over time. If the South remains part of the Union, it faces domination by an urban-industrial north protected by tariffs, a strong national government with few states' rights, and a political climate that will end slavery soon. (Slavery cannot stand over the long term anyway, but the transition will be imposed if the South remains in the Union.) If the South fights a war and wins, it will not be a second-class region in a much larger country but will instead be its own nation. If the South fights a war and loses, it ends up as part of the Union anyway. At this point, the costs of a war are unknown, ranging from the minor costs of a quick march on Washington to the terrible costs in lives and property of an extended war.

You are members of the Virginia legislature. Using only the information available to legislators at the time, decide: Should Virginia secede and fight or remain a part of the Union?

□ Secede and fight □ Remain a part of the Union

Source: Grade 5 United States History to 1877 Teacher Resource Guide (Richmond: Virginia Department of Education, 1999), p. 32





### Names

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 $\Box$  Secede and fight  $\Box$  Remain a part of the Union

# Be prepared to defend your recommendation.

Source: United States History to 1877 Curriculum Framework (Richmond: Virginia Department of Education, 2001), pp. 36-37



Worksheet 5-2

Names \_\_\_\_\_\_

Observe the Hole Punch Race, then fill in and calculate the numbers asked for below:

	One-hole punch	Three-hole punch
Units of output (pages punched)	(a)	(b)
Acceptable units of output (pages punched and approved by Quality Control)	(c)	(d)
Acceptable output per minute (pages punched and approved by Quality Control, divided by 2)	(e) = c/2	(f) = d/2
Finally, calculate the productivity ratio, defined as f ÷ e	(g) = f/e	1



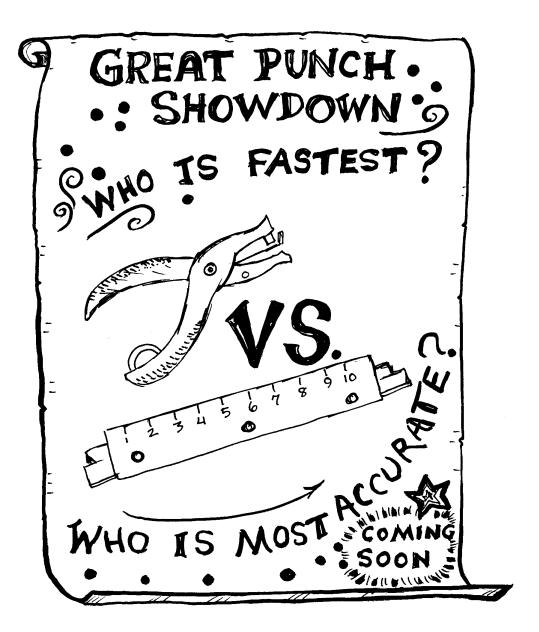
Pattern 5-1

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This pattern requires that the three holes on the left be precisely punched so that the resulting pages will easily fit into a three-ring binder. Your job is to punch as many pages as possible when the teachers says "go." Quality counts!





# Additional Resources on United States History

## **Online Resources**

American Memory The Library of Congress's guide to U.S. history, with extensive online resources and lesson plans. <u>http://memory.loc.gov/ammem/amhome.html</u>

Congress of Web sites Hosted by the Independence Hall Association of Philadelphia, this site's mission is to bring American history to life on the Internet for visitors worldwide. <u>http://www.ushistory.org/</u>

National Center for History in the Schools Geared to the National History Standards, this site contains complete lesson plans, unit objectives matched to the national standards, and reproducible primary sources. Note: Those standards are quite different from the Virginia standards in form and content. <u>http://www.sscnet.ucla.edu/nchs/</u>

### Do History

This site contains valuable guidelines on how to do oral history and interviews. It contains some content unsuitable for elementary school children, so do *not* send students directly to this site. http://www.dohistory.org/

## **Printed lesson plans**

Lesson (Grades 8-12, but with materials adaptable to grade 5): Problems Under the Articles of Confederation Concepts: debt, tax, tariff, trade, currency United States History: Eyes on the Economy, Vol. 1 (New York: National Council on Economic Education, 1993, viewable and printable in Virtual Economics)

Lesson (Grades 4-6): Why Were the Colonies Frustrated with England? Concepts: costs and benefits. From Adventures in Economics and American History (Richmond: Econ Fun, Inc., 2000). (Econ Fun, Inc. can be



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contacted at 11920 Dalkeith Lane, Richmond VA 23233 or <u>econ.fun@verizon.net</u> .)

Lesson (Grades 4-6):Lewis and Clark: Why Did They Go Exploring?

Concepts: costs and benefits, scarcity, opportunity cost, resources, incentives, trade.

From Adventures in Economics and American History (Richmond: Econ Fun, Inc., 2000). (Econ Fun, Inc. can be contacted at 11920 Dalkeith Lane, Richmond VA 23233 or <u>econ.fun@verizon.net</u>.)

Lesson (Grades 8-12, but with materials adaptable to grade 5): *Productivity Raises Output: The Cotton Gin* Concepts: productivity, profit, standard of living, division of labor, specialization *United States History: Eyes on the Economy, Vol. 1* (New York: National Council on Economic Education, 1993, viewable and printable in *Virtual Economics*)

## Video resource

Instructional video: Taxes in U.S. History Segment 2: The Protective Tariff Issue, 1832 Concepts: taxation, government spending, federalism (New York: Joint Council on Economic Education, 1990) Videotape available at many media centers; teacher's guide viewable and printable in Virtual Economics. Tapes are also available from the Virginia Taxpayer Education Coordinator, 400 N. Eighth St., Room 564, Richmond, VA 23240; phone(804) 916-8917. That address is updated at http://www.irs.ustreas.gov/plain/taxi/districtcoords.html. Note: This tape and accompanying lessons have been successfully used in the middle school setting. The tape itself is easily understood by upper elementary students, although the exercises in the teacher's guide are more suitable to middle and high school students.



# Glossary

Alternatives	The different possibilities from which a decision maker may choose.
Barter	The trading of goods directly for goods, rather than using money.
Capital Resource	Any input to production that is itself produced by humans, such as machinery, tools and equipment.
Choice	The act of selecting a particular item or course of action from a set of possible alternatives.
Communication	Exchange of information among people; moving ideas or information from place to place.
Competition	The situation in which more than one buyer or seller tries to purchase or provide similar kinds of goods or services.
Consumer	Someone who uses a good or service; often, but not always, the person who bought it.
Cost	The sacrifice incurred as a result of an action. (Often, but not always, measured in money.)
Demand	The different quantities of a good or service that will be purchased at various possible prices.
Economics	The study of choice under scarcity.



Good	Something tangible that people value.
Human Resource	Any input to production provided by the effort of a person; the effort or labor of people at work.
Input	Any resource used for production.
Incentive	An expected reward that motivates a person to take an action.
Interdependence	Relying on others in an economic system, rather than being self-sufficient.
Intermediate Good	Something produced that serves as an input to further production; for example, lumber produced from timber is an intermediate good in the production of houses.
Market	Any arrangement that allows buyers and sellers to exchange goods and services.
Money	Anything commonly accepted in exchange for goods and services.
Natural Resource	Anything from the physical environment that can be used as an input to production (or conserved).
Opportunity Cost	In a choice, the benefit expected from the highest valued alternative forgone; or, "what you give up" when you make a choice.
Output	A good or service resulting from production. (Producers take <i>inputs</i> and produce <i>outputs</i> .)



Price	The amount of money paid or received in exchanging a good or service.
Producer	An individual or group that takes resources ( <i>inputs</i> ) and transforms them into goods and services ( <i>outputs</i> ).
Productivity	The amount of output produced per unit of time or per unit of input.
Productivity Ratio	The productivity of one process divided by the productivity of another process, used to compare the relative efficiency of the processes.
Scarcity	The inability to satisfy all wants, or all competing demands, at the same time.
Service	An action that people value.
Specialization	To concentrate on producing a particular good or service.
Supply	The different quantities of a good or service that will be provided at various possible prices.
Tax	Money paid to the government to provide services.
Technology	Society's knowledge of how to accomplish processes such as production, especially through the use of machinery and computing capability.
Trade	Exchange of goods and services between buyers and sellers.



**Transportation** Moving things or people from place to place.





# <u>Complementary Video</u> <u>Resource</u>

This Teacher's Guide is a companion to an earlier print guide, *The Role of Money in an Economy*, that was distributed with a 50-minute training video, *Money Matters: The Role of Money in an Economy*. The video was sent (September 2000) to all elementary schools in the state by the Virginia Department of Education. Your school media specialist can help you find your school's copy, or you may contact the Virginia Department of Education Social Studies Specialist at (804) 225-3454 for assistance. The video was intended to help teachers with the material by exhibiting models of good teaching of economics.

The five teachers on the film represented kindergarten and the first, third, fourth and fifth grades. Fourth and fifth grade teachers could benefit from seeing how the foundation can be laid in the teaching of primary-grade learning standards. A natural break occurs after the third grade segment, where the tape can be stopped for discussion and reaction. Primary teachers also could benefit from the fourth and fifth grade segments by seeing how elementary economics principles are applied in those grades.

Although the five teachers on the tape use very different approaches and teaching strategies, they have the following elements in common:

- the learning style is active, involving the students, rather than passive.
- the teachers consistently use and reinforce economic vocabulary.
- the teachers draw together economics with other disciplines, particularly language arts, as the opportunity arises.
- the teachers have carefully prepared their activities before going into the classroom with them, and



• the teachers express a positive attitude toward economics and learning about economics.

The video was produced to illustrate teaching of a different set of learning standards than those covered in this teacher's guide; however, we believe that viewing this video would be helpful to teachers working from this guide also.

William C. Wood Teresa Harris, *producer* Jeffrey Butler, *videographer* Marilou Johnson, *narrator and script writer* May 2000

