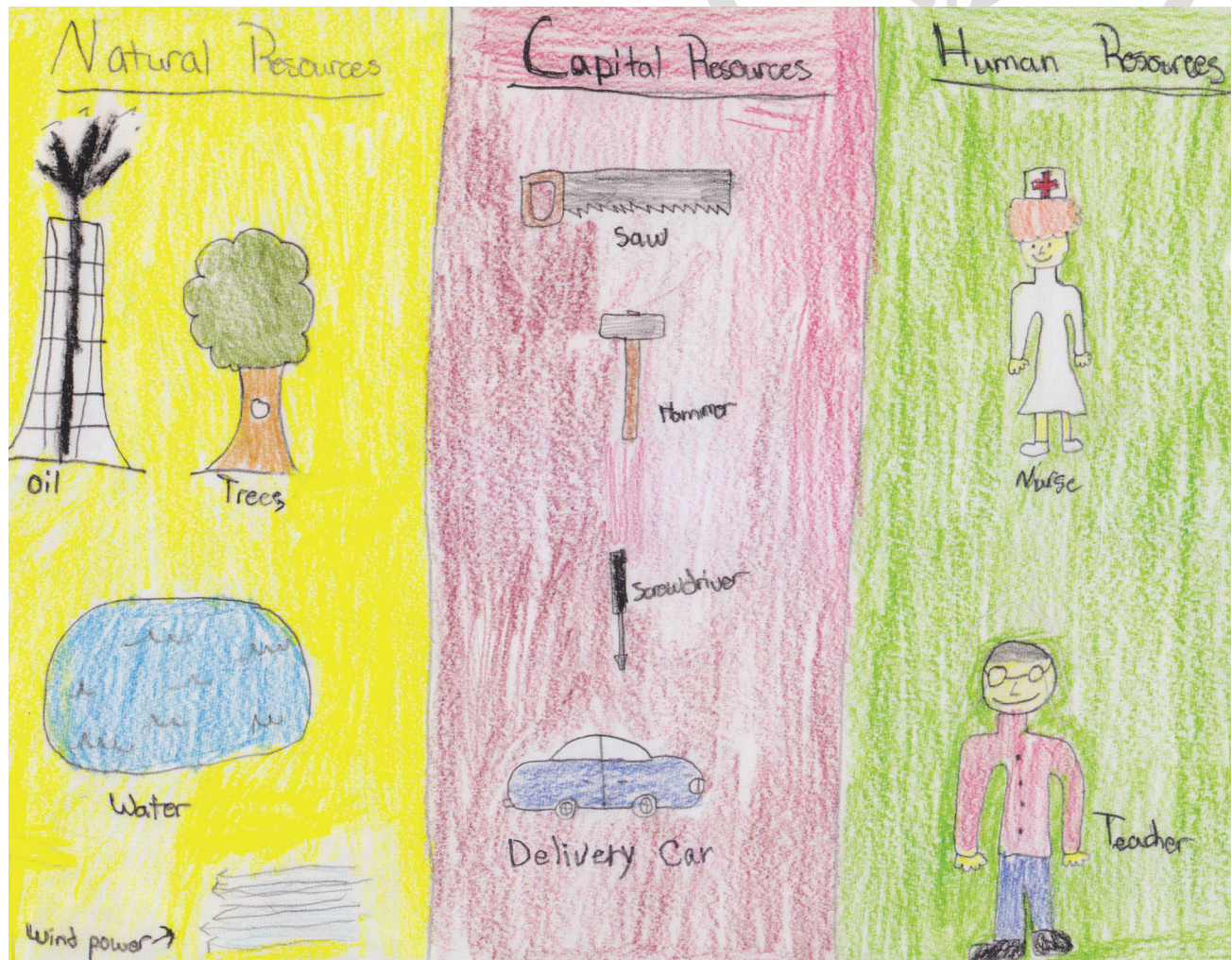


RESOURCES, PRODUCERS

2



**RESOURCES ARE USED
TO PRODUCE GOODS
AND SERVICES.**



**Economics
Arkansas**
EDUCATION FOR REAL LIFE

CONCEPT STATEMENTS FOR ELEMENTARY ECONOMICS

1. People consume goods and services to help satisfy their wants.
2. **Resources are used to produce goods and services.**
3. Because many things are scarce, people need ways to allocate them.
4. Scarcity requires people to make choices that involve trade-offs and have opportunity costs.
5. Specialization and division of labor increase people's productivity and dependency on one another.
6. People are willing to make exchanges when what they receive is worth more to them than what they give up.
7. Money makes trading easier.
8. The price of a good, service, or resource is determined by buyers and sellers in that market.
9. People earn income when they sell their resources.
10. People incur expenditures when they buy goods and services.
11. Entrepreneurs and businesses incur costs when they buy resources and earn revenues when they sell the goods and services produced with those resources.
12. Governments provide goods and services and collect taxes.

RESOURCES ARE USED TO PRODUCE GOODS AND SERVICES.

HUMAN RESOURCES: people who work (provide mental abilities and/or physical services)

Examples:

- ❖ teacher, laborer, nurse, factory worker, clerk, janitor, cook, manager, lawyer, farmer
- ❖ carpenter, secretary, truck driver, plumber, waiter, pilot, mechanic, firefighter, cashier

CAPITAL RESOURCES: goods that are used to produce other goods and services

Examples:

- ❖ tools (hammer, saw, screwdriver, wrench)
- ❖ machines (assembly line, tractor, computer)
- ❖ buildings (factory, warehouse, office building)
- ❖ equipment (truck, desk, microscope, ladder)

NATURAL RESOURCES: services and materials provided by the natural environment

Examples:

- ❖ sunlight, wind, snow/rain, air, sand, soil, trees, plants, animals, minerals, fossil fuels
- ❖ raw materials produced from these things (glass, wood, rubber, water, tomatoes, milk, cloth, silk, sugar, wool, plastic, paper, leather, steel)

PRODUCE (PRODUCTION): using resources to make goods or provide services

PRODUCER: a person or organization that uses resources to make goods or provide services

Concept Statement Examples

- ❖ Derrick (human resource) mixes lemons, sugar, and water (natural resources) in a pitcher (capital resource) with a spoon (capital resource) to make lemonade (good).
- ❖ A barber (human resource), scissors (capital resource), and water (natural resource) are used to provide a haircut (service).
- ❖ An auto manufacturer (a producer) uses autoworkers (human resources), assembly robots (capital resources), aluminum (natural resource), and other resources to produce a car (good).
- ❖ Derrick, the barber, and the auto manufacturer are all producers (users of resources to make goods or provide services).

GETTING STARTED

- ❖ Prepare a chart with three columns: *Natural Resources*; *Human Resources*; *Capital Resources*. Show the class a glass of water and ask what is in the glass. (*Make sure students realize it is water.*)
- ❖ State that water is a natural resource that comes from snow and rain. Define natural resources as things from the environment used to produce goods and services. Write “water” in the *Natural Resources* column. Discuss uses for water and note their answers: drink it, wash clothes/dishes/car, take baths, cook, water gardens, etc.
- ❖ Ask: Have you helped someone wash a car? Who did you help? (*parents, friends, grandparents*) We know you used water, what else did you use? (*hose, bucket, soap, sponge*)
- ❖ Write one of the people mentioned in the *Human Resources* column. Define human resources as people who work to produce goods and services. Write one of the tools used in the *Capital Resources* column. Define capital resources as goods used to make other goods or to provide services.
- ❖ Next show a grape jelly sandwich. Ask: What are some of the natural resources needed to make the sandwich? (*grapes and sugar for jelly; flour, eggs, milk for bread*) What capital resources are needed? (*knife, spoon, plate*) What human resources are needed? (*parent, cook, child*). Explain that making a jelly sandwich requires natural, human and capital resources. Write the resources used in the appropriate columns on the chart.
- ❖ Discuss the illustration on the front cover and how each resource is used in the production of a good or service. Add these to the chart.

USING WHICH RESOURCE IS IT?

(This can be used as a large group, small group or individual activity and as an assessment.)

- ❖ Review definitions of human, natural and capital resources. Allow time for students to give examples of each. As each example is given, discuss how it is used to produce a good or service.
- ❖ Option 1: Distribute a copy of the activity to each student. Discuss each picture. Have students draw a circle around each human resource, a triangle around each natural resource, and a rectangle around each capital resource. On the back have each student draw or write an example of their own of each type of resource.
- ❖ Option 2: Cut and make 24 resource cards. Move outside or to a large indoor area. Teach students the chant shown to the right. Choose a small group (4-7 players) to be *Producers*. Give each of the remaining students a resource card. They are the *Resources*. Check to make sure everyone understands what their card shows. Have *Producers* discuss with teacher which kind of resource is to be called. Recite the chant using the kind of resource chosen by the *Producers*. All students holding an example of the resource called will run to a designated safe area. This area should be equal distance from the *Resources* and the *Producers*. *Producers* try to catch *Resources* before they get to safety (there is no penalty for being caught). Have *Resources* name the pictures on their cards and monitor for any misconceptions. The first group of *Producers* are then given a resource card to join the other *Resources*. The *Resources* group that ran becomes the next *Producers* and play continues.

CHANT

Producers: Knock, Knock!
Resources: Who's there?
Producers: Producers!
Resources: What do you want?
Producers: Resources
Resources: What kind?
Producers: Natural!
(Human! Capital!)

USING EVERYTHING COMES FROM SOMETHING

[Note: Each row is a set: a natural resource, a raw material processed from it, and a good produced with it.]

- ❖ Show the class a soft drink can and ask: What material was used to make this can? Lead discussion to “aluminum.” Continue: Aluminum comes from what natural resource? Lead discussion to mining and that all metals start out as ores in rocks (“bauxite” ore for aluminum). Explain that all materials used in producing goods and services start in the natural environment as natural resources. They are processed into the raw materials that are used to produce goods. Give another example: cows (natural resource) are milked to get raw milk (raw material) that is used to produce cheese (good).

(Continued inside)

TEACHER THOUGHTS

1. A person is a human resource only when they are working to produce a good or service--a person is a consumer when they are relaxing or using goods and services.
2. Capital resources are goods used to produce other goods and services, **not** goods used to satisfy wants--how a good is used determines if it is a capital resource or a consumer good.
3. All goods are made out of materials that come from the natural environment. These materials are natural resources regardless of how much they were processed before becoming part of a good.
4. When producing a good, human and capital resources can be thought of as the "actors" (performing the production), while natural resources are that which is "acted" upon (the throughput of production).

PRODUCER HAT

Prepare a large pre-cut hat for each student (similar to the one shown). Lead the class in a discussion (review) of human resources. Distribute hats and explain that students will decide with the help of their family a type of human resource to be the focus of their hat. The type of human resource should be written on the hat. At home they will decorate the hat with capital resources (tools) and/or natural resources that this human resource might use while doing their job of producing a good or service. These can be drawn, cut from magazines, printed from the computer or even small samples of some of these tools or natural resources. For example, if the choice is a baker (human resource) some capital resources might be pans, oven, spatula, bowls, sink, etc. Some natural resources might be eggs, water, sugar, etc. Return to school and share.



USING RESOURCES AT HOME

Students will become producers of goods and services at home. As each good or service is produced students will list resources used in production. Goods might include cookies, a sandwich, or a picture. If cookies are produced, the human resources might include the student and parent. Capital resources used might include the oven, cookie sheet, and bowl. Natural resources used might include milk, sugar, and eggs. Services could be sweeping the floor, taking out the trash, or washing the dog. Some services may not require all resources. Completed charts should be returned to school and discussed.

Good or Service Produced	Human Resources	Natural Resources	Capital Resources

THE STATE OF NATURAL RESOURCES

Prepare a list of natural resources found in your state. Most states have multiple examples of each of the following: minerals, stones, agricultural crops, animals, trees, fossil fuels, etc. Assign each student a different natural resource and have them write a brief report addressing some of these questions:

- ❖ Where in the state is the natural resource extracted or harvested?
- ❖ What raw materials are produced from the natural resource?
- ❖ What goods are produced using the natural resource?
- ❖ List some producers in the state who either extract/harvest or use this natural resource.
- ❖ Describe any link between the natural resource and a historical event in the state.

DISCUSSION OR WRITING PROMPTS

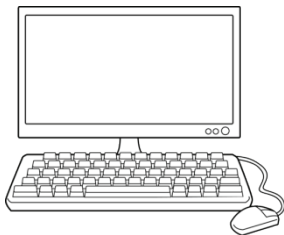
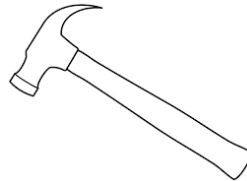
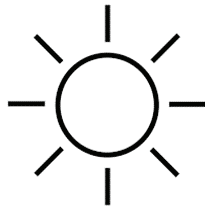
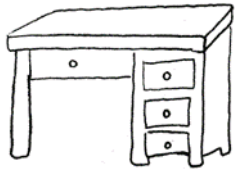
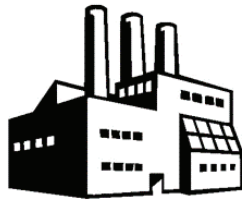
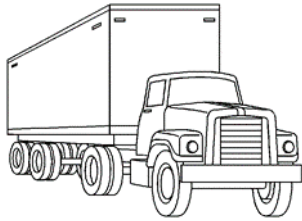
- ❖ Describe how a truck (wood, land, or a computer) can be used to produce three different goods or services.
- ❖ If you were stranded on an island, which three natural resources and three capital resources would you want and why?



LITERATURE & ONLINE CONNECTIONS

- ❖ Scan the QR code above or go to www.economicsarkansas.org Click on *For Teachers - Grab & Go Economics - Online Connections*

WHICH RESOURCE IS IT?



EVERYTHING COMES FROM SOMETHING

iron ore	steel	car
sugar cane	sugar	candy
sand	glass	mirror
sheep	wool	sweater
rubber tree	rubber	tire
oil	plastic	bottle
cotton	fabric	shirt
wheat	flour	bread
chicken	egg	omelet
tree	wood	table
cow	leather	belt
snow/rain	water	soft drink

THE PRODUCTION PROCESS

These natural resources



are transformed by these human and capital resources



into this good.

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- ❖ Option 1: Cut out and give each student one set (duplicate as necessary) and have them put the cards in order beginning on the left with the natural resource.
- ❖ Option 2: Cut out enough sets so that each student gets one card. Tell students their card is a natural resource, a raw material, or a good produced from those. The goal is to find the two other cards (students) that would complete their set. Once three students think they have a set, have them bring it to the teacher to verify that it is correct. Discuss completed sets.
- ❖ Option 3: Show only the middle column and explain that these are raw materials. Have students determine what natural resource these came from and provide an example of a good produced from them. *(Note: There are many other possible examples of goods made from glass, or plastic, or wood. There are also other possibilities for natural resources such as sugar from sugar beets, wool from alpacas, fabric from flax, and an egg from an ostrich.)*
- ❖ Option 4: Show students a few selected sets as examples and then have them create sets on their own.

Some additional set examples:

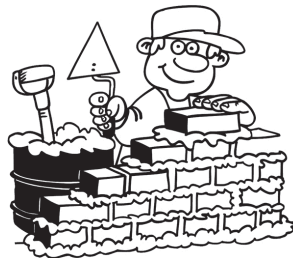
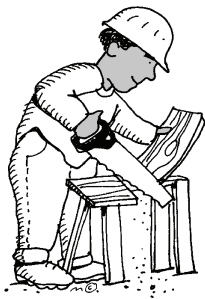
bees, raw honey, honey
gold ore, gold, jewelry
tree, pulp, paper

silkworm cocoons, silk, tie
oysters, pearls, necklace
aloe plant, aloe, lotion

tomato plant, tomatoes, sauce
copper ore, copper, wire
cacao beans, chocolate, candy

USING THE PRODUCTION PROCESS

- ❖ Describe the production of a good as basically a process where materials (natural resources) are transformed (molded, cut, bolted, heated, welded, painted, etc.) by workers (human resources) using tools and machines (capital resources) into a good which is made up of those materials.
- ❖ Option 1: Show or describe each example below one at a time. Have students complete the activity page (human resources to the left and capital resources to the right in the middle section) writing lightly each time so they can erase after each example is done.
Wood (tree) being sawed by a carpenter using a saw and saw horse to produce a house
Bricks (clay) and concrete (limestone) being laid by a bricklayer using a trowel to produce a wall
Flour (wheat), salt and sugar being rolled by a cook using a roller and board to produce a piecrust



- ❖ Option 2: Have groups of students investigate the production process of some type of good (car, farm crop, furniture, clothing, or a good produced by a local business), complete the activity page, and report back to class. Challenge them to identify at least three different kinds of each type of resource.

Examples:

Car

Natural: steel (iron ore), aluminum (bauxite ore), rubber (rubber trees), plastics (oil), glass (sand)

Human: designers, engineers, assemblers, welders, bolters, painters, managers

Capital: assembly plant (factory building), assembly line, computers, automated machines

Farm crop

Natural: land/soil, sun, seeds, water, fertilizer (nitrogen, phosphorus, potassium)

Human: farmer/manager, farmworkers, harvesters/pickers, truck drivers

Capital: tractor, tiller/plow, harvester, sprayer/spreader, truck, barn, maintenance building, silo