Delaware Recommended Curriculum

This unit has been created as an exemplary model for teachers in (re)design of course curricula. An exemplary model unit has undergone a rigorous peer review and jurying process to ensure alignment to selected Delaware Content Standards.

Unit Title: **Economic Systems**

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Content Area: **Social Studies**
Grade Level: **4**

Summary of Unit

An economy is an organized arrangement for producing goods and services to satisfy people's wants. In any economy, **productive resources** used to produce these goods and services are scarce. Therefore, choices must be made. This requires an economy to answer three basic economic questions—what goods and services to produce, how to produce them, and who will get them. In grade 4, this means students need to study how different types of economic systems answer these basic questions. Students will be more empowered when they comprehend how interdependent the world has become and what their role in the economy is.

Different economic systems—**traditional, command,** and **market**— have different ways to answer the three economic questions. Each of these systems has costs and benefits for its citizens.

On the simplest level, **traditional** economies tend to do things the way they have always been done. Members of these societies tend to produce what they have always produced using the same methods as their ancestors and distribute or allocate the final products the way custom dictates.

In **command** economies, central planners determine what and how much to produce based on politically determined goals. Central planners also determine the type and combination of resources used to produce the goods and services. In command economies, the "who will get goods and services" question is answered by central planners who set wages, incomes, and prices for goods and services. Prices are usually set below the market price creating shortages.

In a **market** economy, consumer preferences, producer costs, and profit considerations determine what and how much of a good or service to produce. The decision of which resources to use, in what combinations, and with what technology is made by individual businesses. They mix of human, natural, and capital resources to minimize production costs and maximize profits. Human resources earn income which determines the amount of goods and services they can purchase. Producers compete for consumer dollar votes and use information about spending patterns and their production costs to make production and pricing decisions.

Stage 1 – Desired Results

What students will know, do, and understand

Delaware Content Standards

- **Economics Standard Three 4-5a**: Students will identify different means of production, distribution, and exchange used within economic systems in different times and places.

Big Idea

- Economic Systems

Enduring Understanding

- Because resources are scarce, societies must organize the production and determine the distribution of goods and services.

Essential Questions

- How have advances in technology affected our lives?
- In what ways do economic systems differ and why?

Knowledge and Skills

Students will know…

- The meanings of content-specific vocabulary words
- Different methods of production
- The factors which increase production
- Different methods of allocation/distribution
- The attributes of three types of economic systems

Students will be able to…

- Explain the advantages and disadvantages of different methods of production
- Explain how producers raise productivity, especially with the application of technology
- Explain the advantages and disadvantages of different methods of distribution
- Discern between three types of economic systems

Stage 2 – Assessment Evidence

Evidence that will be collected to determine whether or not Desired Results are achieved

Transfer Task

This summative assessment is a transfer task that requires students to use knowledge and understandings to perform a task in a setting or context.

The assessment and scoring guide should be reviewed with students prior to instruction. Students should work on the task after lessons have been completed.

Essential Questions Measured by the Summative Assessment

- How have advances in technology affected our lives?
- In what ways do economic systems differ and why?

Prior Knowledge	Now that you have learned about production, and distribution in different types of economies, you are ready to give advice about different economic systems.
Problem	The members of a society about which you will read are not sure that they have the best economic system. They have heard that things are done differently in other countries, and they are thinking about changing their economic system.
Role/Perspective	You are an economist who has been asked to advise the members of a society that wants to change their economic system.
Product/ Performance	You may produce a PowerPoint presentation or a poster that demonstrates how life for people in the society will be different if they choose to change their economic system. You will need to identify what type of system they currently have, and will need to advise them to switch to one of the other types of systems. You will need to point out how things will be different and what advantages and disadvantages there are to making the switch. You will also need to explain how technology will be needed to help them. You will make a presentation to explain what you have included in your PowerPoint or poster.
Criteria for an Exemplary Response	You have correctly identified the type of system currently in place. You have fully explained the type of system you advise the society to switch to. You have fully explained how life will be different under the new economic system, including advantages and disadvantages. You have explained how technology will help the society. You use vocabulary that you have learned in the unit. You make the presentation of your PowerPoint or poster clear.

Click here for the Transfer Task Reading.[1]

[1] This reading has a lexile level of 920, appropriate for the Common Core State Standards 4-5 grade band.

Rubric

Scoring Category **The presentation provides…**	**SCORE POINT 3**	**SCORE POINT 2**	**SCORE POINT 1**
Identification of the economic system currently in place	The explanation of the current system is completely accurate.	The explanation of the current system is partially accurate.	The explanation of the current system is completely inaccurate.
An explanation of the recommended system, including advantages and disadvantages	The explanation is thorough and accurate	The explanation is partially developed and accurate	The explanation is minimally developed and/or inaccurate.
Explanation of technology's impact	Numerous examples of technology and its impact are provided.	A few examples of technology and its impact are provided or many examples are present but the impact is not explained.	Two or fewer examples of technology and its impact are provided.
Use of vocabulary	The project demonstrates the correct usage of a majority of the vocabulary terms introduced in the unit.	The project demonstrates the correct usage of about half of the vocabulary terms introduced in the unit.	The project demonstrates the correct usage of a minimum number of the vocabulary terms introduced in the unit.

Points	Rating
12	Exceeds the Standard
9-11	Meets the Standard
5-8	Near the Standard
4	Below the Standard

Student Self-Assessment and Reflection

> When students are required to think about their own learning, to articulate what they understand and what they still need to learn, achievement improves.
>
> - Black and William, 1998; Sternberg, 1996; Young, 2000

How a teacher uses the information from assessments determines whether that assessment is formative or summative. Formative assessments should be used to direct learning and instruction and are not intended to be graded.

The Checks for Understanding at the end of each instructional strategy should be used as formative assessment and may be used as writing prompts or as small-group or whole-class discussion. Students should respond to feedback and be given opportunities to improve their work. The rubrics will help teachers frame that feedback.

An interactive notebook or writing log could be used to organize student work and exhibit student growth and reflection.

Stage 3 – Learning Plan

Lesson One

Essential Questions

- How have advances in technology affected our lives?
- What are the advantages and disadvantages of different methods of production?

Background

In Economics Standard Three, emphasis is placed on production, distribution, and exchange.

Production refers to how goods and services are produced. Are goods handmade by individual **craftsman,** using **division of labor,** or with the use of extensive **technology**? In grade 4, students should learn about different ways goods are produced and the **advantages and disadvantages of different methods**. This usually includes producing something first using the craftsman method and then the specialization and division of labor method.

Note for Teachers

This unit does not contain activities pertaining to **exchange**, as they are not needed for students to understand different economic systems and to complete the transfer task. Students are introduced to exchange in the 3rd grade Delaware Recommended Curriculum unit, Economic Exchange.

Distribution refers to **allocation** of goods and services.

Exchange refers to how goods and services are traded and paid for. Over time, different methods have been used to facilitate the **exchange** of goods and services. These range from barter to commodities to fiat money.

In this lesson students are introduced to different methods of production and discover the advantages and disadvantages of each.

Craftsmen produce goods but do not share the work. Each person produces his or her own good from the first step to the last. Craftsmen may share tools and equipment but not labor. Division of labor means human resources (workers) perform only a single, or very few, step(s) in the production of a product, as they do when working on an assembly line. Specialization occurs when a group or individual produces a smaller range of goods and services than they consume. Specialization and division of labor usually increase the productivity of workers which means an increase in the number of goods produced per worker. Productivity is a measurement of output per worker. Productivity is measured by dividing output (goods and services) by inputs used to produce the output. If a company has 5 workers (inputs) who produce 20 goods (output), worker productivity is 4. Productivity can be increased through specialization and division of labor, by investment in human capital (education and training), and investment in capital goods (tools and equipment).

Students will most likely define technology by referring to the electronic gadgets that they use daily. They will develop a broader definition of technology and investigate the types of technology that changed production methods during the Industrial Revolution in Delaware.

Materials for Lesson 1:

Strategies 1-2

- Visuals 1-5 – prepare for class

Strategy 3

- Handout 1 – 1 per student or pair of students
- For Widgets:
  - 8 ½" x 11" paper
  - Single hole punch
  - Ruler
  - Paper clips
  - Markers or pens
  - Token rewards, such as candy or stickers
  - 3-hole punch
- Chart paper and markers

Strategy 4

- Handout 2 – 2 per student
- Visual 6 – 1 to show students
- Handout 3 – Make multiple copies of phonybills for students
- Paper for origami cups
- Visual 7 – origami directions
- Visual 8 – Production chart
- Handout 4 – 1 per student

Strategy 5

- Handout 4 – 1 per student
- Handout 5 – 1 for every other student
- Handout 6 – 1 for every other student

Instructional Strategies

Strategy 1: Gathering Information
Think/Pair/Share, Simulation

Display the two photos of craftspeople (Visuals 1 and 2) one at a time. Pass out writing paper to the students. For each visual, ask the students to observe what each person is producing and have them list the steps that they believe are needed to produce that item.

Have the students meet in pairs to exchange ideas, and add any new ideas they hear from their partners to their lists. Finally, reconvene the class and have students share their ideas. Display the lists of steps (Visual 3) and congratulate them for figuring out the steps, pointing out any they didn't think of.

Display the word ***craftsperson*** on a word wall, or some type of display that can remain visible to the students throughout this unit and for the transfer task. Tell the students that someone who produces a good such as bread or pottery, and does all the steps by themself is called a craftsperson.

Ask the students what would happen if everyone in the class decided to order a clay pot on the same day. Elicit the idea that the craftsperson would not be able to make enough pots for everyone who wanted one immediately. Some customers would have to wait a long time until the potter could produce a pot for them.

Ask how enough pots could be produced so that people would not have to wait. (More people could make them.)

Strategy 2: Extending and Refining
Simulation[2]

Tell the class that they will now be participating in an activity to test out that answer. Put the word ***production*** on the word wall. Define it as "the creation or manufacture of something of value." Tell them that they will be involved in the production of a product called Widgets. Model the procedure for making Widgets.

1. Neatly stack two sheets of 8.5"x11" paper.
2. Using the ruler and the pencil, mark three dots at 1 ½", 5 ½", and 9 ½" along the 11" side of the paper.
3. Using the single hole punch, punch a hole at each of the three dots.
4. Slip a paper clip through the middle hole to hold the two pieces of paper together.
5. For decoration, draw a flower around each of the other two holes using the marking pen.

Divide the class in half. Divide each half into smaller groups of 4 or 5 students.

- Assign one half of the class to produce widgets like craftspeople. Each student must do all of the steps individually. Those in the craftspeople half of the class may share supplies and materials, but they may not help each other make the widgets.
- Tell the other half of the class that they may divide up the production steps within their groups to produce the widgets, and may share the supplies and materials.

Pass out the materials needed to each group. Allow the groups a minute or two to get organized.

[2] Adapted from *Widget Production*, Economics for the Elementary Educator, SPEC Publishers, Inc., Baldwin, Missouri

Tell the class that they will have five minutes to produce as many widgets of high quality that they can. Warn them that you will be inspecting widgets and that you will reject any that do not meet the standards.

Stop at the end of the five minutes. Tell students to discard any partially completed widgets. Inspect finished widgets, discarding those which are not properly produced. Ask groups to count their acceptable widgets.

Display the Widget production Table (Visual 4). Complete columns 1-4 for Round 1 for each group. Explain that column 5 represents labor productivity. Add the word *productivity* to the word wall. Define this as the number of widgets per worker and calculate it by dividing the number of acceptable widgets by the number of students in the group.

Have the students turn to an elbow partner and ask them to make observations about the differences in productivity among the groups. Reconvene the class and ask students to share their observations. During the discussion elicit the idea that just having more people to produce a product does not necessarily produce the most goods. The groups which divided up the work were able to produce more widgets.

Display the words ***specialist*** and ***specialization*** on the word wall. Tell the students that when the production steps were divided up among members of a group, each person became a specialist. One person's specialization was marking the holes, another specialization was punching the holes, and yet another was putting paper clips through.

Discuss the advantages and disadvantages of the craftsperson method of production versus the specialist/division of labor method of production.

- Specialist: Advantages include speed and expertise gained from learning only one step of the process and not needing to wait to use resources. Disadvantages include boredom from doing the same job all day and what to do when workers are absent and other workers do not have the same skills.
- Craftsperson: Advantages include the satisfaction of producing a product from beginning to end and variety during the work day. Disadvantages include learning and perfecting all the skills needed for production, and slower production.

Explain that you are going to pay each group who produced widgets according to how many widgets were produced. Distribute small candies (but warn them not to eat them yet), or small tokens, to each group.

Tell the class that they will now have a chance to increase productivity. Have each group take a minute to discuss how they might do this, and then share their ideas with the class. Suggestions might include having everyone become specialists or giving groups more materials. Tell them that they may not change their method of production, and they will not be receiving any more materials other than paper. They may try to smooth out other problems or shuffle jobs around.

Begin another five minute round.

After this round, repeat the procedure of discarding incomplete and unacceptable widgets. Complete the table for round 2. Pay groups again according to the widgets they produced.

Have each craftsperson pair up with a specialist to discuss changes in productivity and to infer why these changes came about.

Announce that you would like to increase productivity even more and that a new invention, a three-hole punch will help groups become more productive. By omitting the measuring and marking step, demonstrate how to produce a widget using the three-hole punch.

Continue by explaining that, unfortunately, there is only one three-hole punch. Ask for suggestions for ways to distribute this scarce resource. Suggestions might include giving it to the least productive or most productive group. If no one suggests selling the three-hole punch, tell the class that this is the method you will use. Auction off the punch to the highest bidder in return for their candy or tokens.

Begin another five minute round in which everyone produces widgets. Repeat the same procedure of discarding and counting the products. Complete the table for Round 3 and pay the workers again.

Ask students the following:

- What are some reasons the groups without the three-hole punch increased their productivity anyway? (additional experience)
- What effect did the three-hole punch have on productivity? (It probably increased it.)
- How did the three-hole punch affect the workers who had previously measured and marked? (They no longer had a job or they had to retrain for a new job.)

To conclude, review the vocabulary words that were introduced. Then have the craftspeople partner with the specialists to produce a few written sentences summarizing what they have learned from the widget activity.

Check for Understanding

- How might a hamburger restaurant increase the number of hamburgers they produce each day? Explain your answer with an example.

Rubric

2 – This response gives a valid method with an accurate and relevant explanation.

1 – This response gives a valid method with an inaccurate, irrelevant, or no explanation.

Strategy 3: Extending and Refining

Scavenger Hunt

Divide the class into small groups of 2-3. Give each group a large sheet of paper and a marker. Tell them that you will give three minutes to list all the technology they can think of. At the end of the three minutes, collect the papers and hang them where all the students can see them.

Discuss the similarities of the lists and any items that might differ. Congratulate the class on coming up with such a large list, and then tell them that you know of some items they have not thought of. In fact, you are thinking of technology that they used during widget production. Ask if anyone knows to what you are referring (*the 3-hole punch*) but do not tell them if they do not know.

Put the word ***technology*** on the word wall. Define it for the students as "the use of human knowledge to create machines and methods which improve products and their production." If the students did not figure out that the 3-hole punch was the technology in widget production, ask them to consider the definition, think about that lesson again, and draw a conclusion. If they did already identify the punch, ask them how it fits the definition.

Tell the students that they will be going on a technology scavenger hunt. Place the various pages of Visual 5 (photos of Delaware industries) in locations around the room. Pass out Handout 1 (Scavenger Hunt) to individuals or partners.

Allow the students to travel from one location to another, observe the photos, and list the technology that is evident in each production picture. Reconvene the class and share what the students have observed. Ask them to explain how a few of the items they have listed fit the definition of technology.

Explain that new technology is often in the form of improved capital resources. Add the words ***capital resources*** to the word wall. Ask the students to name some capital resources they observed in the scavenger hunt (these would be the same items they listed as technology). Define capital resources as "the tools used in the production process."

Tell the class that they will now be participating in a simulation that shows why companies spend income to purchase new capital resources, or invest in new technology.

Strategy 4: Extending and Refining
Object Based Learning[3]

Explain that each of the students will be working for the *Intelamath Company*. Their job will be to solve math problems, and they will be paid for each problem that they solve correctly.

Distribute Handout 2 (Math Problems) and tell the students that they will have four minutes to solve the problems. Also tell them that they will need to work without talking to any other workers, and that you will not be able to provide any help or explanations.[4]

Set a timer and tell them to begin. At the end of the four minutes, display Visual 6 (Correct Answers) and have them check their answers. Have each student turn in his or her paper to collect their pay (pennies or tokens) for the number of answers they have correct. Make a mental note of the lowest score.

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[3] Adapted from *Folding Our Way to Productivity*, From Roosters to Robots, Virtual Economics v.3, National Council on Economic Education

[4] This is done to provide a bridge to the next part of the lesson. This may cause some students to become anxious, so reassure them that they will have more than one chance to work the problems, and that it is not a test.

Ask the students how technology could improve their productivity. If none of them suggest a calculator, show them one, and state that this new capital resource is available to anyone who wishes to purchase one. Set a price that is one penny or token lower than the lowest score that was earned in the first round. This will allow everyone who wants to purchase a calculator to do so.

Pass out a fresh copy of Handout 2 to each student. Set the timer for six minutes again and allow them to solve the problems using the calculator, but with the same restrictions on talking or getting help from you. Repeat the procedure for checking answers and getting paid.

Post the following question where all students can see it:

- Why do companies invest in improved capital resources and technology?

Have the students turn to an elbow partner and discuss the answer. (The investment leads to increased productivity.)

Ask the students what else might help them to improve their productivity, or solve more problems, in the same amount of time. Since some of the math symbols in the problems are most likely unfamiliar to fourth-graders, they should respond that they would need to know what those are and how to use the calculator to solve them.

Tell the class that they are now going to work for another company called *Origami Inc*. where the workers make paper cups.[5] Place the students in groups of eight to ten. Pass out several sheets of paper to each student.

Quickly demonstrate how to make a cup without giving any verbal instructions. Then tell the class that each group will be receiving income of one phonybill (Handout 3) for each completed cup that meets your quality control standards. Let them know that you will be selling small bags of treats that the group may share for 10 phonybills.[6]

Allow the students five minutes to produce cups. At the end of the five minutes, check any cups that have been produced for quality, discarding those that are not the same as your sample. Pay groups for any cups that are adequate. Then offer to sell treat bags to any groups who have enough phonybills. It is most likely that none of the groups will be able to afford the treats.

Survey the students to find out if anyone is happy with the income they received. Most likely, few to none of the students produced acceptable cups, and so very little income was earned.

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[5] For this activity you will need multiple sheets of paper per student, each 5.5 inches square. Do not use construction paper as it will not fold correctly.

[6] As an alternative to copying and cutting phonybills, use your school's PBS tickets.

Ask the students to explain why not many cups were produced. (The training provided was sparse; only a quick demonstration without any explanation.)

Ask them how they might improve production to earn more income. (They will need more, and better, training.)

Demonstrate how to make a cup once again, but with detailed verbal instructions, as well as displaying Visual 7. Allow the students to make two practice cups along with you as you repeat the steps.

Tell the students that they will now begin production of paper cups again, for five minutes. After the five minutes, check for quality and pay the students according to what they have produced. Now, the groups should have produced enough cups to earn enough to buy the treat bags.

Ask the students what the difference in productivity was from the first round of production to the second (productivity was up). Ask them what caused this rise in productivity (they received more training and practice). Display the words *human capital* on the word wall. Define it as "the abilities and skills of any individual, especially those gained through education and training, that increase productivity."

Display Visual 8 (Increasing Productivity), and give each student a copy of Handout 4. Ask the students to think about making widgets, and to tell you what helped them to increase productivity from the first round of production to the second (specialization).

Record the word specialization in the first blank of the arrow. Then ask them to recall what helped increase productivity in the third round of the widget production as well as when they worked for *Intelamath* (technology). Record the word technology on the second space.

Finally, ask them what helped in the production of paper cups, and what would have helped in the *Intelemath Company* (training, or education). Record the word education in the final space on the arrow. Leave the visual up with the word wall words. Have the students elaborate on their worksheets with specific examples from the previous activities.

Check for Understanding

The chart below shows the change in the number of shirts produced per worker in a shirt factory.

Production of Shirts per Worker per Year

	1820	**1859**
Number of shirts produced	2,000	9,410

What is the **most likely** cause for the change in the number of shirts produced per worker? Use the graphic organizer on Handout 4 to explain your answer.

Rubric

2 – This response gives a valid cause with an accurate and relevant explanation.

1—This response gives a valid cause with an inaccurate, irrelevant, or no explanation.

Strategy 5: Application
Jigsaw, Summarizing

Place the students in groups of 2-3. Designate groups as A or B.

Give the A groups Handout 5 (Oliver Evans)[7], and the B groups Handout 6 (Diary of Jonah Walker)[8] as well as another copy of Handout 4 for everyone.

Instruct the groups to read the material they have been given and to look for evidence of the factors that increase productivity. Have students record examples on their Handout 4.

After the groups have completed the task, tell the A group members to each find a member of a B group. The partners will share the information from the reading that they did and both partners will fill in the information gained from the other on their handouts.

Have the students return to their original groups and compare the notes they gained from meeting a partner from the opposite group.

Check for Understanding

- Give an example of a product that you would like to produce.
- Explain how you would make sure that your factory produced as much of this product as it possibly could.

Rubric

2- Student's explanation includes all three factors that increase production.

1- Students explanation includes one or two factors that increase production.

[7] This reading has a lexile level of 890, appropriate for the Common Core State Standards 4-5 grade band.

[8] This reading has a lexile level of 910, appropriate for the Common Core State Standards 4-5 grade band.

Lesson Two[9]

Essential Question

- In what ways do economic systems differ and why?

Background

All societies face the same fundamental economic problem of scarcity which is caused by the fact that societies have limited resources and unlimited wants. Because of scarcity, every society must answer the basic economic questions of what to produce, how to produce, and for whom to produce. How a society or nation allocates its human, natural, and capital resources depends on the type of economic system it uses.

In ***market*** *economies*, most resources are privately owned. Consumer sovereignty directs resources for the production of goods and services. Producers compete for consumer dollars and use this information to decide which goods and services to offer for sale in the marketplace. Produces decide how a good is produced based on the costs of production. They decide how much to supply by comparing the cost of producing the product to the price they expect to receive for it.

Command *economies* generally have a group of central planners who make distribution decisions based on goals they have established or have been given by the country's political leaders. These planners determine what is produced, the mix of resources used to produce the goods and services, and the prices, which are often set below market price creating shortages.

In ***traditional*** *economies*, the basic economic questions of what to produce, how to produce, and for whom to produce, are answered based on a society's traditions and customs.

The activities in this part of the unit are designed to allow students to explore the three types of economies, and to develop an understanding of the differences between them.

Instructional Strategies

Materials for Lesson 2:

Strategy 1 materials

- Handout 7 – 1 scenario for each group
- Visual 9 – Production Specifications
- Visual 10 – Production Recording Sheet
- Visual 11 – Economic Systems
- Visual 12 – Economic Systems definitions

[9] Lesson courtesy of Bonnie Meszaros, Center for Economic Education, University of Delaware

- Visual 13 – Economic Systems - 3 types

Strategy 2 materials

- Handout 8 – Reading – 1 per student
- Sticky Notes
- Handout 9 – 1 per student

Strategy 3 materials

- Handout 10 – 1 copy, separated for matching activity
- Visual 14
- Handout 11 – 1 scenario per group
- Handout 12 – 1 per student

Strategy 1: Gathering Information
Simulation

Add the words "***economic systems***" to the word wall.

Tell the students that they will be participating in a simulation to learn about different economic systems.

Divide the class into groups of four or five students. Label the groups A, B, and C. Any group labeled B must have 5 students. Groups A and C may have four or five. Distribute one of the three production instructions (labeled Handout 7).

Display Visual 9 (Production Specifications). Tell the class that these apply to all the groups, but each group also has additional instructions on the handouts. Tell students they will produce jewelry made from macaroni follow the directions given to their group.

Review the specifications shown on Visual 9 (Production Specifications).

Give students time to read the specifications and organize their groups. Circulate among the groups to be sure that they understand the task. For Group A, select one student who will use the supplies first to make bracelets.

Distribute macaroni, string, scissors, 2 markers, and a ruler to each group.

Allow 15 minutes for groups to produce jewelry. Then stop production.

Display Visual 10 (Production Recording Sheet). Tell the students that the value of a necklace is $10 and that the value of a bracelet is $5. Have each group report the number of bracelets and necklaces produced and the value of their production, with the following adjustments:

- When Group A reports, tell them that it is tradition that the men in the group divide the bracelets equally among themselves. Record the value of their production.

When preparing for this activity, be sure to obtain macaroni that will fit on the string according to the specifications on Visual 9.

- If Group B reports more than 5 bracelets or any necklaces, note that the extra output will go to their central planners. Record the value of their production equal to $5 per bracelet for up to 5 bracelets. As the central planner, seize the extra products. Tell the group that as central planner you will distribute five bracelets as a reward for meeting the quota – give the bracelets back to group members in any way you wish.
- When group C reports, tell them that they will be paid the value of their output. They can use the money to pay for goods. Write the value of their output on the chart. Do not actually sell the bracelets or necklaces.

Ask students these questions:

- What is different about the production output of the groups? *(Group A should produce the fewest; Group B should produce at least five bracelets. Some B groups may produce more, but the extras are distributed as deemed desirable by the central planner. Group C should produce the most and may produce necklaces.)*
- What might explain the differences in output? *(Answers will vary but might include different supplies, skills of workers, or method of production, rewards system. Students may not know that all groups had the same supplies and that different groups had different directions. Do not point this out at this time.)*
- What is different about the value of what the groups produced? *(Group A should have the least; GroupB may produce more than five but will only be paid for five; Group C should earn the most since it is likely that they produced the higher priced necklaces.)*
- What might explain this? *(Students may say that the group had better tools, more workers, more supplies, produced necklaces instead of bracelets, better method of production, etc. Accept all answers but give no explanation at this time.)*

Tell students that each group will have an opportunity to share how they produced their bracelets and necklaces. Ask one member of each group to tell the class how the group determined:

- what to produce;
- how to produce it;
- what job each member of the group would have;
- who would get the final products.

Display Visual 11 (Economic Systems). Ask the students to listen to each of the group presenters and think about how each group answered the basic economic questions.

Ask a representative from Group A to present. Discuss the following and record answers on Visual 11:

- How did Group A decide what to produce? (*traditional ways, customs*)
- How did Group A assign jobs and determine how to produce and how much to produce? (*tradition, customs*)
- How did Group A determine who would get the bracelets? (*tradition, custom*)

Repeat the presentation and recording on Visual 11 with Groups B and C.

Group B:

What to produce: *Central planner determined what was needed. Produced what the central authority told them to produce*

How to produce: *Central authority wanted the group to produce efficiently. Each member was assigned a job and the group was told how to set up the production process using an assembly line. Individuals could not choose their own job. They were randomly assigned. Group was told to produce five bracelets. If they met this quota they would be rewarded.*

For whom to produce: *Central planners declared who was in need of the bracelets.*

Group C:

What to produce: *The group produced whatever they wanted. They were motivated to select what they felt would be most profitable.*

How to produce: *They were free to organize any way they chose. They chose a method the group thought would be efficient and least costly. They produced as many as they could given the skills and education of the workers.*

For whom to produce: *Individuals willing to pay the highest price would get the products.*

Display Visual 12 (Economic Systems). Discuss the definition of an economic system with the class.

Display Visual 13 (Systems Definitions). Review the definitions of each type of economic system. Return to Visual 11 and have the students decide which group was representative of each type of system (*A was traditional, B was command, and C was market*).

Ask the students why different groups produced different amounts of jewelry and earned different amounts. (You may want to display the production recording sheet again; Visual 10.) Sample responses:

- *Those in the market system produced more and earned more.*
- *Group C got to keep all that they earned which was an incentive other group did not have.*
- *Group B was only rewarded for the quota they met which was to produce five bracelets.*
- *Anything over five went to the central planners and workers were not paid for these.*
- *There was no incentive to produce more.*
- *Group A followed custom and weren't motivated to produce any other way.*

Collect the bracelets and necklaces for use in another unit activity.

Check for Understanding

- Which system seems most like the way that the United States' economic system works? Explain why you think so.

Rubric

2 – The answer names one of the systems (although it may not be a market system) and the explanation supports the choice by including examples from what was learned in the lesson.

1 – The answer references one of the three economic systems but there is no explanation, or the explanation does not match the chosen system.

Strategy 2: Extending and Refining
Continuum

Have students work in pairs to read Handout 8 (Reading: Aztecs and Incas). After reading do the following:

Draw a continuum on the board like this:

Traditional ---------- Command---------- Market

Ask students what the domestic mode of production is. *Economies that were self-sufficient. Iroquois families produced and gathered all they needed to survive. All families engaged in the same economic activities. Men hunted and fished, built houses, cleared fields, traded and were involved in warfare. Women were in charge of farming, raising the children, cooking, making clothing and baskets.*

Ask what type of economic system is the domestic mode of production most like, and ask for an explanation. *It is most like the traditional economy. Production was carried out by families based on tradition.*

Assign students to work in pairs. Give each pair two small sticky notes. Ask them to label one I for Iroquois and one C for Colonists. After discussion among the pairs, ask pairs to come to the board and place their sticky notes on the diagram under the type of system they think the Iroquois and Colonial economic systems were most like.

Ask students the following:

- Why did so many of you put your sticky notes for the Iroquois under Command?

Jobs were dictated by gender and the land and housing was jointly owned.

- How did the Incas answer the three basic economic questions?

Iroquois "state" owned the land, the products of the land, and the output of labor. The state determined how production would be allocated. Clay pipes and surplus goods were traded.

- Why did so many of you put your sticky notes for the American Colonists under Market?

Colonists bought and sold goods and services. Colonists had a choice of occupation based on where they lived.

Some students may realize that each system was neither pure command nor market economy and may place their decision between the two.

Ask them to explain what parts of each economic system they recognized in either the Colonial or Iroquois. *Level of governmental control varied between the two, but in conclusion, the American Colonial economy was most like a market economy and the Iroquois Empire most like a command economy.*

Check for Understanding

- Distribute a copy of **Handout 9** to each student. Ask them to complete the chart.

Rubric

Traditional	3,9,12
Command	1,5,6,7,8,10
Market	2,4,5,11

Strategy 3: Extending and Refining
Vocabulary on the Move, Categorizing

Announce to the class that there has been an order placed for the macaroni jewelry that they produced in Lesson 1. A second-grade teacher would like to give the jewelry to her class. She has 28 students in her class.[10]

Display the jewelry that was created earlier. Ask the students what problem exists. *There is a scarcity of jewelry.*

Tell the students that they now have an *distribution* problem. The economic question of for whom to produce must be answered somehow. Put the word *distribution* on the word wall. Define it as "distributing, sharing, or dividing up."

Copy Handout 10 (Distribution Methods Matching) and cut it apart. Give the names of the methods to some of the students and the descriptions to others. Have the students move around the room to find matches between the names and the descriptions.

Once they have found the matches, post them on a large piece of paper. Discuss the following by reading the name and description, and then asking the students for additional examples (suggestions are in italics):

- **Lottery** is a method of distribution that involves chance. An example is drawing names from a hat to allocate a prize. *Sometimes universities don't have enough dorm rooms for all the students, so they put their names in a lottery and the university draws names to determine who will get rooms.*

[10] If the number of bracelets and necklaces you have from the earlier activity is equal to, or more than this number, you will need to adjust the story so that two teachers need the jewelry for more students. The number of students should exceed the number of jewelry pieces you have.

- **First-come, first-served** is a method of distribution in which those first in line or those who are the first to order receive the good or service. An example is standing in line to be the first to enter a store for a special sale. *Another is a radio contest in which the first caller after a signal wins a prize.*
- **Authority** decides is a method of distribution in which a person in authority decides who receives the goods and services. For example, a teacher decides who gets to use the computers in the classroom. *At a camp, a counselor might decide who gets to sleep in which cabin.*
- **Personal characteristics** is a method of distribution in which people receive goods or services because of some need or characteristic. For example, handicapped drivers are given reserve parking spots close to a shopping area. *At a baseball game, free caps are given to those who are 12 years old and under.*
- **Highest bidder** is a method of distribution in which the people who can afford to pay the most for the goods and services are the people who receive them. For example, a new car is on sale for $23,000. Individuals who are willing and able to pay $23,000 can buy the car. *Additional consumer examples are appropriate.*
- **Competition and force** are methods of distribution in which those who receive goods and services are those who win a competition. For example in a hot-dog-eating contest, the individual who can eat the most hot dogs wins a prize. *In school, the classroom that reads the most books gets a pizza party.*
- **Sharing** is a method in which the goods and services are divided equally. For example, there are three students in the class who want to use the computer. There are only 30 minutes before the day ends. The students decide to share the computer and each gets 10 minutes. *A student brings four candy bars to class for a treat. There are 20 students in the class. She divides the candy bars equally among her classmates.*

Display Visual 14 (Benefits and Costs). Ask students who benefits (wins) and who bears costs (loses) for each distribution method. See the teacher answer key for suggested ideas to fill the chart.

Pass out an index card to each student. Ask them to write on the card which method should be used to allocate the jewelry and explain why they think this would be the best method.

Have the students stand and sort themselves into groups according to which distribution method they have chosen. Have each group choose a speaker to explain the group's viewpoint to the other groups.

Check for Understanding

- A local elementary school is having a talent show in the school auditorium. Five hundred teachers, students, parents, and friends want to attend. The auditorium only has seats for 350 people. Because of the school schedule, the show can only be presented one time.
- How should the school allocate the seats? Explain why you think this is the best distribution method to use.

Rubric

2 – This response gives a valid distribution method with an accurate and relevant explanation.

1 - This response gives a valid distribution method with an inaccurate, irrelevant, or no explanation.

Strategy 4: Application

Role Playing

Students act out scenarios while other students watch to identify the economic system represented in the skits.

Divide the class into 6 groups. Distribute the scenarios (Handout 11) to the groups; one scenario per group. Allow time to devise a skit that demonstrates the scenario using the economic system that has been assigned.

Distribute the exit ticket (Handout 12). As each group presents, the rest of the students should be marking the exit ticket. The exit tickets are used as the Check for Understanding for this part of the unit.

Check for Understanding

- Students fill out an exit ticket on which they identify the type of economic system that was demonstrated in each skit.

Rubric

2 - The student correctly identifies 4 to 5 economic systems.

1 - The student correctly identifies fewer than 4 systems.

Visual 1

Visual 2

Visual 3

Steps for making bread:

1. Gather ingredients: yeast, flour, sugar, water, salt, flavorings if needed
2. Gather equipment: bowls, bread board, mixer, plastic wrap, baking pans
3. Put the yeast, a little sugar, and the water in a bowl. Wait 10 minutes.
4. Mix the flour, salt, and any flavorings along with the yeast mixture in the mixer for 10 minutes.
5. Take the bread dough out and knead it by hand on the bread board for 5 minutes.
6. Put it in a clean bowl, cover with plastic wrap and let sit for 1 hour.
7. Take it out, knead it for a few more minutes, then break it into pieces to make rolls.
8. Put the rolls in the baking pan, cover with plastic wrap and let sit for ½ hour.
9. Uncover the rolls, put them in the oven and bake for 20 minutes.
10. Take them out and let them cool for ½ hour.
11. Wrap them up to sell.

Steps for making pottery:

1. Get a large lump of clay.
2. Push and pull on the clay on a work table to soften it up.
3. Set up your pottery wheel, plug it in, and get a bowl of water to keep nearby.
4. Cut off a piece of the clay.
5. Start the wheel and shape the clay with your hands. Use the water to keep the clay wet.
6. Cut the pot off the wheel.
7. Put it in the kiln (like an oven) for 12 to 24 hours.
8. Let it cool.
9. Paint the pot.
10. Put it back in the kiln for 2 hours.
11. Let it cool, then wrap it to sell.

Visual 4 Widget Production Table

Group Name	Method of Prod.	Input or Workers	Output or Widgets Round 1	Output or Widgets Round 2	Output or Widgets Round 3	Productivity or Widgets per Worker Round 1	Productivity or Widgets per Worker Round 2	Productivity or Widgets per Worker Round 3

Visual 5 Delaware Industries

Photo 1

1865 Pusey and Jones, Wilmington

Shipbuilding and paper making

Visual 5, continued

Photo 2

Mid-1800's Bluestone quarry

Photo 3

Making Baskets at the Marvel Packaging Company

1920

Photo 4
Sorting eggs for size, Poultry Industry, 1930

Photo 5

Lima beans are removed from their shells, Milton, 1935

Handout 1 Technology Scavenger Hunt

List the technology you see in each of the photos of Delaware's industrial and agricultural past.

Photo 1

Photo 2

Photo 3

Photo 4

Photo 5

Handout 2 Math Problems

2,649 + 4,750	3,503 +7,992	147,934 +356,286	98,532,033 +34,825,109

237,421 - 155,781	54,028,956 - 3,459,208	43,932,576,893 - 5,302,683,443

349,678,371 x 6	453,972 x 9	432,937,563 x 7

459,387 X 21	703,251 x 33	321,928 x 57	4,329,987 x 46

3,456÷7	957362÷8	528764÷2	422048÷4

√25	√36	√ 121	√256

Visual 6 Answers to Math Problems

2,649 + 4,750 7,399	3,503 +7,992 11,495	147,934 +356,286 652,154	98,532,033 +34,825,109 133,357,142

237,421 - 155,781 81,640	54,028,956 - 3,459,208 50,569,748	43,932,576,893 - 5,302,683,443 38,629,893,450

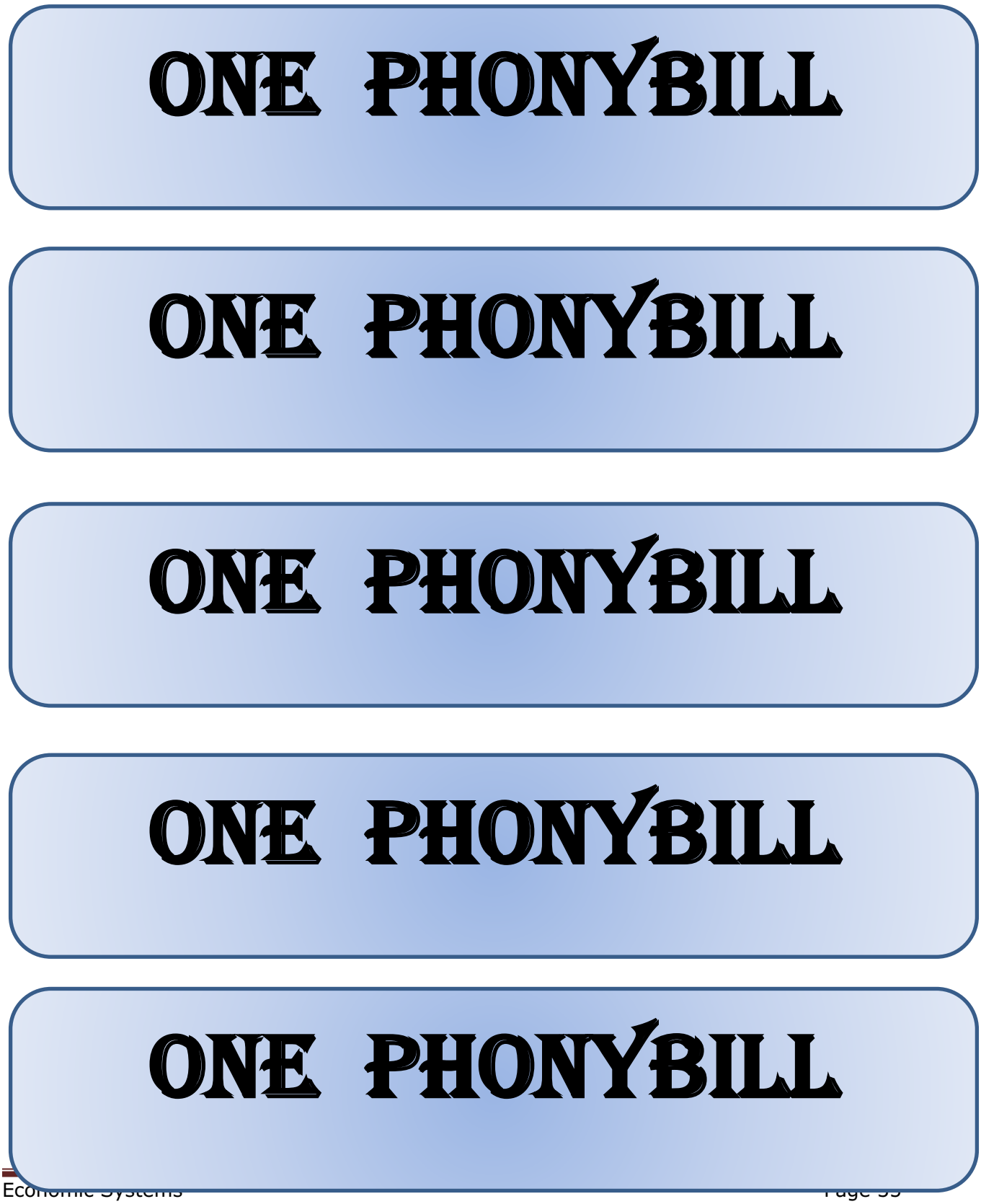
349,678,371 x 6 2,098,070,226	453,972 x 9 4,085,748	432,937,563 x 7 3,030,562,941

459,387 X 21 9,647,127	703,251 x 33 23,207,283	321,928 x 57 18,349,896	4,329,987 x 46 199,179,402

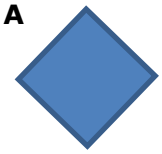
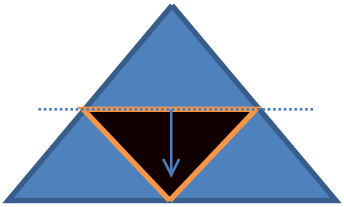
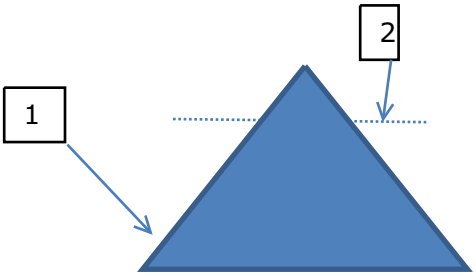
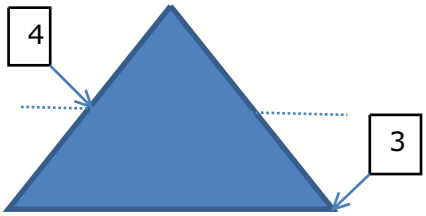
3,456÷7 493.71	957,362÷8 119,670.25	528,764÷2 264,382	422,048÷4 105,512

√25 =5	√36 =6	√ 121=11	√256=16

Handout 3 Phonybills

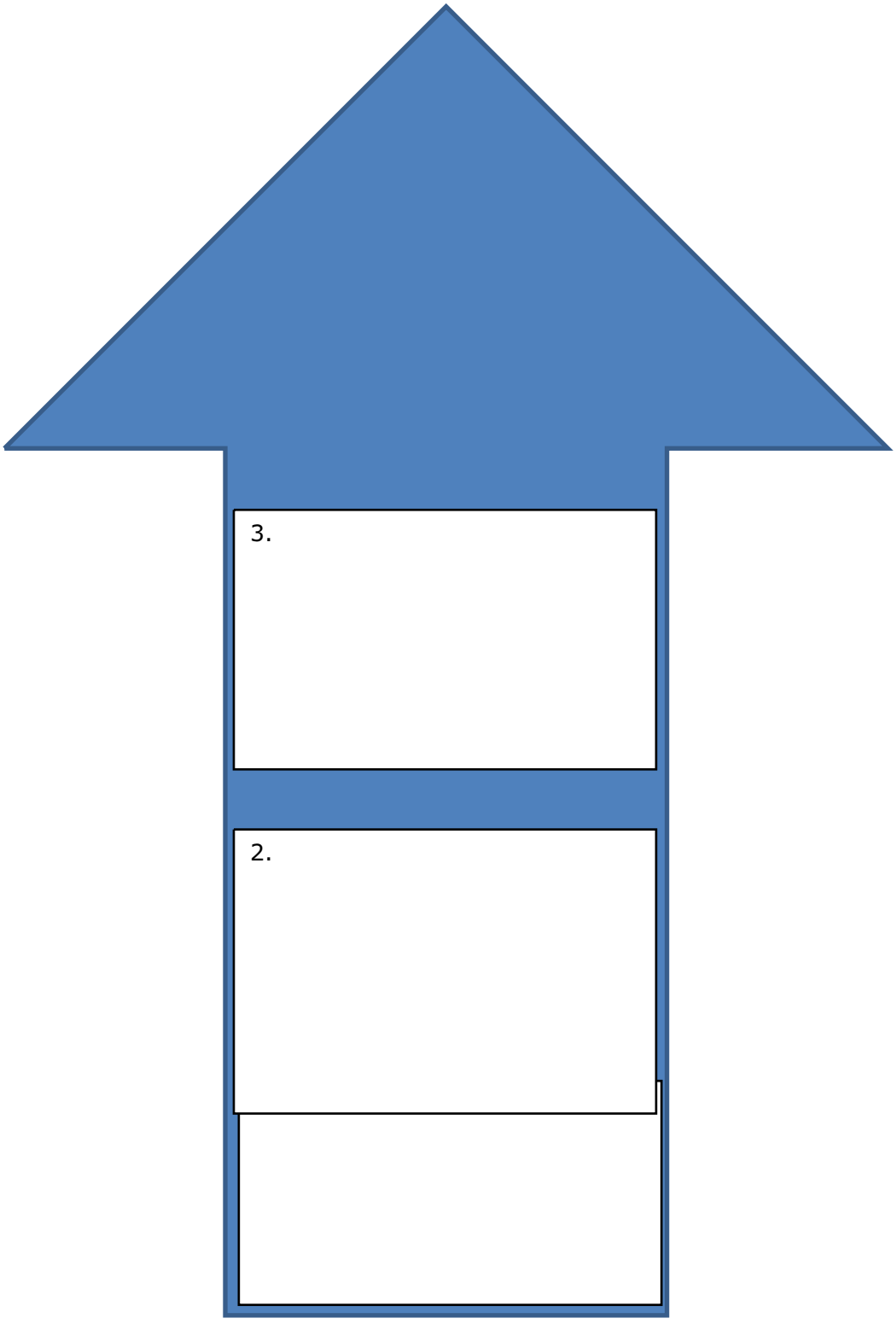


Visual 7 Origami Cup Instructions

1. Place your square paper like Figure A. 2. Fold the paper in half so that the bottom point meets the top point. 3. Crease along the fold so your paper looks like Figure B.	**A**  **B** 
4. Using the top triangle, fold the top point down to the bottom fold as in Figure C. 5. Make a good crease in the fold, then open up to the top again to look like Figure B.	**C** 
6. Fold point 1 up to point 2, crease the fold, and open back up.	
7. Fold point 3 up to point 4 and crease and fold well. 8. Refold the other side again (point 1 to point 2).	
9. Fold the top point down as you did in step 4. 10. Turn the cup over and make a similar fold, folding the top point down. 11. Open up, and you have a drinking cup.	

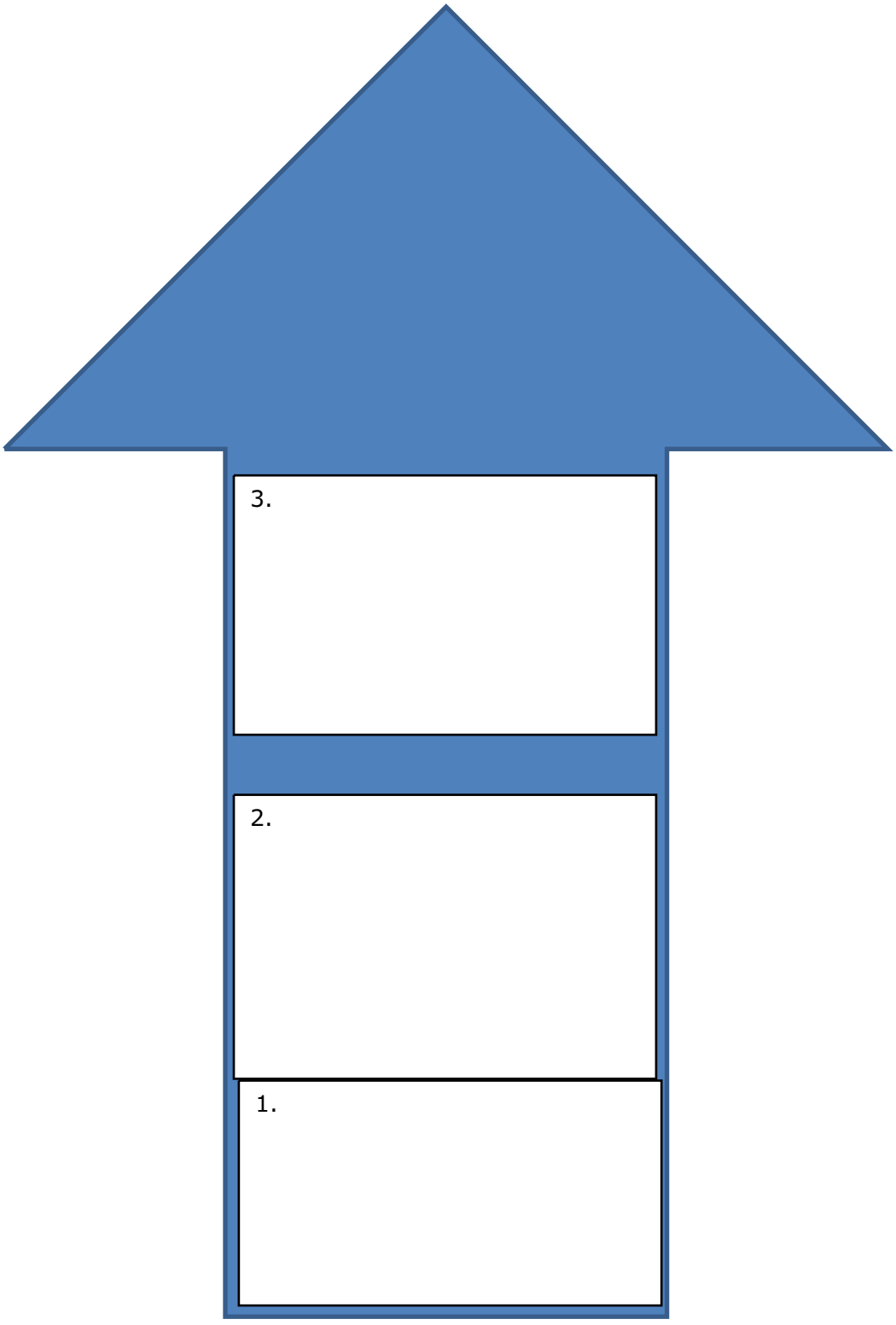
Visual 8

Increasing Productivity



Handout 4

Increasing Productivity



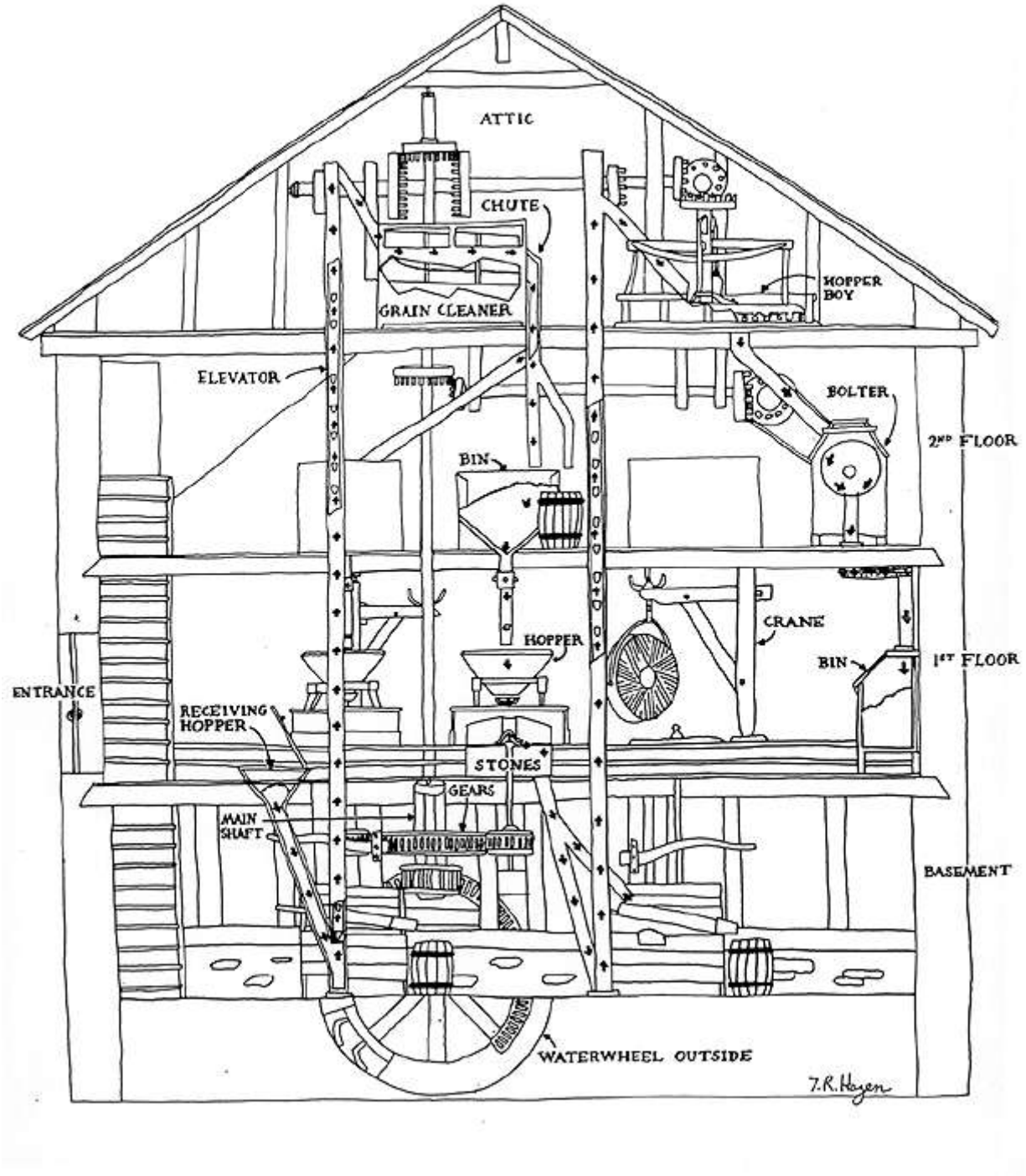
Handout 5 Oliver Evans

The best place for a flour mill is next to a fast-moving stream because the force of the water will produce a lot of power. The Brandywine River is the best river in Delaware for turning water wheels to power a mill. Ships used to sail up the Brandywine to bring grain to the mills, and then carry away the flour that is produced. Many people were needed to produce the flour, package it and load it onto the ships.

Oliver Evans was born in Newport, Delaware, in 1755 and is known as one of America's first great engineers. He invented a process to make flour almost entirely with machines. One or two men could produce three times the amount of grain. The grain was better quality too.

Other mill owners copied his methods. Brandywine flour was shipped throughout the world.

Handout 5 cont'd Oliver Evan's Mill Invention



NOTE: This text is for the teacher to use as the diagram is explained.

Grain would be brought to the mill by wagon, carried into the **ENTRANCE** door on the first floor. The miller would weigh the sacks of grain. The miller would then pick up each sack and dump it into the **RECEIVING HOPPER** on the first floor. There is a gate in the bottom of the receiving hopper which controls the flow of grain down the chute which feeds the **ELEVATOR**. The grain flow can be shut off, or just opened in varying amounts so that each elevator cup is properly filled. The grain flows down the chute to the mill's basement; there the empty cups that have come from the mill's attic turn right side up as they pass over the bottom pulley in the elevators boot. As the cups come up from under the pulley they are filled by the chute.

Cups on the continuous moving belt carry the grain up through the floors of the mill to the mill's **ATTIC.** As the cups of the belt turn over the top driving pulley, the full cups are over turned and their material empties out down a chute. The chute feeds the grain into the **GRAIN CLEANER.** The grain cleaner or rolling screen is a double mesh wire covered cylinder. The wire cylinder strains or filters our any dirt, seeds and any other foreign matter from the grain. At the end of the grain cleaner is a smutter or fanning mill, which removes the smut, mold, fungus and any dirt clinging to the grain. Then from the smutter the grain falls through a **CHUTE** to the **SECOND FLOOR** and into grain **BINS** directly above the millstones. From the hopper shaped bottom bins on the **SECOND FLOOR,** the grain falls down a vertical chute on the **FIRST FLOOR** (which is removable for millstone dressing). The vertical chute has a gate in it to control the flow and cut off the grain. These chutes fill the **MILLSTONE HOPPER** that sits on a wooden frame called a horse. The horse sits on the round wooden millstone cover called a vat. Hung from under the horse is a wooden device called a shoe. The shoe regulates the flow of grain into the millstones.

The three pairs of mill **STONES** are on the **FIRST FLOOR.** The grain is fed into the turning upper stone called the runner stone. The wooden shoe is vibrated back and forth by a turning device mounted in the center of the upper turning millstone, called the damsel. The grain is moved between the upper turning millstone and the bottom stationary stone, called the bed stone. These 2 stones are from 3/8" an inch apart in the center eye, to about one sixteenth apart at the outer edge of the two stones. On the surface of both millstones are cut grooves in the millstones which cut the grain like a pair of scissors. The upper runner stone is turning about 125 revolutions per minute, and the kernels of grain make a spiral path outward between the millstones. Each kernel is between the stones for 3 1/2 revolutions. The two millstones never touch and you do not get any of the stone into the flour, about as much stone as you get steel from your butter knife when you butter your bread. There are three millstone **CRANES** used to lift off the upper runner stone for millstone dressing.

The meal leaves the millstones all around the outer edge and as it does it falls down a chute attached to one side under the millstone cover. The ground grain is slightly warm and moist, so in the basement it is fed into the bottom of another elevator. The elevator carries the meal up to the **ATTIC** where a chute pours it into the outer edge of a low tub enclosing the **HOPPER-BOY**. The hopper-boy is a turning rake that cools and drys the meal so it won't stick in the bolting screens. From a chute attached just off center if the hopper-boy the cooled meal falls down a chute into the **BOLTER** on the **SECOND FLOOR.** The bolter is a long round reel covered with various side mesh screens. From the head of the reel, the screens vary from fine to medium mesh in the side of the openings to allow the finest (smallest particles) flour to pass through the screen, then continuing down the inside of the reel (the next larger size particles) the middlings pass through the medium sized screen. And finally out the lower tail of the reel falls the (largest size particles) bran. The three grades of materials falls down different chutes into conveyors just under the **SECOND**

FLOOR. The turning conveyors move the material horizontally into the three different produce **BINS** on the **FIRST FLOOR**. The miller would afterwards pack the flour into barrels, and the bran and middlings into sacks.

The above drawing and text by T. R. Hazen appeared in "How Does It Work?" (text and drawing), Peirce Mill (folder), Parks & History Association, Georgetown, Washington, D.C. 1987, reprint 1989.
Material found at: http://www.angelfire.com/journal/millrestoration/section.html

Handout 6 Apprentice Journal

Diary of Jonah Walker

In 1800, Jonah Walker, a twelve year old farm boy, was apprenticed to Mr. James Pyle, a cooper (barrel maker) in Brandywine Village. The cooper was the boy's master, giving him food, a place to sleep, and the few clothes he would need. Jonah was not paid, but was taught the trade of barrel making. He would be under contract from seven to nine years.

At first the noise of the cooper shop, the nearby mills, the steady line of huge loaded grain wagons pulled by six horses with their loud rough wagoners, and the mixture of village smells were bewildering to Jonah. He missed his family of four brothers and two sisters. He especially missed his twin brother, Joe, who had been apprenticed to a Philadelphia printer. You will meet the following people in this diary:

- Mr. James Pyle, cooper
- Mrs. James Pyle, his wife
- Mr. Bill, 18-year old, nearly finished his apprenticeship. (He slept in the house)
- Jim Pierson, 14-year old apprentice
- Jonah Walker, 12-year old, new

March 6 Mr. James Pyle and Mrs. Pyle and three little girls - Martha, Sarah, Liz. I'm here with four more years to come. Shop on corner – house alongside. Sleep with Jim Pierson he's 14 from near Dover. Eat with family. Do what they tell me.

March 7 Almost too tired to write – candle about out. Rain all day swept chips and shavings. Dust and noise awful.

March 8 Mr. Pyle said I was to go to First Day School to learn to read- write- cipher – ugh. Had to help put 6 ft hickory poles in awful smelling water hole - piled rocks on top to keep poles down. Stacked firewood big load just came.

March 9 Mrs. good cook. Said I was to help her make me a copy book had to make holes in lots of folded paper Mrs. sewed through holes. This wood or old piece of leather apron will be cover.

March 10 First Day School not so bad – Mr. Starr teacher thinks I read good writing so-so ciphering – ugh. Said I was to practice writing by keeping a diary. This is it.

March 11 Work all day bed where are you? Noise loud.

March 17 First day – worked for Mrs. – carry water in and milk cow each am Mrs. Smiles nice - lots of bread and jam. School tiresome don't like ciphering

March 20 helped pound softened hickory poles with old wood mallet

March 22 carry water off and on all day – bringing in firewood in am – look for eggs.

April 12 Helped split firewood – upset water as I went into shed – glad it was not in kitchen

April 17 Busy day at shop – wonder if I can ever learn to use tools as Mr. Pyle does

April 19 saw mill today when we took barrels to mill – noise – dirt

April 20 the Brandywine is rising. Water has flooded lower floor of a mill on south bank

Handout 7 Production Instructions

Group A Production

Your group values the way things were done in the past. Tradition dictates the way you do things. You produce what your ancestors did and in the same way. Your ancestors produced bracelets so you will produce bracelets.

Each member of the group makes an entire bracelet. The teacher will give the macaroni, markers, scissors, and ruler to one member of the group. This member will make one complete bracelet, pass it around for the other group members to admire, and then pass the production material to the next group member. It is a tradition that each group member only makes one bracelet.

Group B Production

Your group lives in a country where the central leadership makes decisions. It determines what is needed by the people and how resources are used. The leadership values efficient use of time and resources.

You produce what the central leadership wants. The central planners have determined that 5 bracelets are needed immediately and that you are to produce necklaces.

Your group will specialize and divide up the labor. You cannot choose your job. The tallest member of the group will be the string cutter. Going clockwise around the group, the next person will draw dots on the macaroni. The third person will string the macaroni alternating the different colored dots. The fourth person will tie the knot and the fifth will trim the knot.

If your quota of five bracelets is filled, your group will be rewarded by the central planner with bracelets. If you produce more than five bracelets, any extra bracelets will go to the central planners. If you produce necklaces, the central planners will take all the necklaces.

Group C Production

Individuals in your country produce whatever brings the highest price and produces it in the least costly method. Your group can produce whatever jewelry it wants and can organize the group members as you want. Your goal is to produce as many pieces of quality jewelry as possible in the time you have.

You can organize your group and choose jobs in whatever way you choose. You do not have to trim the knot neatly. Your group will be paid for as any pieces of jewelry as you can produce. Your group will be paid $5 for every bracelet produced and $10 for every necklace.

Visual 9 Production Specifications

Production Specifications

Production Steps	One Bracelet	One Necklace
Cut piece of string	10 inches long	16 inches long
Draw dots on macaroni using two different color markers—use one color per piece of pasta	10 pieces of macaroni—5 with each color dot	16 pieces of macaroni—8 with each color dot
Place macaroni on string	10 pieces of macaroni—alternate color dots	16 pieces of macaroni—alternate color dots
Knot string	Knot two ends of string together to create a bracelet	Knot two ends of string together to create a necklace
Trim knot using scissors	Trim knot	Trim knot

Visual 10 Production Recording Sheet

Production Recording Sheet

Group	# of Group Members	# Produced		Value of Production
		Bracelets	Necklaces	

Visual 11 Economic Systems

Group	What to Produce	How to Produce	For Whom to Produce
A			
B			
C			

Visual 12

Economic System Definition

- The formal and informal rules that a society uses to determine what to produce, how to produce, and how to distribute (for whom to produce) goods and services.

Visual 13 Definitions of Three Economic Systems

Command System — An economy in which most economic issues of production and distribution are resolved through central planning and control.

Market System — An economy that relies on a system of interdependent market prices to allocate goods, services, and productive resources and to coordinate the diverse plans of consumers and producers, all of them pursuing their own self-interest.

Traditional System — An economy in which customs and habits from the past are used to resolve most economic issues of production and distribution

Handout 8 Economic Systems of the Iroquois and American Colonists[11]

Iroquois

The Iroquois were farmers and hunters. They fished and gathered berries, plants, and roots. Before the arrival of Europeans the primary weapons were bows and arrows, stone axes, knives, and blowguns. The major crops were maize, beans, and squash. Surplus crops were dried and stored for future use. After the harvest of crops in the late summer, the Iroquois hunted until the winter solstice. In early spring the Iroquois fished and hunted and then in late spring and summer they cleared and planted fields. The Iroquois owned all the land together. They built longhouses and several hundred people lived in one longhouse.

The Iroquois knew how to bend and shape green wood. They made house frames, pack frames, snowshoes, toboggans, basket rims, lacrosse sticks, and other wood products from green wood. Rope was made from the inner bark of trees. Clay pipes were among the many types of items manufactured by the Iroquois.

Long before European contact the Iroquois were involved in an intricate trade network with other native groups. Clay pipes were an important trade item that reached other native groups all along the east coast of North America. Traditionally, men hunted and fished, built houses, cleared fields for planting, and were responsible for trade and warfare. Farming was the responsibility of women, whose work also included gathering wild foods, raising the children, preparing food, and making clothing and baskets.

The American Colonists

In the colonies, the merchants, artisans and even farmers did not live on just the goods they produced. Instead they sold goods and services and lived on their earnings. Cities and towns played a key part in the economy. Agricultural regions near the coast and along rivers were also important.

In order to trade with a large group of people, goods had to move from producers to markets. To make a profit, goods need to be transported in the least costly way. It cost as much to ship goods by wagon 30 miles over colonial roads as it did to ship goods by boat 3000 miles to London, England. Colonial goods were often shipped to London.

Both men and women made goods and provided goods and services. Some people made their living by fishing in the ocean. Others sold wheat, timber and animal furs. They made boats large enough to transport the goods to other colonies. Clothes for the family were often made at home. Women spun wool from their own sheep into thread and then wove it into cloth. Some colonists bought expensive fabric from London.

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[11] Sources: Davidson, James West. *Nation of Nations: A Narrative History of the American Republic*. New York: McGraw-Hill, 2004. Print. Wilder, Howard Baker, Robert Phillips Ludlum, and Harriett McCune Brown. *This Is America's Story*. Boston: Houghton Mifflin, 1986. Print.

Handout 9 Check for Understanding

Read each statement and place a check under the type of economic system it represents.

1. Central authority or government determines what to produce

2. Individuals choose their jobs

3. Custom determines jobs

4. Goods distributed to highest bidder

5. Produce by the least costly method

6. Government determines what is needed

7. Goods distributed based on those declared in need

8. Production process determined by central authority

9. Produce the way ancestors produced goods

10. Government determines jobs

11. Demand and profit determine what is produced

12. Custom determines what to produce

Handout 10 Distribution Methods Matching

Method	Description
Lottery	A method of distribution that involves chance. An example is drawing names from a hat to allocate a prize.
First-come, first-served	A method of distribution in which those first in line or those who are the first to order receive the good or service. An example is standing in line to be the first to enter a store for a special sale.
Authority	A method of distribution in which a person in authority decides who receives the goods and services. For example, a teacher decides who gets to use the computers in the classroom.
Personal characteristics	A method of distribution in which people receive goods or services because of some characteristic. For example handicapped drivers are given reserve parking spots close to a shopping area.
Highest bidder	A method of distribution in which the people who can afford to pay the most for the goods and services are the people who receive them. For example, a new car is on sale for $23,000. Individuals who are willing and able to pay $23,000 can buy the car.
Competition and force	Methods of distribution in which those who receive goods and services are those who win a competition. For example in a hot-dog-eating contest, the individual who can eat the most hot dogs wins a prize.
Sharing	A method in which the goods and services are divided equally. For example, there are three students in the class who want to use the computer. There are only 30 minutes before the day ends. The students decide to share the computer and each gets 10 minutes.

Visual 14 Benefits/Costs of Distributions

Method	Benefits	Costs
Lottery		
First-come, first-served		
Authority		
Personal Characteristics		
Highest Bidder		
Competition or Force		
Sharing		

Visual 14 Benefits/Costs of Distributions/Answers

Method	Benefits	Costs
Lottery	**Everyone has an equal chance**	**Only one person or a limited number of people get the good or service; it depends on chance**
First-come, first-served	**For people who have the time to stand in line or don't have to travel long distance to get to line**	**Those who do not have the time or who have to travel long distances**
Authority	**Individual making the decision may give it to a friend or someone who doesn't need it; individual who gave up decision does not bear responsibility**	**People who are not friends with the authority may not get the item; individual who gave up the decision has to live with authority's decision even if he doesn't like it**
Personal Characteristics	**To those who have the characteristic;**	**Deciding who really needs it is difficult and subjective; not everyone will agree; eliminates those who don't have the characteristic**
Highest Bidder	**People with enough income get more goods and services**	**Those who do not earn enough income;**
Competition or Force	**Those with the strength or skill**	***Only* those with the strength or skill get the good or service**
Sharing	**Everyone gets some goods or services but often not enough; some people receive goods and services they shouldn't (they benefit unnecessarily)**	**Some people get goods and services they shouldn't (they don't want them)**

Handout 11 System Scenarios

Group 1

Your group is producing cars in a car factory. Someone from the government tells the manager of the factory to buy all the parts that are needed from his cousin's car part business. The government authority also tells the manager that the factory must produce 15 cars this week, and they will each be sold for $500 dollars, at a car dealership in the capital city. The manager of the factory gives one worker the job of painting the cars but that worker is actually very good at putting engines together. Another worker is assigned to the job of putting in windshields even though that worker knows a great deal about putting the fabric on seats. All of the workers work really hard for the week and end up producing 16 cars. The government authority visits the factory and takes the 16th car. The authority thanks the workers for working so hard and gives the extra car to one of the workers, who is another cousin. After work, the workers go to the only grocery store in town, where the government has only allowed the grocer to sell three dozen eggs, ten pounds of meat, and six gallons of milk each day this week. The eggs are too expensive for two of the workers.

Group 2

Each of the members of your group have set up small businesses in a town. One person runs a bakery, another runs an auto parts store, the third person has a gym that offers fitness classes. A fourth town member owns a small grocery store where local farmers can sell their produce. The fifth townsperson owns a beauty salon. Each week, they get together to talk over lunch. The bakery owner tells about how well the coffeecakes are selling and the bakery is making lots of money. The baker had to make an extra 10 cakes last week and sold them all. The person running the auto parts store was having a slow business week, so he lowered the prices of headlights and a couple of other parts and more people started shopping there. The gym owner is seeing lots of people signing up. People like the fact that the owner has graduated from school with a special fitness certificate. The grocer and the beauty salon owner are happy to see business doing well.

Group 3

The members of your group live in a small community in the country. Some group members belong to the Smith family and some belong to the Watkins family. The Smiths and the Watkins have lived in this community for over a hundred years. Each family has a garden and keeps some animals for milk, eggs, and meat. The two families share a fruit orchard that was planted by the Watkins' great-great-grandfather. One person in each family makes the family clothing. The Smith family makes a special jam, from the grandmother's recipe, which the Watkins family likes. The Watkins are good at fixing the farm machinery, so the Smiths trade jam with them in return for equipment repair.

Group 4

Your group is made up of Inuit people, who live in the Arctic. It takes special skills to live in this harsh climate, and for thousands of years the parents have been teaching the children how to fish, hunt, and make the tools they need for those activities. When some of the members of the group have been successful at hunting or fishing, they always share the food with all the other members. Other members of the group make sure that each family has help to build the shelter they need, and to make the warm clothing that is necessary.

Group 5

The members of your group live in New York City. They have all graduated from college and they have chosen to work in banking, computer technology, advertising, and the government. They all love to shop in the many stores in the city. Each week they read the newspaper to find the latest sales, and shop where the prices are the lowest. They have a favorite frozen yogurt shop, where the owner has decided to make a new bacon-banana flavor. The yogurt shop owner has heard from many customers that they would be willing to buy this new flavor. When they are not buying their groceries, they eat at one of the many fine restaurants. Each restaurant owner is serving the food that he or she makes best. Because the food is so good, each of the restaurant owners is making lots of money.

Group 6

In your group, each member has been assigned by the government to work in one factory or another. Anyone with a last name that starts with A-G must work in the clothing factory, while those with last names that start with H-N must work in the computer factory. (You will need to make up new last names for yourselves for this skit.) When the clothing factory workers sit down to have lunch they start talking about how hard it has been to get gas for their cars lately. The government has only allowed one tanker truck per month to deliver gas to the gas station in town. The government has been giving any extra gas to the mayors of the neighboring towns. The clothing factory workers are also wondering why the government keeps telling them to make tie-dye shirts, when the latest fashion is solid- color shirts. When the workers at the computer factory get out of work, they start talking about how they would like to have one of those new computers at home, but the factory is only allowed to produce one hundred a year and they are all taken by the government to be sold in the big city.

Handout 12 Scenarios Exit Ticket

As you watch each group act out their skit, think about what you have learned about different economic systems. Circle the system that is represented by each skit, and write a brief explanation of why you chose that answer. (Hint … tell how each of the three economic questions was answered in the skit.)

Group 1	**Traditional**	**Command**	**Market**
Group 2	**Traditional**	**Command**	**Market**
Group 3	**Traditional**	**Command**	**Market**
Group 4	**Traditional**	**Command**	**Market**
Group 5	**Traditional**	**Command**	**Market**
Group 6	**Traditional**	**Command**	**Market**

Transfer Task Reading

Read the story below and use the information to complete the transfer task.

My name is Peter. I am ten years old. I've been listening to my parents and neighbors talking a lot lately. Last night, they went to a meeting in the town hall. I think that something big is about to change.

Let me tell you a little about my family. My dad works at a factory that produces automobiles and my mom works in another factory that produces special kinds of bread. I'm not sure they like their jobs, but they go to work every day because they need to earn money. The commercials on our little TV tell us that it is good for our neighbors and our country when every worker goes to work each day. The commercials say workers should do their best to make the products that our country needs. Our government is relying on each worker to help.

A year ago, the government decided that my dad and the people at his factory should make an extra thousand cars. The government had decided to use up all the steel that was being made in steel factories. I heard my dad saying that he was not sure who was going to buy all those cars, because there were so many already waiting to be sold. He also wondered what would happen to the people who build large buildings if the government did not send the steel that they need to their construction sites. The workers at his factory did what they were told, even though it meant working long hours, with old hand tools.

My mom mixes the bread at her bread factory. She and her coworkers use big bowls and spoons, and spend many hours stirring ingredients together. Then, other workers carry the dough to long tables where they cut it into pieces to put in the baking pans. On some days, they make wheat bread, and on other days they make cinnamon bread. It all depends on what ingredients the government has delivered to the factory each day.

On her way home from work, my mom shops for groceries to make our dinner. The special bread that she makes in the factory is in the store, but the government has put a price on it that we cannot afford. There is only one store in town; we can't go to different stores to find the best prices. All the prices are decided by the government. That's how it is for everything we want to buy.

I heard that at the meeting last night, my parents and neighbors talked about wanting to change how things are in our country. They are planning to talk to our government about running things differently. They have heard that other countries are run differently, and maybe everyone here could do better.

What advice could you give to them?