

## *Delaware Model Unit Gallery Template*

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: Resources & Production**

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**District: Cape Henlopen School District**

**Content Area: Social Studies**  
**Grade Level(s): K-3**

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### **Summary of Unit**

As consumers and producers, people use resources in different ways to satisfy their wants. Due to scarcity, societies must choose how to produce and allocate resources, goods, and services in order to satisfy their wants. To do this, individuals and societies must answer three basic economic questions—What goods and services will be produced? How will these goods and services be produced? Who will consume them?

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## **Stage 1 – Desired Results** (What students will know, do, and understand)

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### **Delaware Content Standards**

- Include those addressed in Stage 3 and assessed in Stage 2.

**Economics Standard Three K-3a:** Students will identify human wants and the various resources and strategies that have been used to satisfy them over time.

### **Big Idea(s)**

- Transferable core concepts, principles, theories, and processes from the Content Standards
  
- Resources
- Patterns
- Interdependence

### **Unit Enduring Understanding(s)**

- Full-sentence, important statements or generalizations that specify what students should understand from the Big Ideas(s) and/or Content Standards and that are transferable to new situations.
  
- Because resources are scarce, societies must organize the production, distribution, and allocation of good and services.
- The way societies make economic decisions depends on cultural values, availability and quality of resources, and the extent and use of technology.

### **Unit Essential Questions(s)**

- Open-ended questions designed to guide student inquiry and learning
  
- How should people use what they have to get what they want?
- Why have different ways to produce and allocate goods and services developed?

### **Knowledge and Skills**

- Needed to meet Content Standards addressed in Stage 3 and assessed in Stage 2.

#### **Students will know...**

- Choice
- Production
- Producer
- Consumer
- Resources
  - Natural
  - Human
  - Capital
- Division of Labor
- Assembly Line Production

**Students will be able to...**

- Exercise sound reasoning in understanding and making complex choices
- Frame, analyze and solve problems
- Work productively with others

## Stage 2 – Assessment Evidence

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

### Suggested Performance/Transfer Task(s)

- Performance/transfer tasks as evidence of student proficiency.

An effective assessment for ALL students should be designed to include:

- \*Complex, real-world, authentic applications
- \*Assessment(s) for student understanding of the Stage 1 elements (Enduring Understandings, Essential Questions, Big Ideas) found in the Content Standards
- \*Demonstration of high-level thinking with one or more facets of understanding (e.g., explain, interpret, apply, empathize, have perspective, self-knowledge)

This summative assessment is a transfer task that should be reviewed with students prior to using the activities in the unit.

### Essential Question Measured by the Summative Assessment

- How should people use what they have to get what they want?

Prior Knowledge	You have just learned that people use resources in different ways to satisfy their wants.
Problem	<p>A bad storm has caused your school to lose power. No lunch has been made. The only choice for lunch today is a jelly sandwich, an apple, and a carton of milk. Classes will eat in their classroom because the cafeteria is dark. So, each child’s lunch must be placed in a box. The principal has asked your class to make the lunches for the entire school. She needs the 500 lunches in one hour.</p> <p>The boxes need to be put together:</p> <ul style="list-style-type: none"> <li>• The apples need to be washed and dried.</li> <li>• The sandwiches need to be made and wrapped in paper.</li> <li>• A carton of milk must be put in each box.</li> </ul> <p>The lunches must be packed and counted on carts for each classroom.</p>
Role/Perspective	You are a student in the class.
Product/Performance	Complete the chart for the resources you will need. Next, write a plan that tells what your class needs to do so that everyone’s lunch is ready in one hour. Be sure to explain why you chose that plan.

Criteria for Exemplary Response	<ul style="list-style-type: none"> <li>• The chart shows the correct category for the productive resources.</li> <li>• The plan tells what your class needs to do so that everyone’s lunch is ready in one hour.</li> <li>• The plan demonstrates how you would use productive resources.</li> <li>• The explanation includes an understanding of why specialization increases production and cuts down on time.</li> </ul>
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**Chart Resources and Production**

<b>Natural</b>	<b>Human</b>	<b>Capital</b>

**Rubric(s)**

- Scoring guide to evaluate performance/transfer tasks used as evidence of student proficiency.

An effective scoring guide should:

\*Measure what is appropriate for the Content Standard that is assessed.

\*Provide opportunities for differentiation of the performance/transfer tasks used as evidence of student proficiency.

**Transfer Task Rubric**

Scoring Category	Score Point 3	Score Point 2	Score Point 1
<b>The chart categorizes the productive resources needed</b>	The chart accurately categorized <b>all</b> productive resources	The chart accurately categorized <b>most</b> productive resources	The chart accurately categorized <b>few</b> productive resources
<b>The plan explains what each member of the class needs to do so that everyone’s lunch is ready in one hour</b>	The plan is <b>well developed</b> and <b>clearly explained</b>	The plan is <b>partially developed</b> with a <b>somewhat clear explanation</b>	The plan is <b>minimally developed</b> and an <b>unclear explanation</b>
<b>The plan demonstrates how you would use productive resources</b>	The plan <b>clearly demonstrates</b> how you would use the productive resources	The plan <b>somewhat demonstrates</b> how you would use the productive resources	The plan <b>minimally demonstrates</b> how you would use the productive resources

Scoring Category	Score Point 3	Score Point 2	Score Point 1
<b>The plan explains the reason(s) why specialization increases production and cuts down on time</b>	The explanation is <b>thoroughly developed</b>	The explanation is <b>partially developed</b>	The explanation is <b>minimally developed</b>
<b>Uses content-appropriate vocabulary in order to demonstrate understanding</b>	Content appropriate vocabulary is <b>well developed</b> & evident	<b>Some</b> evidence of content appropriate vocabulary usage	<b>Minimal</b> evidence of content appropriate vocabulary usage

**Total Score: \_\_\_\_\_**

**Above the Standard: 13 to 15 points**  
**Meets the Standard: 8 to 12 points**  
**Below the Standard: 5 to 7 points**

### Other Evidence

- Varied evidence that checks for understanding (e.g., tests, quizzes, prompts, student work samples, observations and supplements the evidence provided by the task).

Formative Assessment is embedded into the lessons through the Checks for Understanding.

### Student Self-Assessment and Reflection

- Opportunities for self-monitoring learning (e.g., reflection journals, learning logs, pre- and post-tests, self-editing—based on ongoing formative assessments).

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 (Design learning activities to align with Stage 1 and Stage 2 expectations)

### Key learning events needed to achieve unit goals

- Instructional activities and learning experiences needed to align with Stage 1 and Stage 2 expectations

Include these instructional elements when designing an effective and engaging learning plan for ALL students:

- Align with expectations of Stage 1 and Stage 2
- Scaffold in order to acquire information, construct meaning, and practice transfer of understanding
- Include a wide range of research-based, effective, and engaging strategies
- Differentiate and personalize content, process, and product for diverse learners
- Provide ongoing opportunities for self-monitoring and self-evaluation

### Lesson One: Background

As consumers and producers, people use resources in different ways to satisfy their wants. Due to scarcity, societies must choose how to produce and allocate resources, goods, and services in order to satisfy their wants. To do this, individuals and societies must answer three basic economic questions: What goods and services will be produced? How will these goods and services be produced? Who will consume them?



How the question of what to produce is answered depends on the availability of *productive resources*. Societies tend to produce goods and services when the resources needed for production are readily available and accessible. Size and skills of the labor pool, quality and quantity of *natural resources* and *capital resources*, and access to technology determine how goods and services are produced. Areas with poor capital resources, limited *technology*, and large populations tend to rely heavily on *human resources* in the production process using limited or poor quality tools and equipment. Countries with skilled labor, access to natural resources, and high quality capital resources use less labor and more machines and technology in the production process. In reality, the mix of human, natural, and capital resources that societies use fall somewhere in between labor or capital intensive economies.

### Instructional Strategies

#### Strategy 1 – Gathering Information: Think\Pair\Share

Ask the students:

- Think about how lemonade is made.
- Individually, list the materials necessary to make lemonade.

Students should then *pair with another to compare lists*. Finally, have students *share their lists with the class*. Compile the list for the class on a board or wall.

We are using lemonade as an example of a product that people make with resources. Tell the students:

- You will learn about producers and the three kinds of productive resources that are used to make things.
- In this example, the producer is the person who makes the lemonade, the person who brings together all of the things on our list—the productive resources. So the things on the list used to make lemonade are called productive resources.
- We call a person who makes a good or provides a service a producer, like the person who might make lemonade.
- Can you name some producers and tell what good or service they produce?

Pick one of the producers that students named and ask:

- How does that producer make their good or provide their service?
- What productive resources are used?

When students initially learn new concepts or terms, it is important to not just give a definition. An informal explanation or example provides a viable starting place for learning. In later strategies, students will refine their understanding and correct any misconceptions.

Add to the Word Wall: producer, productive resources.

### Check for Understanding

- Write down what *producer* and *productive resources* means. Tell your partner.
- How is your explanation different from your partner’s explanation?

### Rubric

**2** – This response gives a valid difference with accurate and relevant reasoning.

**1** – This response gives a valid difference with an inaccurate, irrelevant, or no reasoning.

For administration of formative assessment see [Student Self-Assessment and Reflection](#)

### Strategy 2 – Extending & Refining: Categorizing

Divide the students into groups of 2–3. For each group, write the following terms (include any other valid suggestions from students) on index cards.

lemons	cutting board
lemon juice	large glass jar or pitcher
sugar	long-handled spoon
knife	water
measuring cup	cup or drinking glass

Tell students that anything that is used to make goods and services that people want are called *productive resources*. There are three kinds of productive resources: natural, human, and capital resources. Write the terms on the Word Wall.

- Natural resources are things from nature that can be used to make goods or services.
- Human resources are workers that are needed to make goods and services.
- Capital resources are things made by people that are used to make other goods or services.



For each group of 2-3, have students group the productive resources used to make lemonade into the three categories above. Conduct a class discussion once students are finished to help clear up any misconceptions about the three categories.

**Note to Teacher:** If it is not mentioned, ask students if there *is anything missing from the list of productive resources used to make lemonade*. Someone has to stir the lemonade with the spoon—it could be mechanical but is probably a human resource.

Ask: *What other examples of each kind of resource can you think of?* Encourage students to look around the room to find examples. Keep a list for use in the next strategy.

### **Check for Understanding**

- What are some differences between the three types of productive resources:
  1. Capital
  2. Natural
  3. Human

#### *Rubric*

**3** – This response gives a valid difference between each of the three with accurate and relevant reasoning.

**2** – This response gives a valid difference between two of the three with accurate and relevant reasoning.

**1** – This response gives a valid difference between two of the three with inaccurate, irrelevant, or no reasoning.

For administration of formative assessment see [Student Self-Assessment and Reflection](#)

### **Strategy 3 – Application: Non-Linguistic Representation**

When you ask students to draw or graphically represent a vocabulary term, they are forced to think of it in a new way.

Maintain the groups of 2-3 students. Assign one student in each group to be the “group artist.” Give the group artist an index card with one of the following terms: human resources, productive resources, natural resources, or capital resources. Tell the artist that he or she is to *draw an explanation of the term without words or letters, and the rest of the group has to guess the term based on the drawing*. (This strategy is similar to the board game Pictionary. Teachers may substitute the terms above for others more suitable to the class environment.)

Give each group an opportunity to continue until each student has been the group artist.

The teacher might choose one of the terms to model for the entire class. This shows that being a good artist is not as important as explaining with pictures.

### **Check for Understanding**

This picture shows a farm worker hauling apples with a tractor near Winchester, VA.



:USDA Online Photography Center, #95cs0648: CD0056-014

What productive resources are used to produce apples? Be sure to explain why each resource is a natural, capital, or human resource.

*Rubric*

- 2** – This response gives a valid example with an accurate and relevant explanation.
- 1** – This response gives a valid example with an inaccurate, irrelevant, or no explanation.

How would producing apples be different without capital resources? Explain your answer.

*Rubric*

- 2** – This response gives a valid difference with an accurate and relevant explanation.
- 1** – This response gives a valid difference with an inaccurate, irrelevant, or no explanation.

For administration of formative assessment see [Student Self-Assessment and Reflection](#)

## Lesson Two: Background

Due to scarcity, who gets the goods and services once they are produced requires some method of allocation. In traditional societies, this question is handled by custom. In a command economy, a central authority makes the decision usually by setting prices on goods and services, often below the market price which results in shortages. In a market system, this question is usually answered by price. A consumer's income determines what goods and services one can afford.



However, within any economic system there are different ways to distribute goods and services. These include prices, command, majority rule, contests, force, first-come-first served, sharing equally, lottery, personal characteristics, and others. No one method can satisfy all wants. Therefore, advantages and disadvantages of each method must be analyzed before one is selected. In the classroom, scarcity exists naturally. At this level, students can compare the advantages and disadvantages of different methods of allocating various goods and services such as treats, time on the classroom computer, use of classroom supplies, and playground equipment as well as goods and services that are scarce at home and in the community.

## Instructional Strategies

### Strategy 1 – Gathering Information: Sequencing Events

Ask students, in small groups of 2 or 3, to *think about how a plant grows*. Give students a short time to talk about it and write down the steps in growing a plant.

Have each group create their own diagram on poster board that shows the sequence of events for a plant to grow. Groups should share their diagrams with each other in a class discussion.

**Note to Teachers:** Be aware of misconceptions in sequencing: it is not necessarily important that all steps in plant growth (from seedling to maturity) are recalled, but rather that the steps each group does show on the poster board are in the correct sequence.

Have students *identify the steps in producing a plant as requiring natural, human, or capital resources*. For instance, if a group says that sunshine is needed, sunshine is a natural resource.

### Check for Understanding

Think about something you have produced either in school or at home.

- Make a list of the resources used.
- Categorize the resources into groups (natural, human, capital).
- Write the sequence of tasks needed to create the product.
- Is there another way to make the product? Explain how if there is another way. If there is no other way, explain why not.

#### Rubric

**4** – This response gives a valid list of categorized resources accurately sequenced with an accurate and relevant explanation of whether there is another way to make the product that includes how or why not.

**3** – This response gives a valid list of categorized resources accurately sequenced with an accurate and relevant explanation of whether there is another way to make the product but fails to explain how or why not.

**2** – This response gives a valid list of categorized resources accurately sequenced with an inaccurate, irrelevant, or no explanation of whether there is another way to make the product.

**1** – This response gives a valid list of categorized resources inaccurately sequenced with an inaccurate, irrelevant, or no explanation of whether there is another way to make the product.

For administration of formative assessment see **Student Self-Assessment and Reflection**

### Strategy 2 - Extending & Refining: Graphic Organizers

Have students read the book *The Little Red Hen*. An online version of *The Little Red Hen* can be found at

[http://www.econedlink.org/lessons/popup.php?lesson\\_number=389&&flash\\_name=Little\\_Red\\_Hen.swf](http://www.econedlink.org/lessons/popup.php?lesson_number=389&&flash_name=Little_Red_Hen.swf)

Keep in mind there will be several elements to identify in the story:

- Production – the steps in producing a loaf of bread.
- Resources – natural, human, and capital resources needed in the production process.

Have students work together, in small groups of 2 or 3, to *identify the productive resources that are used to make bread in the story and write each productive resource on an index card.*

Provide each group with a large piece of chart paper divided into three sections: natural, human, and capital. Have the groups cooperatively sort the cards to fit the three categories. Have them fill in the chart and display it on the wall. Discuss the completed charts and assess them for accuracy.

***Resources Needed to Produce a Loaf of Bread***

<b>Natural</b>	<b>Human</b>	<b>Capital</b>

Ask students to *re-read the story of the Little Red Hen to look for the tasks needed to produce the loaf of bread.*

*Record each task on a separate index card and arrange the cards in the proper sequence.*

Have the groups share their sequence of tasks and initiate a discussion to have the total class come to consensus on the correct sequence.

Have each group *contribute to a bulletin board display using pictures to illustrate the sequence of events used to produce bread by the Little Red Hen.*

Use the bulletin board to initiate a discussion of the production process. Ask the following questions:

- How could the production process be improved so that the Little Red Hen could make more than one loaf of bread?
- Would more bread be produced in the same amount of time if work was shared by other animals in the story? Why?

**Check for Understanding**

- Write a letter to the Little Red Hen to tell her how resources could be changed so that she could produce more bread.

*Rubric*

**2** - This response gives a valid example with an accurate and relevant explanation.

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

For administration of formative assessment see **Student Self-Assessment and Reflection**

**Strategy 3 – Application: Problem-Solving**

Divide students into groups of four or five. Have their chairs and desks arranged to form a common work surface. Give each student a new box of 8, 12, or 24 crayons per student (use boxes of all the same crayon count).

Determine by asking individual students in each group how many crayons of each color are in each box. For example, *how many red crayons are in each box?* How many are blue? Record the correct number of individual colors for each box as a reference.

Ask each student within each group to open their own box and *spill the contents in a large pile in the middle, mixing up the crayons* as they add more. Have your students *carefully unfold the crayon box so that it is flattened*.

*It is now your job to put back together one box of crayons per student. We will keep track of how long it takes each group. You will have to put the correct crayon colors back into your box.* Refer the students to the correct number of colored crayons in each box.

*Raise your hand when you are finished, and I will record how much time it took on the board* (keep track for each group). Do not keep track of which student finished and how much time—it is more important to see how long it takes to put all the boxes back together.

When all the boxes have been reassembled, add up the total time for each of the groups—e.g., group A took X minutes, group B took Y minutes, etc. **Note:** This is a good time to integrate mathematics.

Students should examine how long it took each group to finish the crayon sorting. *Can you think of a way to make the job easier?*

You will want to encourage the idea of an assembly line or division of labor—e.g., they might first sort the crayons according to color, then each student could place several crayons in the box and then hand the box to the next child until the box is back together, and filled properly. Or, all the students could work to sort the crayons and each could participate in the reloading of each box.

Have the students do the sorting activity again, this time using the easier process. Record the time for this round. Have your students refer to the tip sheet if they need some help thinking of ways they could improve their assembly line.

### **Check for Understanding**

Think about something you have produced either in school or at home.

- Why was the job easier?
- What happened if one of the students got behind?
- What happened when the work piled up?
- What if one of the students was ill on the day this work was to be done?

#### *Rubric*

**3** – This response gives a valid explanation with three accurate and relevant predictions.

**2** – This response gives a valid explanation with two accurate and relevant predictions.

**1** – This response gives a valid explanation with one accurate and relevant prediction.

Your class wants to earn money for a field trip. You have decided to sell decorated sugar cookies. You have 30 minutes of class time to decorate as many cookies as you can.

- What is the best way to produce the most cookies? Why?

#### *Rubric*

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

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

For administration of formative assessment see **Student Self-Assessment and Reflection**

## Resources and Teaching Tips

- A variety of resources are included (texts, print, media, web links)
- Help in identifying and correcting student misunderstandings and weaknesses

Background information and teaching tips are embedded within the lessons.

Lesson 2/Strategy 2: Another text that might be used for this strategy is *The Ox Cart Man* by Donald Hall, Barbara Cooney (*Illustrator*)

## Differentiation

- Stage 2 and 3 allow students to demonstrate understanding with choices, options, and/or variety in the products and performances without compromising the expectations of the Content Standards.
- Instruction is varied to address differences in readiness, interest, and/or learning profiles.
- Accommodations and differentiation strategies are incorporated in the design of Stage 2 and 3.

Differentiation is embedded into the teaching strategies. For instance, cooperative learning and paired discussion takes place throughout the unit.

## Design Principles for Unit Development

At least one of the design principles below is embedded within unit design.

- **8<sup>th</sup> Grade Technology Literacy** - the ability to responsibly use appropriate technology to communicate, solve problems, and access, manage, integrate, evaluate, and create information to improve learning in all subject areas and to acquire lifelong knowledge and skills in the 21st Century (SETDA, 2003).
- **International Education** - the ability to appreciate the richness of our own cultural heritage and that of other cultures in to provide cross-cultural communicative competence.
- **Differentiated instruction** - the ability to effectively and efficiently reach all students in a heterogeneous environment.
- **Universal Design for Learning** - the ability to provide multiple means of representation, expression, and engagement to give learners various ways to acquire and demonstrate knowledge.
- **21<sup>st</sup> Century Learning** – the ability of to use skills, resources, & tools to meet the demands of the global community and tomorrow’s workplace. (1) Inquire, think critically, and gain knowledge, (2) Draw conclusions make informed decisions, apply knowledge to new situations, and create new knowledge, (3) Share knowledge and participate ethically and productively as members of our democratic society, (4) Pursue personal and aesthetic growth. (AASL, 2007)

### 21<sup>st</sup> Century learning skills include:

- Exercise sound reasoning in understanding and making complex choices
- Frame, analyze and solve problems
- Work productively with others
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## Technology Integration

The ability to responsibly use appropriate technology to communicate, solve problems, and access, manage, integrate, evaluate, and create information

Useful websites are embedded within the lessons. Student use of computers for some strategies is encouraged.

## Content Connections

Content Standards integrated within instructional strategies

### SOCIAL STUDIES

- **Economics Standard One K-3a:** Students will understand that individuals and families with limited resources undertake a wide variety of activities to satisfy their wants.
- **Economics Standard Three K-3a:** Students will identify human wants and the various resources and strategies which have been used to satisfy them over time.

### ENGLISH LANGUAGE ARTS

- **ELA Standard One:** Use written English appropriate for various purposes and audiences.
- **ELA Standard 1.4 and 1.6 (pre K-4):** Demonstrate oral language proficiency – conversations, collaborative group work.
- **ELA Standard 4.4a (2-10):** Using appropriate texts, students will be able to connect their own experiences to those of literary characters by using literature as a resource for shaping decisions.

### MATHEMATICS

- **Mathematics Standard One (K-5) Numeric Reasoning:** Develop the concept of multiplication by using models to count the number of groups.