Allocation Methods – Grade Five

**Ohio Standards Connection:**

**Economics**

**Benchmark A**
Explain the opportunity costs involved in the allocation of scarce productive resources.

**Indicator 1**
Compare different allocation methods for scarce goods and services such as prices, command, first-come-first-served, sharing equally, rationing and lottery.

**Social Studies Skills and Methods**

**Benchmark D**
Use problem-solving skills to make decisions individually and in groups.

**Indicator 9**
Use a problem-solving/decision-making process which includes:
- Identifying a problem;
- Gathering information;
- Listing and considering options;
- Considering advantages and disadvantages of options;
- Choosing and implementing a solution;
- Developing criteria for judging its effectiveness;
- Evaluating the effectiveness of the solution.

**Lesson Summary:**
Using economic reasoning skills, students will be able to compare different allocation methods for goods and services. Students will experience each of the allocation methods listed in the indicator. They will learn why allocation methods are needed when there are scarce goods or services. Given a scenario, students will list options, consider advantages and disadvantages, and choose and implement an allocation method.

**Estimated Duration:** One hour and 20 minutes

**Commentary:**
Students have no doubt already felt the results of different methods of resources allocation, such as first-come-first-served or command. This lesson helps students understand the decision-making process behind these allocation methods and the major advantages and disadvantages of each method. They will also understand that people, acting individually or collectively through government, must choose which methods to use to allocate different kinds of goods and services, and that no method of distributing goods and services can satisfy all wants. This lesson will take five to 10 minutes a day over the course of several days.

**Pre-Assessment:**
- On the overhead, list the following terms/phrases: first-come-first-served, rationing, lottery, command (one person decides), price, equal share.
- Tell students to think about how to give out a limited number of snacks when there are more people than snacks.
- Tell students to write a brief explanation of what each allocation method means and give an example, if possible. Have the students record answers on the Review Guide, Attachment A.
- Allow 15 minutes before stopping the students and holding a class discussion about their understanding of these terms.
- Collect the guides to be used for individual evaluation of student understanding.
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- As a final pre-assessment and reflection step, give students the opportunity to place a sticker under one of the following headings on the class graph to see how the majority of the class feels about their distribution knowledge.

| I know six ways to decide who gets something when there isn’t enough for everyone. | I know some ways to decide who gets something when there isn’t enough for everyone. | I don’t know how to distribute something when there isn’t enough. |

**Scoring Guidelines:**
This simple and quick pre-assessment will give you an understanding of the needs of the class. Those students with stickers under the first column will be offered differentiated instruction to add more depth to their understanding. Use the pre-assessment as a guide for planning instruction.


**Post-Assessment:**
- Introduce the *Snack Time Scenario* to the class.
- Distribute Attachment B, *Snack Time Post-Assessment.*
- Have the students read the scenario and brainstorm a list of ideas.
- Make it clear that they have a limited amount of snack and only some students will be able to get the snack. Refer to this as a scarce resource.
- As an option, tell students they may compare three different distribution methods for extra credit instead of only comparing two types of methods.

**Scoring Guidelines:**
Use the rubric in Attachment C to score this post-assessment.

**Instructional Procedures:**
1. While students are out of the room, clear their chairs away and put 10 chairs in the front of the room. As students enter back into the room, choose students to sit in the chairs. Have all other students stand at their desks.
2. After the 10 chosen students are seated, uncover the word wall, or display on an overhead, the economic vocabulary words and definitions that follow. Provide students with a copy to keep with their review guide.
   - **Command:** The teacher or some other authority decides how things will be distributed.
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- **Equal shares**: Everyone gets the same amount.
- **Lottery**: Pick numbers or names out of a hat to see who is chosen.
- **Rationing**: Limit the amount of time to use a certain product or limit the number a person can have.
- **First-come-first-served**: If you are first in line, you will get the product.
- **Prices**: Buying or purchasing for money. (Those with enough money get the scarce good or service.)

3. Have students match one of the ideas on the word wall with the way the chairs were distributed (Command). Highlight or check off command at this time. Ask students: How can we give each of you a chance to get one of the chairs when there are not enough chairs for everyone? Have students discuss the lottery method for distribution of the chairs. Lead a class discussion on how this would be done and why it would be a good way to distribute the chairs. Have the students highlight or check off lottery on the list so they are aware of which methods have been demonstrated and discussed. Allow time for students to record the example on their *Review Guide*, Attachment A.

**Instructional Tip:**
In addition to the terms discussed, students should have some familiarity with the other economic words needed for the indicator: goods and services, scarcity and opportunity cost. Some review may be necessary.

4. After the lesson, give each student a chair. Assign or ask for a volunteer to summarize today’s allocation methods on chart paper to display in the room. Display the summary for students and have them record it on their *Review Guide*, Attachment A.

5. During the next lesson, tell students there will only be two pencils available for each team of four to five students for the next hour. Have students come up with a time limit for each person to use the pencils. After the time is decided, give the students a written assignment to complete.

6. After a reasonable amount of time, collect the written assignments and discuss the advantages and disadvantages of rationing. Assign another student the task of summarizing this lesson’s allocation method on chart paper to display in the room. Highlight or check off rationing on the word wall. Have the students record the example and definition on their review guide (Attachment A).

7. At lunchtime or before lunch, distribute a special snack, like a lollipop, to the first five to seven students in line. After lunch, discuss with the students what happened with the ones who received a snack (“There were only ___ snacks and ___ students”). Ask them if they recognized the type of allocation method used in the cafeteria. The answer is first-come-first-served. Again, assign a student the task of summarizing the allocation method demonstrated on chart paper. Highlight or check off first-come-first-served from the word wall. Have the students record example and definition on their *Review Guide*, Attachment A. (You may want to give the rest of the class the special snack at the end of the activity.)

8. As an alternative, set out a limited number sheets of colored paper for an assignment and make the rest of the paper plain or white. Give the first 10 students who line up, the colored paper.
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9. For the remaining three allocation methods, meet with three smaller groups of students (two to three in each group) and ask them to decide on an activity to demonstrate the remaining allocation methods. Have each small group devise the plan by the following day. Approve the plans, and have students collect necessary materials and demonstrate the method.

10. Have students write a summary of each method. Choose students to read from the chart paper, to review the past week’s demonstrations and give everyone a chance to finish recording definitions on their Review Guide, Attachment A. After all allocation methods have been reviewed and discussed, have students place tally marks next to their favorite allocation methods. Have a brief discussion as to why students chose the allocation method they did for their favorite. Make sure the students know they will be asked to give an example of how each allocation works on the post-assessment. Allow time for students to quiz each other and review information on the review guide with a partner.

11. Administer the post-assessment when you feel the students have reviewed their notes and are sure of methods.

12. Have students allocate a snack to their designated classroom or grade level, and record the details of the event. After the allocation activity, have students informally present to the fifth grade class their detailed information about the results of their chosen allocation method. (What was the snack? How was it allocated? Why did you think the chosen allocation method would work? What were the results of your chosen allocation method? What would you do again, differently next time?)

Differentiated Instructional Support:
Instruction is differentiated according to learner needs, to help all learners either meet the intent of the specified indicator(s) or, if the indicator is already met, to advance beyond the specified indicator(s).
- Have students work in small teams to provide support and give them more opportunities and time to respond.
- Have students create a rap song with the allocation methods to help someone remember them.
- Have students create a poem of one or more of the allocation methods.
- Have students create pantomimes demonstrating the allocation methods and allow other students the chance to guess the method being shown.

Extensions:
- Have students take pictures of signs in the community or cut out newspaper ads that display one or more of the allocation methods. For example: “While Supplies Last” at a local fast food restaurant is an example of first-come-first-served.
- Students may survey the class on the best “indoor game” for rainy days. Set up a tournament using the game. Finally, use different allocation methods each day to determine who will get to play the game.
Homework Options and Home Connections:
Have students prepare for the post-assessment at home using the Review Guide. The Review Guide will help them learn the terms and give them the opportunity to think of examples of each allocation method before the post-assessment.

Interdisciplinary Connections:
English Language Arts
- Communication
  Benchmark F: Give presentations using a variety of delivery methods, visual materials and technology.
  Indicator 9: Deliver formal and informal presentations recalling an event or personal experience that convey relevant information and descriptive details.

Materials and Resources:
The inclusion of a specific resource in any lesson formulated by the Ohio Department of Education should not be interpreted as an endorsement of that particular resource, or any of its contents, by the Ohio Department of Education. The Ohio Department of Education does not endorse any particular resource. The Web addresses listed are for a given site’s main page, therefore, it may be necessary to search within that site to find the specific information required for a given lesson. Please note that information published on the Internet changes over time, therefore the links provided may no longer contain the specific information related to a given lesson. Teachers are advised to preview all sites before using them with students.

For the teacher: Chart paper, overhead, lollipops, resource books on economics for the students, proper paper for the final product.

For the student: Pen, pencil, notebook paper, paper, art supplies.

Vocabulary:
- allocation
- scarcity
- first-come-first-served
- rationing
- lottery
- command
- equal share
- goods
- services
- production
- opportunity cost

Technology Connections:
Have students use word processing and graphic or multimedia software to create flyers.
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Research Connections:

Authentic experiences help students develop real-world knowledge and skills and give them the ability to apply their learning in ways that prepare them for their careers and lives beyond school.


Nonlinguistic representations or imagery mode helps students think about and recall knowledge. This includes creating graphic representations (organizers).

Attachments:
Attachment A, *Review Guide*
Attachment B, *Snack Time Post-Assessment*
Attachment C, *Snack Time Rubric*
<table>
<thead>
<tr>
<th>Allocation Methods – Grade Five</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attachment A</td>
</tr>
<tr>
<td>Review Guide</td>
</tr>
</tbody>
</table>

Define and give examples of the following allocation methods for scarce goods and services:

**Prices:**
- This means
- This means
- This means

One example is
- This means
- This means
- This means

**Sharing Equally:**
- This means
- This means
- This means

One example is
- This means
- This means
- This means

**Command:**
- This means
- This means
- This means

One example is
- This means
- This means
- This means

**Rationing:**
- This means
- This means
- This means

One example is
- This means
- This means
- This means

**First-Come-First-Served:**
- This means
- This means
- This means

One example is
- This means
- This means
- This means

**Lottery:**
- This means
- This means
- This means

One example is
- This means
- This means
- This means
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Attachment B
Snack Time!
Post-Assessment

It is your responsibility to decide on a snack to distribute (allocate) to fifth grade students after lunch. You only have a limited amount of the snack. There is not enough for everyone. It is a scarce good. What type of snack will you give out?

Now you will need to compare two different allocation methods that you can use to distribute the snack.

1. Choose two of the following methods and describe how you will distribute the snack:
   - price
   - command (one person decides)
   - first-come-first-served
   - sharing equally
   - rationing
   - lottery

2. Compare the two methods and explain which will work the best for your snack.
## Snack Time Rubric

<table>
<thead>
<tr>
<th></th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Describe two allocation methods</strong></td>
<td>The description is correct and very detailed for both methods of distribution.</td>
<td>The description is correct for both methods of distribution.</td>
<td>The description is correct for one method of distribution.</td>
<td>The description is not correct for either method of distribution.</td>
</tr>
<tr>
<td><strong>Comparison of allocation methods</strong></td>
<td>The comparison of the allocation methods is correct, complete and very detailed.</td>
<td>The comparison of the allocation methods is correct and complete.</td>
<td>The comparison of the allocation methods is correct but incomplete.</td>
<td>The comparison of the allocation methods is incomplete and not correct.</td>
</tr>
<tr>
<td><strong>Explanation of the of best method</strong></td>
<td>A detailed logical explanation is given for the chosen allocation method.</td>
<td>A logical explanation is given for the chosen allocation method.</td>
<td>An explanation is given but not logical for the allocation method chosen.</td>
<td>No explanation is given.</td>
</tr>
</tbody>
</table>