

# Economic Choice Container

**Background:** We have learned that we must make economic choices because we cannot have everything we want. All choices require giving up something, which is called an “opportunity cost.” People use their money in many ways, including saving, spending, and giving. To help us make economic choices, we must have money and a system for managing our money.

**Design Challenge:** Design and create a container to help you manage your money.

**Criteria:** Your container must

- have three compartments—one for savings, one for spending, and one for giving
- open and close
- remain closed when turned on its side
- have an opening in each compartment for inserting money
- have a symbol on each compartment to represent the purpose of the money in that compartment.



<p><b>Materials:</b> Select from the list below.</p>	<p><b>Tools:</b> Select from the list below.</p>
<ul style="list-style-type: none"> <li>• construction paper</li> <li>• flattened cardboard</li> <li>• glue</li> <li>• index cards</li> <li>• paper fasteners (limit 2)</li> <li>• paper clips</li> <li>• pipe cleaners</li> <li>• scrap paper</li> <li>• twist ties</li> <li>• yarn</li> </ul>	<ul style="list-style-type: none"> <li>• colored pencils</li> <li>• pushpin paper drill</li> <li>• ruler</li> <li>• scissors</li> </ul>

**Targeted Standard of Learning:** History and Social Science 3.9  
Supporting SOL: English 3.1, 3.2; Science 3.1

**Targeted Standard for Technological Literacy:** 11  
Supporting STL: 8, 9, 10, 17

## Tips for Teachers

### Targeted Standards of Learning:

History and Social Science 3.9 The student will identify examples of making an economic choice and will explain the idea of opportunity cost (what is given up when making a choice).

**Supporting SOL:** English 3.1, 3.2; Science 3.1

### Targeted Standards for Technological Literacy:

11 Students will develop the abilities to apply the design process.

**Supporting STL:** 8, 9, 10, 17

Prior Knowledge & Skill	Materials & Preparation	Safety Issues	Class Management	Materials Provided	Design Process
<ul style="list-style-type: none"> <li>Exposure to concepts and vocabulary related to economic choice and opportunity cost</li> <li>A global awareness of ways to help others</li> </ul>	<ul style="list-style-type: none"> <li>Check the Design Brief for materials. Teacher may substitute materials.</li> </ul>	<ul style="list-style-type: none"> <li>Discuss proper use of tools .</li> </ul>	<ul style="list-style-type: none"> <li>Working in groups recommended, allowing each student in the group to make his/her own container.</li> </ul>	<ul style="list-style-type: none"> <li>Design Brief</li> <li>Guided Portfolio (adapt as appropriate/ optional)</li> <li>Rubric Assessments</li> </ul>	Follow the Design Process: <ul style="list-style-type: none"> <li>Restate the problem.</li> <li>Brainstorm solutions.</li> <li>Create the best solution.</li> <li>Test the solution.</li> <li>Evaluate the solution.</li> </ul>



Guided Portfolio, p2



Name \_\_\_\_\_

**2. Brainstorm solutions.** Sketch and/or describe some possible solutions.




Name \_\_\_\_\_

**4. Test your solution.**

Does your container have a compartment for savings? YES NO

- Identify the opening for inserting money.
- Identify and explain the symbol you used to represent savings.

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Does your container have a compartment for spending? YES NO

- Identify the opening for inserting money.
- Identify and explain the symbol you used to represent spending.

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Does your container have a compartment for giving? YES NO

- Identify the opening for inserting money.
- Identify and explain the symbol you used to represent giving.

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Does your container open and close? YES NO

- Explain how it works.

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Is your container able to remain closed when turned on its side? YES NO

- Explain how it stays closed.

Guided Portfolio, p5

Name \_\_\_\_\_

**5. Evaluate your solution.**

Was it the best solution? Why, or why not?

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Look back at your brainstorming page. Would one of your other ideas have worked better? Why, or why not?

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What did you learn by designing and creating this container?

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## Rubric for Economic Choice Container

Name \_\_\_\_\_ Date \_\_\_\_\_

0—no evidence; 1—limited understanding; 2—some understanding with room for improvement; 3—good understanding with room for improvement; 4—substantial understanding

<b>Design Brief Rubric</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
The student restated the problem in his/her own words.					
The student brainstormed more than one idea.					
The student shared problems that occurred and their solutions through written notes or oral communication per teacher’s instructions.					
The student tested the container to make sure <ul style="list-style-type: none"> <li>• it has a compartment for <u>savings</u>, including an appropriate symbol for savings and an opening for inserting money</li> <li>• it has a compartment for <u>spending</u>, including an appropriate symbol for spending and an opening for inserting money</li> <li>• it has a compartment for <u>giving</u>, including an appropriate symbol for giving and an opening for inserting money</li> <li>• it opens and closes</li> <li>• the container remains closed when turned on its side.</li> </ul>					
The student evaluated how he/she could make it better next time.					

## Rubric for Economic Choice Container

Name \_\_\_\_\_ Date \_\_\_\_\_

0—no evidence; 1—limited understanding; 2—some understanding with room for improvement; 3—good understanding with room for improvement; 4—substantial understanding

<b>Oral Communication Rubric</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<p>3.1 The student will use effective communication skills in group activities.</p> <ul style="list-style-type: none"> <li>a) Listen attentively by making eye contact, facing the speaker, asking questions, and summarizing what is said.</li> <li>b) Ask and respond to questions from teachers and other group members.</li> <li>c) Explain what has been learned.</li> <li>d) Use language appropriate for context.</li> <li>e) Increase listening and speaking vocabularies.</li> </ul>					
<p>3.2 The student will present brief oral reports using visual media.</p> <ul style="list-style-type: none"> <li>a) Speak clearly.</li> <li>b) Use appropriate volume and pitch.</li> <li>c) Speak at an understandable rate.</li> <li>d) Organize ideas sequentially or around major points of information.</li> <li>e) Use contextually appropriate language and specific vocabulary to communicate ideas.</li> </ul>					

## Standards of Learning

### English (2010)

#### *Oral Language*

- 3.1 The student will use effective communication skills in group activities.
- Listen attentively by making eye contact, facing the speaker, asking questions, and summarizing what is said.
  - Ask and respond to questions from teachers and other group members.
  - Explain what has been learned.
  - Use language appropriate for context.
  - Increase listening and speaking vocabularies.
- 3.2 The student will present brief oral reports, using visual media.
- Speak clearly.
  - Use appropriate volume and pitch.
  - Speak at an understandable rate.
  - Organize ideas sequentially or around major points of information.
  - Use contextually appropriate language and specific vocabulary to communicate ideas.

### History and Social Science (2008)

#### *Economics*

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

### Science (2010)

#### *Scientific Investigation, Reasoning, and Logic*

- 3.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which
- observations are made and are repeated to ensure accuracy;
  - predictions are formulated using a variety of sources of information;
  - objects with similar characteristics or properties are classified into at least two sets and two subsets;
  - natural events are sequenced chronologically;
  - length, volume, mass, and temperature are estimated and measured in metric and standard English units, using proper tools and techniques;
  - time is measured to the nearest minute using proper tools and techniques;
  - questions are developed to formulate hypotheses;

- h) data are gathered, charted, graphed, and analyzed;
- i) unexpected or unusual quantitative data are recognized;
- j) inferences are made and conclusions are drawn;
- k) data are communicated;
- l) models are designed and built; and
- m) current applications are used to reinforce science concepts.

## **Standards for Technological Literacy**

Standard 8: Students will develop an understanding of the attributes of design.

Standard 9: Students will develop an understanding of engineering design.

Standard 10: Students will develop an understanding of the role of troubleshooting, research and development, invention and innovation, and experimentation in problem solving.

Standard 11: Students will develop the abilities to apply the design process.

Standard 17: Students will develop an understanding of and be able to select and use information and communication technologies.

## Please give us some feedback.

Complete the form below to let us know how this design brief worked for you and your students. Please be specific so that we might use your suggestions to improve the activity. *You can fill this out on your computer, or you can print it, fill it out manually, and scan it.*

Teacher: \_\_\_\_\_

School: \_\_\_\_\_

School division: \_\_\_\_\_

Design brief title: \_\_\_\_\_

<b>Background</b>	<i>Put an X in the appropriate column:</i>	Needs to be rewritten	Needs minor adjustment	Is ready for classroom use
Does it set the context for the activity?				
Is it age-appropriate in language, length, and complexity?				
Does it reference prior learning and/or research that the students did that will facilitate designing a solution to a problem?				
Is it detailed enough that an adult will understand the purpose for the design brief?				
COMMENTS. <i>If any of the questions above are marked other than "ready for classroom use," please provide suggestions here.</i>				

<b>Design Challenge</b>	Needs to be rewritten	Needs minor adjustment	Is ready for classroom use
Does the challenge support your curriculum?			
Is it age-appropriate in language, length, and complexity?			
Is it detailed enough that an adult will understand the purpose for the design brief?			
COMMENTS. <i>If any of the questions above are marked other than "ready for classroom use," please provide suggestions here.</i>			

<b>Criteria</b> Criteria are part of the challenge. They set the limitations for the design. They are not directions.	Needs to be rewritten	Needs minor adjustment	Is ready for classroom use	N/A
Are the limitations age-appropriate?				
Do the limitations encourage critical thinking?				
Is the application of mathematic knowledge/skills integrated into the criteria? If not, should the skill area be addressed?				
Is the application of science knowledge/skills integrated into the criteria? If not, should the skill area be addressed?				
Is the application of social studies knowledge/skills integrated into the criteria? If not, should the skill area be addressed?				
Are language skills integrated into the criteria? If not, should the skill area be addressed?				
COMMENTS. <i>If any of the questions above are marked other than "ready for classroom use," please provide suggestions here.</i>				

<b>Materials</b> Materials help set the limitations for the design. The list should include materials that might work.	Needs to be rewritten	Needs minor adjustment	Is ready for classroom use	N/A
Does the materials list encourage a variety of design solutions?				
Does the materials list include a variety of choices for joining items?				
Does the materials list include materials that force students to make decisions?				
COMMENTS. <i>If any of the questions above are marked other than "ready for classroom use," please provide suggestions here.</i>				

<b>Tools</b> Tools can be used in the construction of the designed product. They are used to manipulate materials. They cannot become part of the product.	Needs to be rewritten	Needs minor adjustment	Is ready for classroom use
Are the tools listed age appropriate?			
Are all tools needed for the activity included?			
COMMENTS. <i>If any of the questions above are marked other than "ready for classroom use," please provide suggestions here.</i>			

<b>Standards of Learning</b>	Yes	No
Does the design brief reinforce the targeted Standard of Learning(s)?		
Are the supporting Standards of Learning appropriate?		
What Standards of Learning would you add or remove?		

<b>Standards for Technological Literacy</b>	Yes	No
Does the design brief reinforce the targeted Standard(s) for Technological Literacy?		
Are the supporting Standards for Technological Literacy appropriate?		
What Standards for Technological Literacy would you add or remove?		

<b>Tips for Teachers</b>	Yes	No
Are the tips listed in the chart helpful for a first-time teacher?		
What tips would you add?		

<b>Guided Portfolio</b>	Needs to be rewritten	Needs minor adjustment	Is ready for classroom use
Are the instructions and questions age appropriate and clear?			
In the "Test your solution" section, do the questions force students to thoroughly test their solutions?			
In the "Evaluate your solution" section, do the questions force students to honestly evaluate their solutions			
COMMENTS. <i>If any of the questions above are marked other than "ready for classroom use," please provide suggestions here.</i>			

<p><b>Additional Comments</b> Please use this area to provide general suggestions for improving this design brief.</p>