

# Economics Arkansas

EDUCATION FOR REAL LIFE

## The BIG Choice - Uno's Garden

By Amy Mileham, Master Economics Teacher  
Rogers School District



### Lesson Description

Based on the book *Uno's Garden* by Graeme Base, this lesson tackles a big question - economic development versus the environment. The first half of the book has 12 pictures with descriptions. The story begins with 9 animals, 100 plants and a snortlepig. Uno likes the forest so much he decides to move in. Pictures 2-12 show the scene as the animals and plants decrease and the population and buildings increase. Students will see the scarcity of plants and animals as the story progresses. They will also see that because of the scarcity of land, choices have to be made. The second half of the book shows how balance is restored to this forest over the next generations, but the snortlepig is never seen again. This shows students how the choices that are made today affect the future. After listening to the story, students are asked to evaluate the choices made.

The students will then participate in an activity where they will have to make choices about how land will be used. They will use a cost-benefit chart to help them with the decision.

### Grade 3-4

### Concepts

- **Alternatives:** One of many choices or courses of action that might be taken in a given situation.
- **Benefits:** Monetary or non-monetary gains received because of an action taken or a decision made.
- **Choice:** Decision made or course of action taken when faced with a set of alternatives.
- **Costs:** An amount that must be paid or spent to buy or obtain something. The effort, loss or sacrifice necessary to achieve or obtain something.
- **Natural Resources:** Things that occur naturally in and on the earth that are used to produce goods and services. Examples: water, wood, coal.
- **Opportunity Cost:** The value of the next best alternative when a decision is made; it's what is given up.
- **Scarcity:** Actions that can satisfy people's wants.

---

**Standards*****Arkansas Economics Standards***

- E.1.3.1 Discuss how scarcity and opportunity cost influence decision-making.
- E.1.3.2 Evaluate problems, alternatives, and trade-offs involved in making a decision such as the cost-benefit decision tree.
- E.1.4.1 Analyze the effects of scarcity and opportunity cost during the decision-making process.
- E.1.4.2 Apply an economic decision-making model when making decisions such as the PACED decision-making.

***Arkansas English Language Arts Standards*****Grade 3**

- 3.RC.2.RF: Answer questions about key details in a text.
- 3.RC.7.RL: Describe how characters respond to major events and challenges.
- 3.RC.8.RL: Describe the main story elements (plot), including characters, setting, events, problem, and solution.
- 3.CC.1.OL: Participate in collaborative conversations following class created discussion guidelines to expand upon conversations.
- 3.CC.3.P: Use relevant, descriptive details to orally report on a topic or text, tell a story, or recount an experience, speaking clearly at an understandable pace.

**Grade 4**

- 4.RC.2.RF: Answer explicit and inferential questions, using details from a text.
- 4.RC.7.RL: Describe how a character changes throughout a story.
- 4.RC.8.RL: Explain how the setting contributes to the plot of a story.
- 4.CC.1.OL: Participate in collaborative conversations following class created guidelines to expand upon conversations.
- 4.CC.3.P: Use relevant, descriptive details to orally report on a topic or text, tell a story, or recount an experience, speaking clearly at an understandable pace.

**Objectives**

Students will be able to

- define and discuss scarcity and decision-making
- define and evaluate choices
- complete a cost-benefit chart to help them make decisions
- define and identify opportunity costs for decisions they make
- choose from limited city resources and describe the costs associated with each choice
- evaluate the challenges facing many of today's towns and communities as they try to balance environmental conservation with economic development and propose solutions
- explain how today's decisions are likely to impact future generations.

**Time required**

- 30 minutes for teacher preparation
- 1 class period (50 minutes)
- 30 minutes for the assessment

**Materials required**

- *Uno's Garden*, by Graeme Base, 1 classroom copy
- scissors - 1 pair for each student
- glue - 1 for each student
- City Planning Memo, 1 copy per student
- City Map, 1 copy per student
- Map Add-ons, 1 copy per student
- Cost-Benefit Chart, 1 copy per student

**Teacher Preparation**

Prepare materials prior to class:

- Make one photocopy per student of each of the City Planning Memo, the City Map, the Map Add-ons and the Cost-Benefit Chart. **NOTE: You will need sheets of 11 x 17 to print/photocopy the City Map.**
- Optional: Laminate each copy of the Memo, Map and Map Add-ons. Don't laminate the Cost-Benefit Charts.

**Procedure**

1. Review key concepts taught, see concepts section of the lesson.
2. Instruct students to listen to the story and take note of what happens to the natural resources in the book. (As more people and buildings come, fewer animals/plants continue to exist.)
3. Read the story through the 11th picture (no trees, no animals, and 512 buildings). Ask students to record their thoughts about this page. Would they want to live there? Why or why not? Ask students to evaluate the decisions that the people have made up to this point.

4. Now read the pages with the 12th picture (1 snortlepig, 1 tree, 1 old shack and Uno). Ask students to listen carefully to the rest of the story and notice what is different this time. (*The plants, animals and buildings stay in balance.*) Finish reading story.
5. Discuss the changes students notice — they may also say there is no snortlepig. You can take this opportunity to discuss extinction if you choose. Explain to students that some of the choices we make can affect many future generations. (In the book it takes many generations to restore the balance.)
6. Announce that students will now participate in an activity based on the book. They will pretend to be on the city planning committee. Their job, on this committee, is to decide how to use scarce land resources within the city.
7. Give each student a copy of the City Planning Memo, City Map, Map Add-ons and the Cost-Benefit Chart. Also give each student glue and scissors.
8. Ask students to read the city planning memo and follow the directions. They will have to decide which items to add to the city map. They will need to fill out the Cost-Benefit Chart to help them make their decision.
9. Instruct students to cut out the items they decide on and position them on their map. Optional: Use glue to affix the items.
10. Have students share their maps and explain their decisions to the class. This will help students understand that people make decisions based on different reasons and the opportunity cost doesn't have to be the same for every person. If available, instruct the students to use the SMART Board for their presentations.

### Closure

Instruct students to write a paragraph defending the choices they made and defining the opportunity cost of their choices.

### Assessment

Allow students to discuss the problem of environment vs. economic progress and brainstorm solutions to this problem.

### Extentions/Connections

- There are obvious science connections here – taking care of the environment, recycling, conservation, extinction, etc.
- Reading strategies – making predictions about what will happen, questioning, making inferences. Instruct the students to look carefully at the expression on the snortlepig's face, infer his feelings, etc.
- Math – there are many formulas and equations within this book.

# City Planning Memo

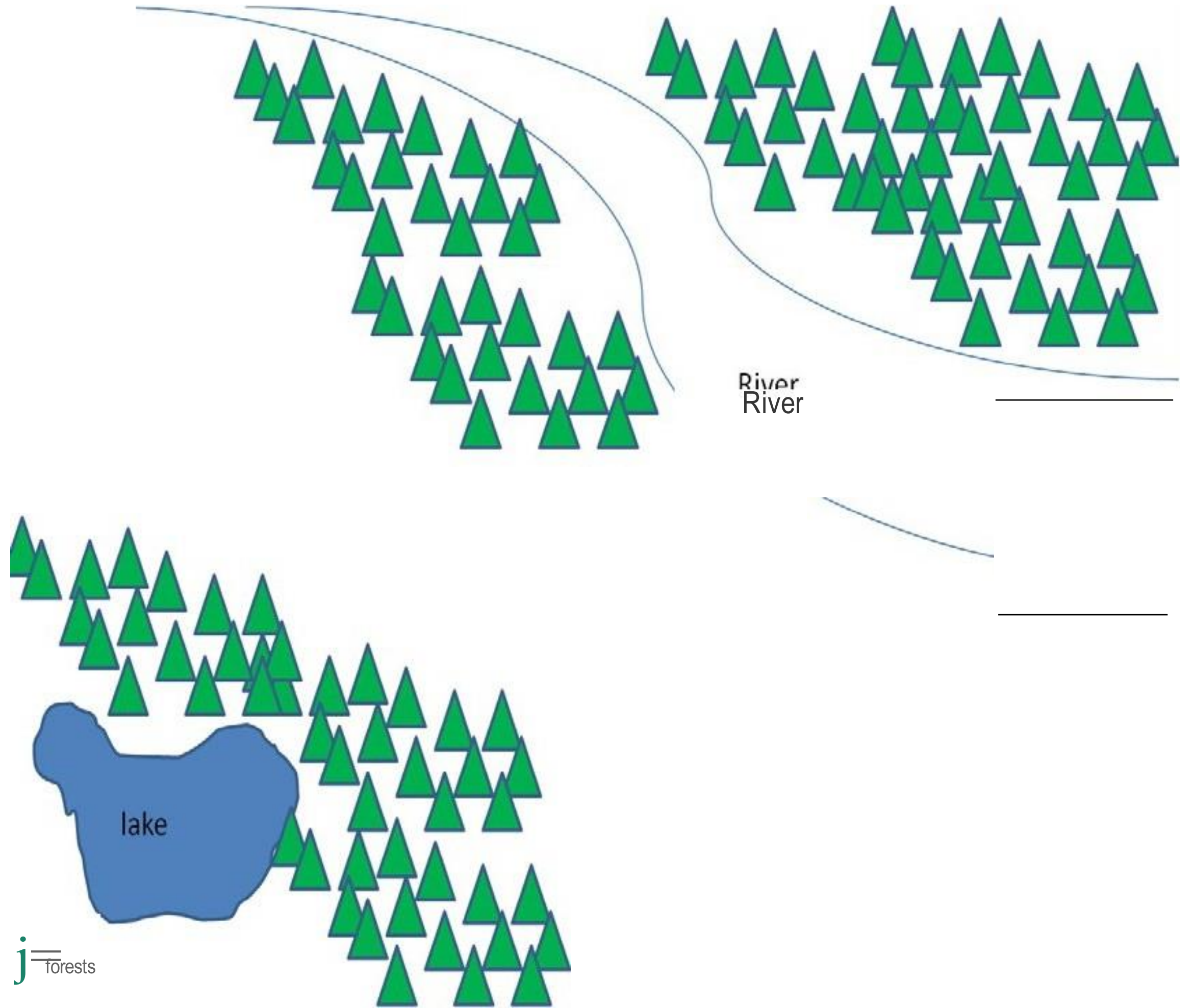
Members of the City Planning Committee:

Please decide which items to place in our city and decide where to place them. We need to decide how to best use our scarce natural resources. Please pay special attention to our river, lake and forests when making your plan. We know some trees may have to be cut down for construction. (If you place an item over the trees, they'll be marked to be cut down) Please consider the goods and services that will be important to the members of our city.



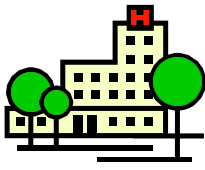




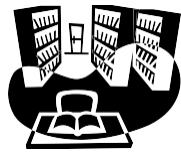









We must include:

- 5 housing developments
- A school
- Fire station
- City offices
- Grocery store
- Waste management station (garbage)
- Hospital
- And 3 other items – you decide

Please be ready to defend your choices. Our city is counting on you!





 <p><b>School</b></p>	 <p><b>City Offices</b></p>	 <p><b>Hospital</b></p>	 <p><b>Fire Station</b></p>	 <p><b>Grocery Store</b></p>
 <p><b>Waste Management</b></p>	 <p><b>Shopping Mall</b></p>	 <p><b>Library</b></p>	 <p><b>Sports Complex</b></p>	 <p><b>Movie Theater</b></p>
 <p><b>Restaurant</b></p>	<h1>Cut out all of the boxes.</h1>			
 <p><b>Housing Development</b></p>			 <p><b>Housing Development</b></p>	
 <p><b>Housing Development</b></p>			 <p><b>Housing Development</b></p>	
 <p><b>Housing Development</b></p>			 <p><b>Park</b></p>	

# Cost Benefit Chart

Choice 1: \_\_\_\_\_

Costs	Benefits

Is it a good choice? \_\_\_\_\_

Choice 2: \_\_\_\_\_

Costs	Benefits

Is it a good choice? \_\_\_\_\_

Choice 3: \_\_\_\_\_

Costs	Benefits

Is it a good choice? \_\_\_\_\_

What was the opportunity cost of your decision (the next best choice you gave up)?

\_\_\_\_\_

Did you make a good choice for your city? Be ready to defend.