

CHOICES, TRADE-OFFS, OPPORTUNITY COSTS

4



SCARCITY REQUIRES PEOPLE TO MAKE CHOICES THAT INVOLVE TRADE-OFFS AND HAVE OPPORTUNITY COSTS.



**Economics
Arkansas**

EDUCATION FOR REAL LIFE

CONCEPT STATEMENTS FOR ELEMENTARY ECONOMICS

1. People consume goods and services to help satisfy their wants.
2. Resources are used to produce goods and services.
3. Because many things are scarce, people need ways to allocate them.
4. **Scarcity requires people to make choices that involve trade-offs and have opportunity costs.**
5. Specialization and division of labor increase people's productivity and dependency on one another.
6. People are willing to make exchanges when what they receive is worth more to them than what they give up.
7. Money makes trading easier.
8. The price of a good, service, or resource is determined by buyers and sellers in that market.
9. People earn income when they sell their resources.
10. People incur expenditures when they buy goods and services.
11. Entrepreneurs and businesses incur costs when they buy resources and earn revenues when they sell the goods and services produced with those resources.
12. Governments provide goods and services and collect taxes.

SCARCITY REQUIRES PEOPLE TO MAKE CHOICES THAT INVOLVE TRADE-OFFS AND HAVE OPPORTUNITY COSTS.

CHOICE: a decision about what to do (and what to give up)

Examples:

- ❖ decide whether to have a banana or an apple for a snack
- ❖ decide how to spend a limited amount of money
- ❖ decide what to do during the next hour
- ❖ decide which clothes to pack in a small suitcase
- ❖ decide whether to use a section of a city park as a dog park, a skateboard park, or a playground

DECISION-MAKING PROCESS: a reasoned way of choosing the best one of possible alternatives

Examples:

- ❖ compare the benefits ("pros") and costs ("cons") of each alternative
- ❖ use the PACED (Problem, Alternatives, Criteria, Evaluation, Decision) decision-making process/grid

TRADE-OFFS: those things gained and lost when comparing one alternative with another

Examples:

- ❖ Broccoli is healthier to eat than a candy bar, but it is not as sweet.
- ❖ Playing tag provides more exercise than playing a board game, but it may not be as much fun.

OPPORTUNITY COST: value of the next-best alternative that is given up when a choice is made

Concept Statement Examples

- ❖ Sara only has enough money (scarcity) to buy one treat: a box of popcorn or a cookie. She thinks about what she likes and dislikes about each (decision-making process): the popcorn is salty, but messy; while the cookie is sugary, but it is small. She decides to buy the popcorn (choice). She gives up the satisfaction she could have gotten from the cookie (opportunity cost).
- ❖ Jordan enjoys playing baseball, basketball, and soccer, but doesn't have enough time (scarcity) to play them all. He uses a simple PACED grid (decision-making process) with the three sports alternatives and the following criteria: his level of talent, his risk of injury, and the number of his friends that would be on his team. After evaluating each alternative, he notices some trade-offs: baseball is safer than basketball, but more of his friends play basketball and while soccer is perhaps his best sport, fewer of his friends play it. He decides to play basketball (choice), although soccer was a close second. He will miss the fun of playing it (opportunity cost).

GETTING STARTED

- ❖ Discuss the illustration on the front cover. Ask: What is the girl doing? What is in each thought cloud?
- ❖ Explain: The girl is trying to make a choice among different alternatives. A choice must be made because we cannot have or do everything we want. Whenever a choice is made, some other alternative is given up. The value of the next best alternative that is given up is called the opportunity cost.
- ❖ Discuss the alternatives of pizza, salad, and burger. Have students provide reasons why the girl might prefer one of these over the others.
- ❖ Ask: What would be your choice? What is your second-best alternative (opportunity cost)?
- ❖ Have students create an illustration based on the cover of the guide with a thought cloud containing alternatives they have considered and the choice they made. Display.

USING MAKING A CHOICE

(Enlarge for whole group instruction. Copy and use for small group and individual activities, home/school connections, and assessments.) Use when deciding between two alternatives. It can be used for group decisions (Will the class go on a field trip to a farm or a local business?); family decisions (Should we spend the afternoon at the park or go to a movie?); or individual decisions (Will I wear my red shirt or my blue shirt today?).

- ❖ Describe a choice scenario. (Use a scenario below or create your own.)
- ❖ Write the problem in the box at the top of the page.
- ❖ Describe and write two alternatives for students to consider in the space above the faces.
- ❖ Working with the first alternative, have students discuss reasons why they like or do not like it. Write positive reasons under the thumbs-up face and negative reasons under the thumbs-down face.
- ❖ Repeat with the second alternative.
- ❖ Review the discussion for each alternative. Have each student choose one of the alternatives.
- ❖ Use the area at the bottom of the page to describe the activity, which alternative they selected and why. They may include a discussion of trade-offs and opportunity cost if appropriate for their skill level.

USING 4-2-1

(Enlarge for whole group instruction. Copy and use for small group and individual activities, home/school connections, and assessments.)

- ❖ Describe a choice scenario. (Use a scenario below or create your own.) Explain that choices must be made because often there is not enough of something (scarcity): time, money, space, etc.
- ❖ Have students suggest four possible alternatives and draw or write these in the top row of boxes.
- ❖ Have students suggest favorable and unfavorable things about each of the alternatives. These things are criteria. Discuss any favorable or unfavorable things that two or more alternatives have in common.
- ❖ Based on this discussion, have each student cross out their two least favorite alternatives and draw or write their top two alternatives in the second row of boxes.
- ❖ Have each student carefully consider the benefits (favorable things) and costs (unfavorable things) of just their top two alternatives and write or draw their choice in the single box. Have them cross out the other alternative.
- ❖ In the area at the bottom of the page, have students explain their choice and identify their opportunity cost (which is the crossed-out alternative in the second row of boxes).

SUGGESTED SCENARIOS FOR MAKING A CHOICE (TWO ALTERNATIVES) AND 4-2-1 (FOUR ALTERNATIVES)

- Choose one after-school snack.
- Choose one recess activity.
- Choose one topping for a pizza.
- Choose a place to go for a family dinner.
- Choose one thing to do the hour before dinner.
- Choose a new pet for your family.
- Choose a type of flower for your planter.
- Choose how to spend your \$5 allowance.

TEACHER THOUGHTS

1. Identifying possible alternatives is important – an unconsidered alternative can't be chosen.
2. Decision makers must determine what criteria (both favorable and unfavorable) are important for them to consider.
3. A trade-off exists when one alternative offers more of one favorable aspect, but less of another favorable aspect when compared to another alternative.
4. Opportunity cost is the “value of the best alternative given up.” This should be less than the “value of the alternative chosen.”

WE DECIDE

Parents, teachers, and students raised enough money to develop an unused section of the schoolyard. The committee proposed three options: an open field and equipment for soccer; a multilevel climbing structure; or benches and picnic tables. Each option requires all of the money that was raised, so only one can be chosen. Each class has been asked for input. Use a decision-making process to decide what use your class will suggest to the committee and why.

OPPORTUNITY COST WEEK

At the start of the school day students should record a choice they made before coming to school that day, making sure to note what they had to give up. At the end of the school day the students should record a choice made during the day and include the opportunity cost of their choice. Continue each day for a week. Teachers should do this too. Discuss at the end of the week.

- ❖ Possible discussion questions: What was your most difficult decision and why? Did anyone else make the same choice? Was the opportunity cost the same for others? Did you make a decision you later regretted?
- ❖ Home/School Connection: Have parents work with their child to record choices and opportunity costs at home. Share with the class.

DISCUSSION OR WRITING PROMPTS

- ❖ Explain the statements: Benefits are things favorable to a decision maker. Costs are things unfavorable to a decision maker.
- ❖ If given several alternatives, will everyone make the same decision? Explain your answer.
- ❖ Consider a decision you made. Explain your alternatives and the criteria you used when making the choice.



GET UP AND CHOOSE!

Display several pictures around the room depicting various items from a category such as food, toys, stickers, etc. (whatever will grab your students' interest). Gather students in the center of the room. Discuss each picture. Tell the students to think about which of these items they would like the most. At your signal, have students move quickly to the area where their favorite alternative is posted. While standing there, have some students state why they chose their item.

Alternatives	Round 1 CHOICE	Round 2 OPPORTUNITY COST

Count the number of students that chose each item and record under Round 1 CHOICE using tally marks on a prepared chart of alternatives. Ask students to consider what their second favorite item would be. Again, on your signal, have them move to the area where that is posted. Explain that this is their opportunity cost (the next best item they give up by making their original choice). Record under Round 2 OPPORTUNITY COST. Discuss why everyone does not make the same choice or have the same opportunity cost (even if they made the same choice).

- ❖ Have each student complete a writing assignment discussing their choice, why they made it, and their opportunity cost.
- ❖ Have each student create a bar graph showing how many students chose each alternative and another one showing how many students had each alternative as their opportunity cost.

LOOKING BACK AT CHOICES THROUGHOUT HISTORY

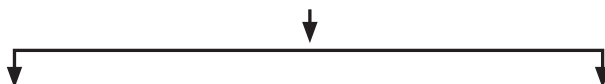
Compare present day choices with a historical period your class is studying. Consider food, clothing, housing, transportation, entertainment, etc. Ask students how problems have changed; how the number and kinds of alternatives have changed; and how criteria have changed.



LITERATURE & ONLINE CONNECTIONS



- ❖ Scan the QR code to the left or go to www.economicsarkansas.org
Click on *For Teachers - Grab & Go Economics - Online Connections*

MAKING A CHOICE

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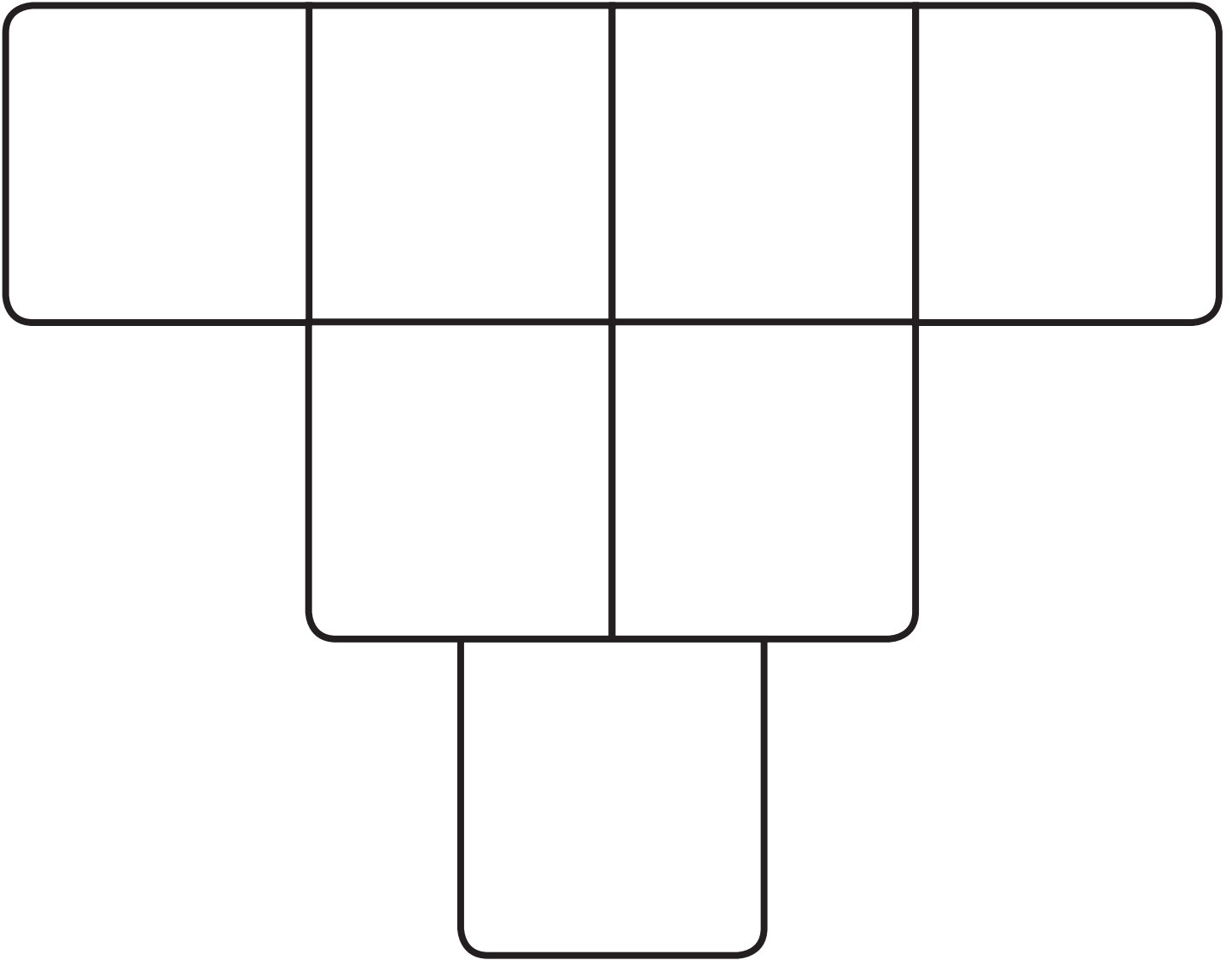


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4-2-1



PACED DECISION-MAKING GRID

① PROBLEM: _____

③ CRITERIA → ↓ ② ALTERNATIVES				



④ EVALUATION

⑤ DECISION: _____

USING PACED DECISION-MAKING GRID

- ❖ Take students through the five steps of the PACED Process below (one by one) using the second concept statement example about Jordan and his decision about what sport to play. After discussing each step, fill in the corresponding section of the PACED grid as shown below.

Step 1: Not enough time to play all three sports (problem), so must decide which one to play

Step 2: Jordan's options (alternatives): baseball, basketball, and soccer

Step 3: Important things to Jordan (criteria): his level of talent, his risk of injury, and the number of his friends on the team

Step 4: Evaluations determined by Jordan (*This is information about how well each alternative satisfies each criterion. In this case, nine evaluations. See shaded part of the grid.*)

Step 5: Jordan chooses basketball after considering trade-offs (*Baseball is more desirable by only one criterion, risk of injury. Basketball and soccer have the same risk of injury, but there is a trade-off between the other two criteria. Jordan is more talented at soccer than basketball, but only two of his friends are on the soccer team, while five are on the basketball team. In choosing basketball, he must have decided that having more friends on his team was more important to him than having more talent.*)

- ❖ Explain that if Jordan feels his next-best option is playing soccer, then the fun of playing soccer would be his opportunity cost (his choice costs him the opportunity to enjoy playing soccer).
- ❖ Have students discuss why Jordan could have made a different choice even though all his evaluations remain the same. (*If he was really worried about injuries, he might have chosen baseball; if he really wanted to play what he is best at, he might have chosen soccer.*) Explain that the "best" choice depends on how important each criterion is to the person making it.

PACED GRID

PACED PROCESS

- Step 1:** Identify the **P**roblem
Why must you make a choice?
- Step 2:** List the **A**lternatives
What are your possible options?
- Step 3:** Determine the **C**riteria
What makes an option desirable?
- Step 4:** Do an **E**valuation
How well does each option satisfy each criterion?
- Step 5:** Make the **D**ecision
Which option has the most favorable trade-offs?

① **P:** ONLY ENOUGH TIME TO PLAY ONE SPORT

③ C	LEVEL OF TALENT	RISK OF INJURY	NUMBER OF FRIENDS ON TEAM
② A			
BASEBALL	MEDIUM	LOW	1
BASKETBALL	MEDIUM	MEDIUM	5
SOCCER	HIGH	MEDIUM	2

④ **E:**

⑤ **D:** PLAY BASKETBALL

- ❖ Have students in groups consider this scenario: Sara is choosing a pet. Her alternatives are a dog, a cat, a bird, and a snake. Things that are important to her (criteria): fun to play with, easy to take care of, and not too loud. Have each group complete a PACED grid. In the evaluation section, have them put a "+" if they feel the alternative satisfies the criteria, a "-" if they feel it doesn't, and a "0" if they feel it is not clear. Based on their completed grid, have each group choose a pet for Sara. Have groups compare and discuss their evaluations and their decisions.