

## Week Twenty-Seven: Scarcity and Trade-Offs

**Weekly Focus:** Comprehension  
**Weekly Skill:** Determining Meaning of Symbols/ Visual Information

**Lesson Summary:** This week students will begin to explore economic issues in more depth. They will learn what *scarcity*, *trade-offs*, and *opportunity cost* are, and then they will work to draw a Production Possibility Frontier in the form of a chart that illustrates these economic concepts.

**Materials Needed:** Internet, Projector, Scarcity Video, PPF video one, PPF video two, Student Handout, Teacher Activity Guide, note-cards

**Objectives:** Students will be able to...

- Define “opportunity cost,” “trade-offs,” and “scarcity”
- Demonstrate comprehension of these concepts by viewing and answering questions of a Production Possibility Frontier graph
- Demonstrate comprehension of these concepts by creating a Production Possibility Frontier graph.

**Common Core Standards Addressed:** [CCSS.ELA-Literacy.RH.11-12.7](#), [CCSS.ELA-Literacy.RST.9-10.4](#)

**Notes:** This lesson requires a basic understanding of how to read points on a graph. Depending on the demographics of your classroom, it may be necessary to give a brief explanation of plotting points on the x-axis and y-axis before proceeding with the Production Possibility Frontier graphs.

## Week Twenty-Seven: Scarcity and Trade-Offs

### Activities:

#### Review: Video

**Time: 15 minutes**

- 1) Quickly review different Economic Systems with students (Command, Market, Traditional). You may do this by breaking students into small groups and having each group be responsible for explaining one type of system.
- 2) Watch Scarcity Video. When finished, asked students what resources they, as students, experience scarcity with (time, money, etc.) What trade-offs do they have to make to be students?

#### Activity One: Introduction to Scarcity, Trade-Offs, and Opportunity Costs

**Time: 40 minutes**

- 1) Work through the steps on the Teacher Activity Guide to introduce Scarcity, Trade-Offs, and Opportunity Cost.

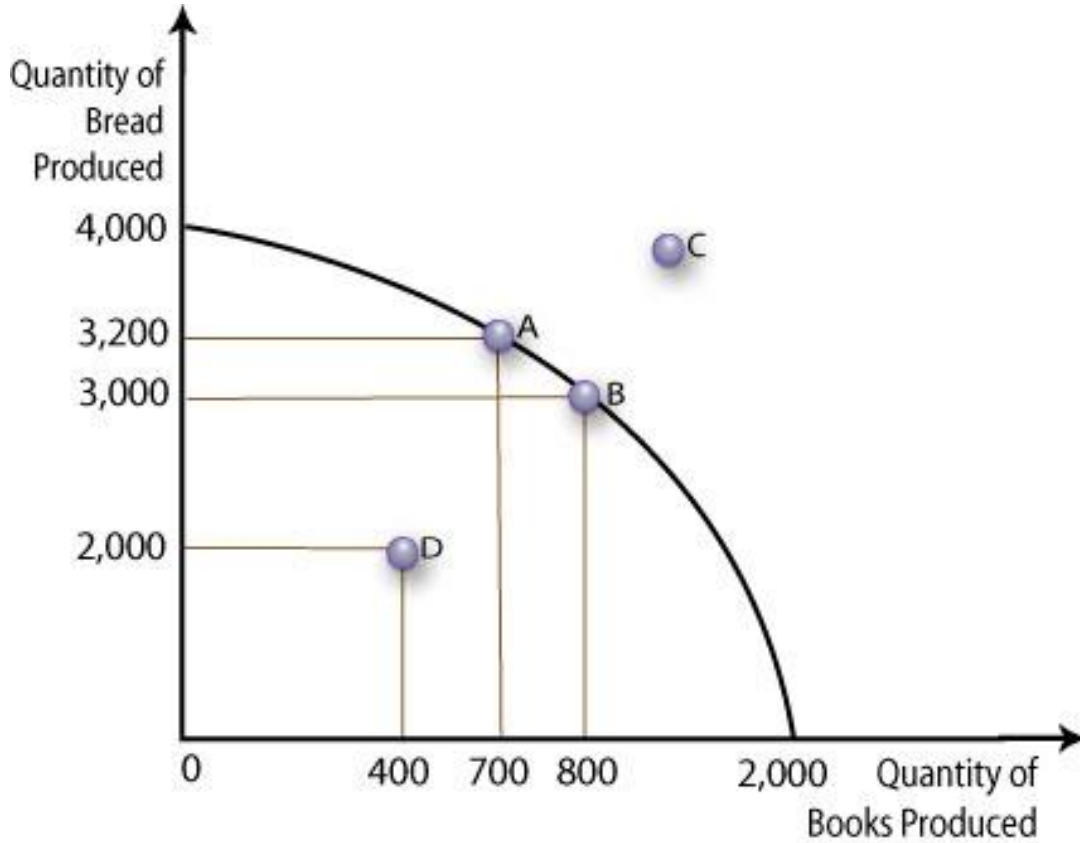
**Break: 10 minutes**

#### Activity Two: Productions Possibilities Frontier

**Time: 45 minutes**

- 1) Explain to students that we are now going to look at one way that economists study the concepts of scarcity and opportunity costs that we just discussed. (**Note:** you may want to spend some time talking about why economists, scientists, etc. use models. When else do we use models? Why?) They do this by creating a model called a Production Possibility Frontier. Have students watch Productions Possibility Frontier Videos 1 and 2.
- 2) Distribute student handout. Go over first PPF chart together.
- 3) Have students work in pairs to complete the second chart. This may also be given as homework.

**Bread and Books Production Possibility Curve**



BREAD	BOOKS
4,000	0
3,200	
	800
	400
0	

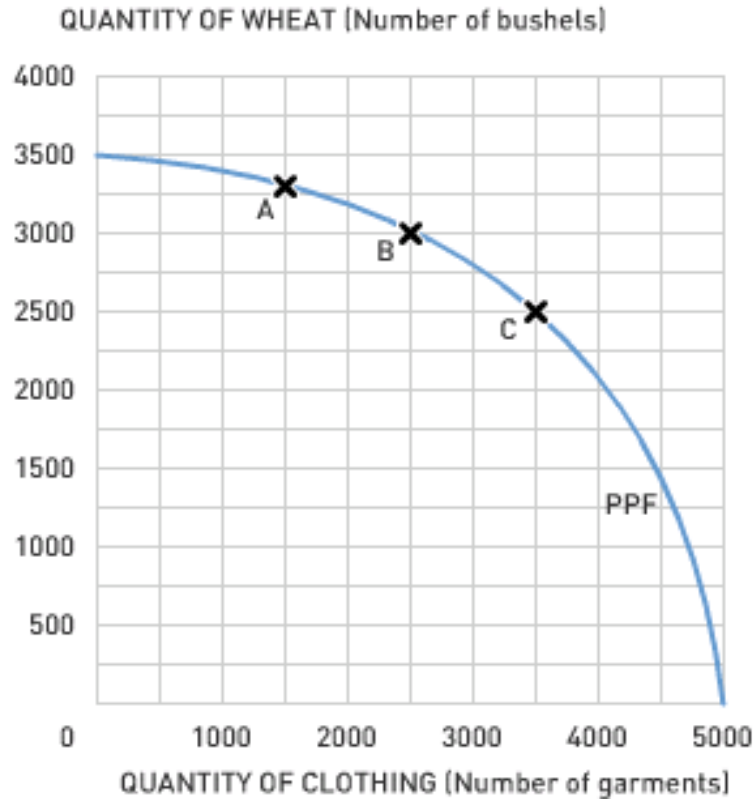
**Directions:** The graph above shows the units of bread and books a country produces during a year. Use the chart to finish filling the table out above and then answer the questions below.

## Week Twenty-Seven: Scarcity and Trade-Offs

---

- 1) Is it possible for this nation to produce 3,000 units of bread and 2,000 units of books at the same time? Why or why not?
  
- 2) How many units of books is this country producing at point D? How many units of bread? Is this an efficient use of the country's resources? Why or why not?
  
- 3) What is the **opportunity cost** to move from producing 700 units of books to 800 units of books?

### Wheat and Clothing Production Possibility Curve



WHEAT (bushels)	CLOTHING (# of garments)
	0
3,000	
2,500	
	4,000
1,500	
1,000	About 4,700
0	

**Directions:** The graph above shows the units of wheat and clothing a country produces during a year. Use the chart to finish filling the table out above and then answer the questions below.

## Week Twenty-Seven: Scarcity and Trade-Offs

---

- 1) Is it possible for this nation to produce 4,000 bushels of wheat and 1,000 garments of clothing at the same time? Why or why not?
  
- 2) How many bushels of wheat is this country producing at **point B**? How many garments? Is this an efficient use of the country's resources? Why or why not?
  
- 3) What is the **opportunity cost** to move from producing 2000 bushels of wheat to 3000 bushels of wheat?
  
- 4) Name an amount of wheat and an amount of clothing that, when produced together, would be an ineffective use of the country's resources.

## TEACHER GUIDE TO SCARCITY ACTIVITY

1. Hand each student a blank index card or small piece of paper and a pen or pencil to write with.
2. Tell the students to imagine that they are going on a trip and they have to pack things to bring with them. They will be going away for 2 weeks and the weather where they are going will be both hot and cold (hot during the day and cold at night). They should plan to bring their favorite clothes and items with them.
3. Have the students write down the 4 MOST IMPORTANT items they want to be sure to take with them on their trip. These might be clothes, a cell phone, a favorite book, etc.
4. Once all the students have written down four items on their card/paper, tell them that they now have to cross off two things from their list. It turns out they will not have enough room in their suitcase and car to bring everything they want. They have to choose which two things from the list of four that they most want to keep with them; the other two have to be crossed off their list. This exercise should produce some difficult choice making by the students.
5. Once everyone has crossed off two things from their list of four, explain that the students have just experienced a common problem in life that we call "opportunity cost."
  - Write the phrase "**opportunity cost**" on the board, with this definition: *An opportunity cost is the term for the value of something given up in order to pursue something else. It is "the next best thing they would have chosen."* Have students write this definition in their notes.
6. Explain that the students also probably experienced the economic concept of "**trade offs**" in the midst of their choice making. For example, let's say that they had a favorite piece of sports equipment, like a special baseball glove or football, on their list and they also had a favorite book. When they had to cut items from their list, they may have crossed out the football in order to retain the book. This is a trade-off: by keeping the book, the student will have something to do on the trip if he/she has to stay inside because of bad weather—he/she can read the book. But it also means that he/she will not have the football to play with outside when the weather is nice. Or perhaps the student decided to cross off the book in favor of keeping the football: the trade off is that they may be bored inside the house if the weather is bad and they have nothing to read, but they will have the football with them to play with outside when the weather is nice. Ask a few of the students to tell the class about their choices. Identify where "trade offs" were made.
7. Now write the word ECONOMICS on the chalkboard/whiteboard in large letters, easily visible to the students. Remind students of our discussion of what this word means from last week. Have a student read a definition from his or her notes. Tell students that although most people think economics is just

## Week Twenty-Seven: Scarcity and Trade-Offs

---

about money, it is really about **making choices**. In fact, two of the most important principles of economics are these (write these 2 principles down on the board for all students to see, then have students write this in their notes):

- **Principle #1 – We ALL Make Choices**
- **Principle #2 – Choices Have Consequences**

Then discuss these principles briefly. For principle #1, ask students to give you some examples of choices they already made today (for example, they may have chosen to walk instead of riding the bus, come to school instead of go to work or staying at home with their kids, etc.) One reason we make choices is because of SCARCITY – for example, think back to the opening exercise of the lesson.

- Write the word “**scarcity**” on the board and this phrase: “*Because of unlimited human wants/needs and limited goods, we all experience the problem of scarcity.*”

For principle #2, help them identify the link between choices and consequences. Help them see that choices have positive and negative consequences. If they study really hard for a test a positive consequence may be that they pass their GED. A negative consequence might be that they have less time to spend with their friends and family.

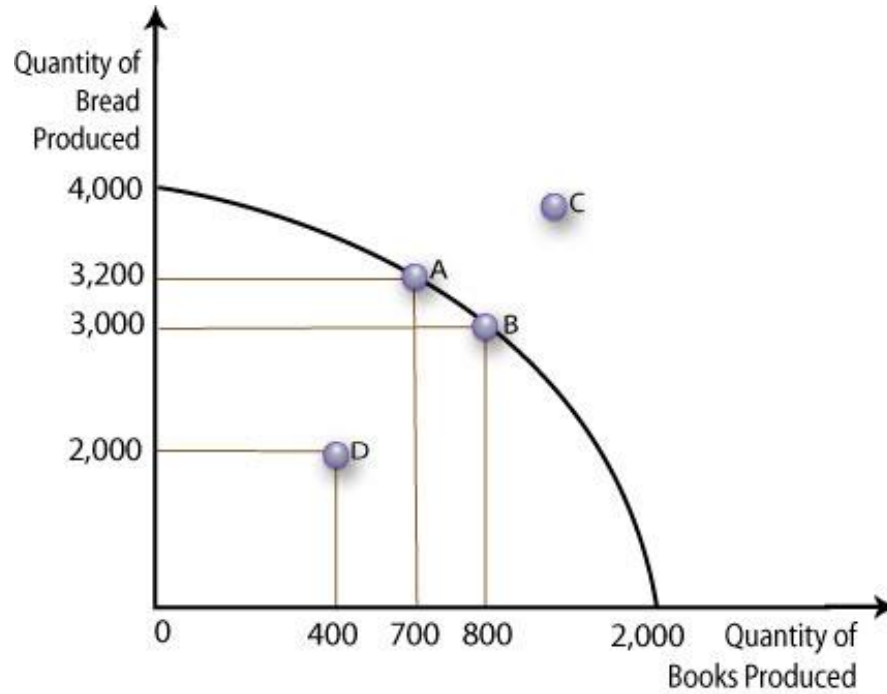
**8. Wrap-Up** by going over the definitions for **Scarcity, Trade-Offs, and Opportunity Costs**. Students will likely be confused about the difference between trade-offs and opportunity costs. Remind them that a trade-off is a trade of one thing for another, while the opportunity cost is the value of the next highest valued alternative or foregone cost.



**\*\*This activity adapted from ele:Vate, Economics Mini-Lessons:**

[http://www.elevateurbanyouth.org/v2/new/Grades5-8/choices\\_opportunity\\_costs.html](http://www.elevateurbanyouth.org/v2/new/Grades5-8/choices_opportunity_costs.html)

**Bread and Books Production Possibility Curve**



BREAD	BOOKS
4,000	0
3,200	700
3,000	800
2,000	400
0	2,000

**Directions:** The graph above shows the units of bread and books a country produces during a year. Use the chart to finish filling the table out above and then answer the questions below.

## Week Twenty-Seven: Scarcity and Trade-Offs

---

- 1) Is it possible for this nation to produce 3,000 units of bread and 2,000 units of books at the same time? Why or why not?

**It is not possible to produce these amounts because the point exists outside of the curve, indicating that resources are insufficient.**

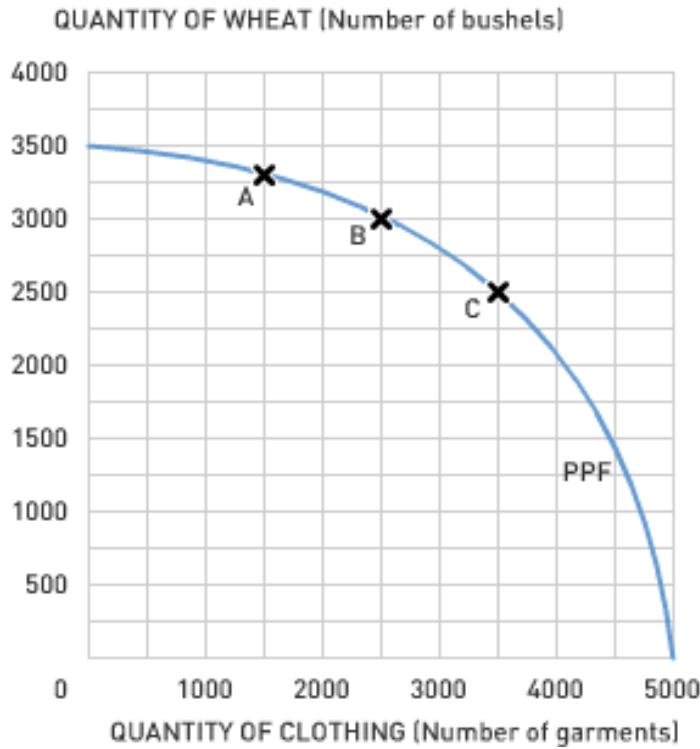
- 2) How many units of books is this country producing at point D? How many units of bread? Is this an efficient use of the country's resources? Why or why not?

**The country is producing 400 units of books and 2,000 units of bread. This is inefficient as the point is inside of the curve, which suggests that resources are being wasted.**

- 3) What is the **opportunity cost** to move from producing 700 units of books to 800 units of books?

**The opportunity cost is 200 units of bread. When you produce 700 units of books you are able to produce 3,200 units of bread. However, when you produce 800 units of books you can only produce 3,000.**

**Wheat and Clothing Production Possibility Curve**



WHEAT (bushels)	CLOTHING (# of garments)
3,500	0
3,000	2,500
2,500	3,500
2,000	4,000
1,500	4,500
1,000	About 4,700
0	5,000

**Directions:** The graph above shows the units of wheat and clothing a country produces during a year. Use the chart to finish filling the table out above and then answer the questions below.

## Week Twenty-Seven: Scarcity and Trade-Offs

---

- 1) Is it possible for this nation to produce 4,000 bushels of wheat and 1,000 garments of clothing at the same time? Why or why not?

**It is not possible to produce these amounts because the point exists outside of the curve, indicating that resources are insufficient.**

- 2) How many bushels of wheat is this country producing at **point B**? How many garments? Is this an efficient use of the country's resources? Why or why not?

**The country is producing 3,000 bushels of wheat and 2,500 garments. This is efficient as the point is on the PPF curve, which suggests that resources are being used to capacity.**

- 3) What is the **opportunity cost** to move from producing 2,000 bushels of wheat to 3,000 bushels of wheat?

**The opportunity cost is 1,500 garments. When you produce 2,000 bushels of wheat, you are able to produce 4,000 garments. However, when you produce 3,000 bushels of wheat you can only produce 2,500 garments.**

- 4) Name an amount of wheat and an amount of clothing that, when produced together, would be an ineffective use of the country's resources.

**Answers will vary, but any answer that establishes a point inside the curve is correct.**