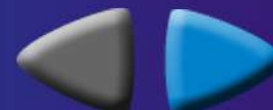


# Scarcity and the Factors of Production

- **What is economics?**
- **How do economists define scarcity?**
- **What are the three factors of production?**



# What Is Economics?

- **Economics is the study of how people make choices to satisfy their wants**
- **For example:**
  - **You must choose how to spend your time**
  - **Businesses must choose how many people to hire**



# Scarcity and Shortages

- **Scarcity occurs when there are limited quantities of resources to meet unlimited needs or desires**
- **Shortages occur when producers will not or cannot offer goods or services at current prices**



# The Factors of Production

- **Land** All natural resources that are used to produce goods and services.
- **Labor** Any effort a person devotes to a task for which that person is paid.
- **Capital** Any human-made resource that is used to create other goods and services.



# The Factors of Popcorn Production

**Land**

**Labor**

**Capital**

**Popping Corn**

**The human effort needed  
to pop the corn**

**Corn-Popping  
Device**

**Vegetable Oil**



# Section 1 Assessment

1. What is the difference between a shortage and scarcity?
  - (a) A shortage can be temporary or long-term, but scarcity always exists.
  - (b) A shortage results from rising prices; a scarcity results from falling prices.
  - (c) A shortage is a lack of all goods and services; a scarcity concerns a single item.
  - (d) There is no real difference between a shortage and a scarcity.
2. Which of the following is an example of using physical capital to save time and money?
  - (a) hiring more workers to do a job
  - (b) building extra space in a factory to simplify production
  - (c) switching from oil to coal to make production cheaper
  - (d) lowering workers' wages to increase profits

Want to connect to the PHSchool.com link for this section? [Click Here!](#)



# Section 1 Assessment

1. What is the difference between a shortage and scarcity?
  - (a) **A shortage can be temporary or long-term, but scarcity always exists.**
  - (b) A shortage results from rising prices; a scarcity results from falling prices.
  - (c) A shortage is a lack of all goods and services; a scarcity concerns a single item.
  - (d) There is no real difference between a shortage and a scarcity.
2. Which of the following is an example of using physical capital to save time and money?
  - (a) hiring more workers to do a job
  - (b) **building extra space in a factory to simplify production**
  - (c) switching from oil to coal to make production cheaper
  - (d) lowering workers' wages to increase profits

Want to connect to the PHSchool.com link for this section? [Click Here!](#)



# Opportunity Cost

- Does every decision you make involve trade-offs?
- How can a decision-making grid help you identify the opportunity cost of a decision?
- How will thinking at the margin affect decisions you make?



# Trade-offs and Opportunity Cost

- **Trade-offs** are all the alternatives that we give up whenever we choose one course of action over others.
- The most desirable alternative given up as a result of a decision is known as **opportunity cost**.

All individuals and groups of people make decisions that involve trade-offs.

# The Decision-Making Grid

- Economists encourage us to consider the benefits and costs of our decisions.

Karen's Decision-making Grid		
	Alternatives	
	Sleep late	Wake up early to study
Benefits	<ul style="list-style-type: none"><li>• Enjoy more sleep</li><li>• Have more energy during the day</li></ul>	<ul style="list-style-type: none"><li>• Better grade on test</li><li>• Teacher and parental approval</li><li>• Personal satisfaction</li></ul>
Decision	<ul style="list-style-type: none"><li>• Sleep late</li></ul>	<ul style="list-style-type: none"><li>• Wake up early to study for test</li></ul>
Opportunity cost	<ul style="list-style-type: none"><li>• Extra study time</li></ul>	<ul style="list-style-type: none"><li>• Extra sleep time</li></ul>
Benefits forgone	<ul style="list-style-type: none"><li>• Better grade on test</li><li>• Teacher and parental approval</li><li>• Personal satisfaction</li></ul>	<ul style="list-style-type: none"><li>• Enjoy more sleep</li><li>• Have more energy during the day</li></ul>



# Thinking at the Margin

- When you decide how much more or less to do, you are **thinking at the margin**.

Options	Benefit	Opportunity Cost
1st hour of extra study time	Grade of C on test	1 hour of sleep
2nd hour of extra study time	Grade of B on test	2 hours of sleep
3rd hour of extra study time	Grade of B+ on test	3 hours of sleep

# Section 2 Assessment

1. Opportunity cost is
  - (a) any alternative we sacrifice when we make a decision.
  - (b) all of the alternatives we sacrifice when we make a decision.
  - (c) the most desirable alternative given up as a result of a decision.
  - (d) the least desirable alternative given up as a result of a decision.
2. Economists use the phrase “guns or butter” to describe the fact that
  - (a) a person can spend extra money either on sports equipment or food.
  - (b) a person must decide whether to manufacture guns or butter.
  - (c) a nation must decide whether to produce more or less military or consumer goods.
  - (d) a government can buy unlimited military and civilian goods if it is rich enough.

Want to connect to the PHSchool.com link for this section? [Click Here!](#)

# Section 2 Assessment

1. Opportunity cost is
  - (a) any alternative we sacrifice when we make a decision.
  - (b) all of the alternatives we sacrifice when we make a decision.
  - (c) the most desirable alternative given up as a result of a decision.**
  - (d) the least desirable alternative given up as a result of a decision.
2. Economists use the phrase “guns or butter” to describe the fact that
  - (a) a person can spend extra money either on sports equipment or food.
  - (b) a person must decide whether to manufacture guns or butter.
  - (c) a nation must decide whether to produce more or less military or consumer goods.**
  - (d) a government can buy unlimited military and civilian goods if it is rich enough.

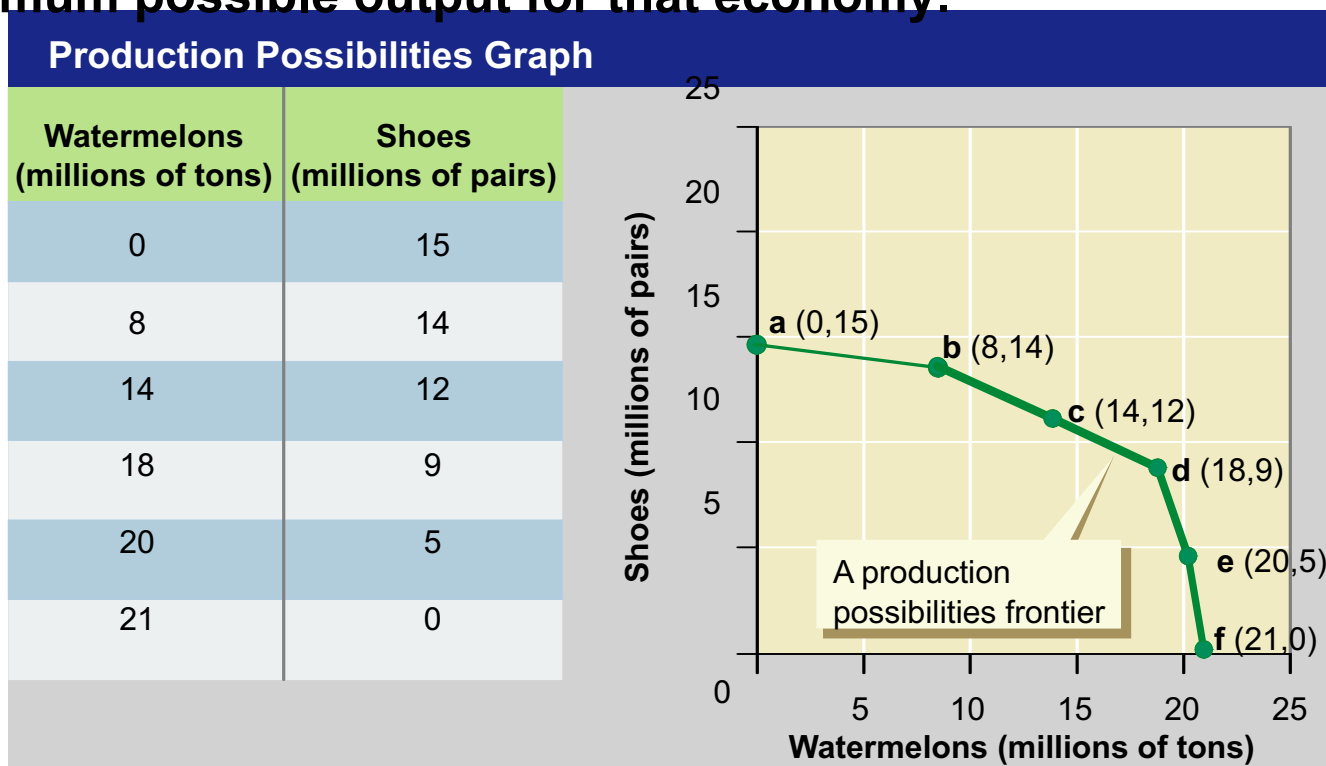
Want to connect to the PHSchool.com link for this section? [Click Here!](#)

# Production Possibilities Graphs

- **What is a production possibilities graph?**
- **How do production possibilities graphs show efficiency, growth, and cost?**
- **Why are production possibilities frontiers curved lines?**

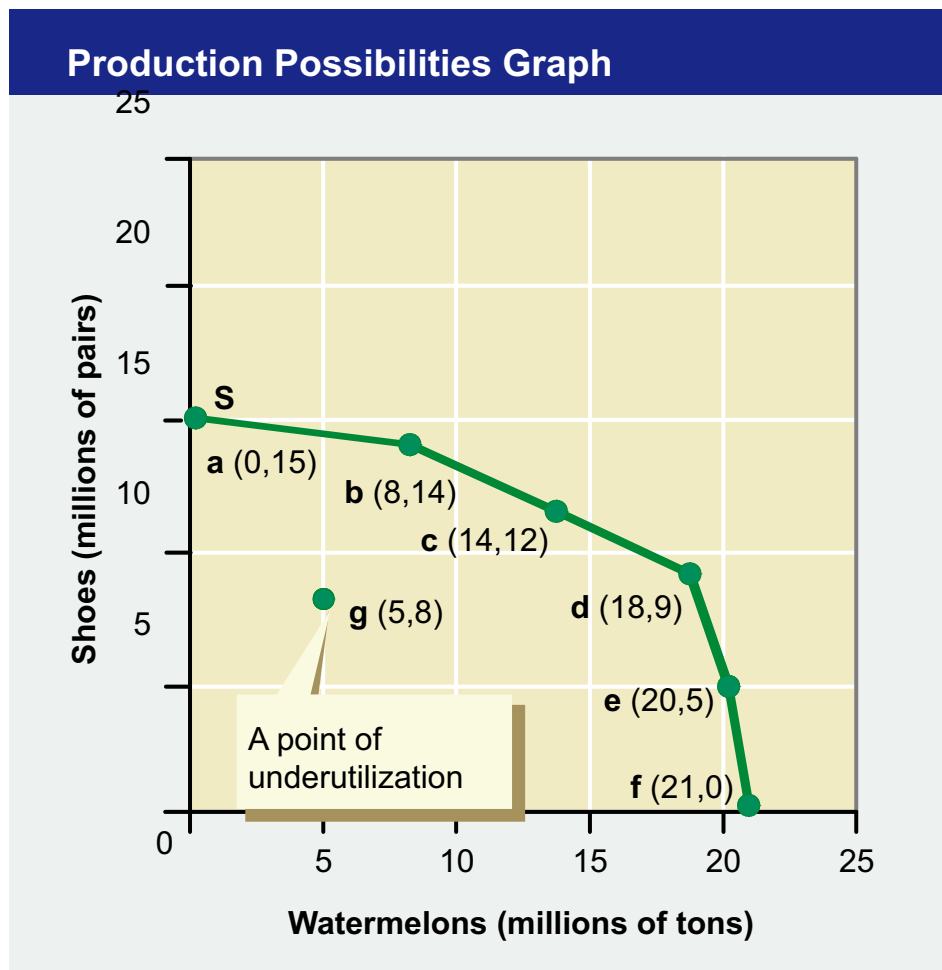
# Production Possibilities

- A production possibilities graph shows alternative ways that an economy can use its resources.
- The production possibilities frontier is the line that shows the maximum possible output for that economy.



# Efficiency

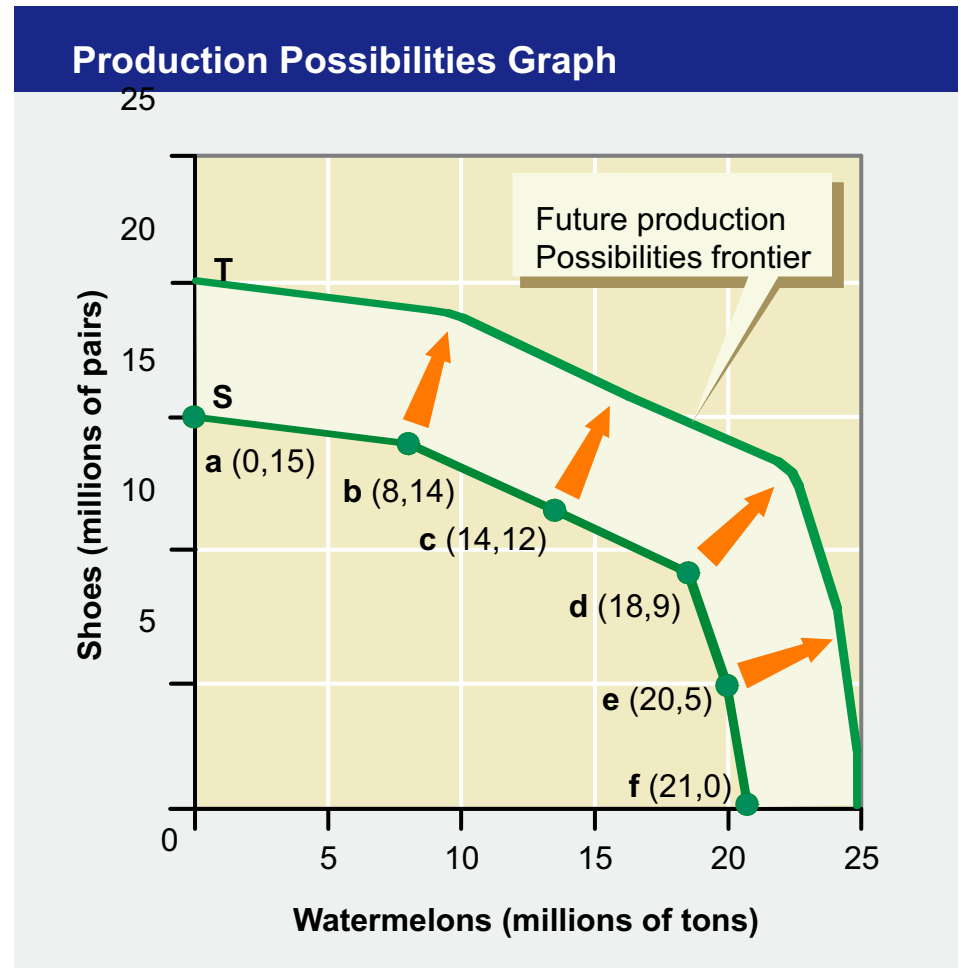
- **Efficiency** means using resources in such a way as to maximize the production of goods and services. An economy producing output levels on the production possibilities frontier is operating efficiently.





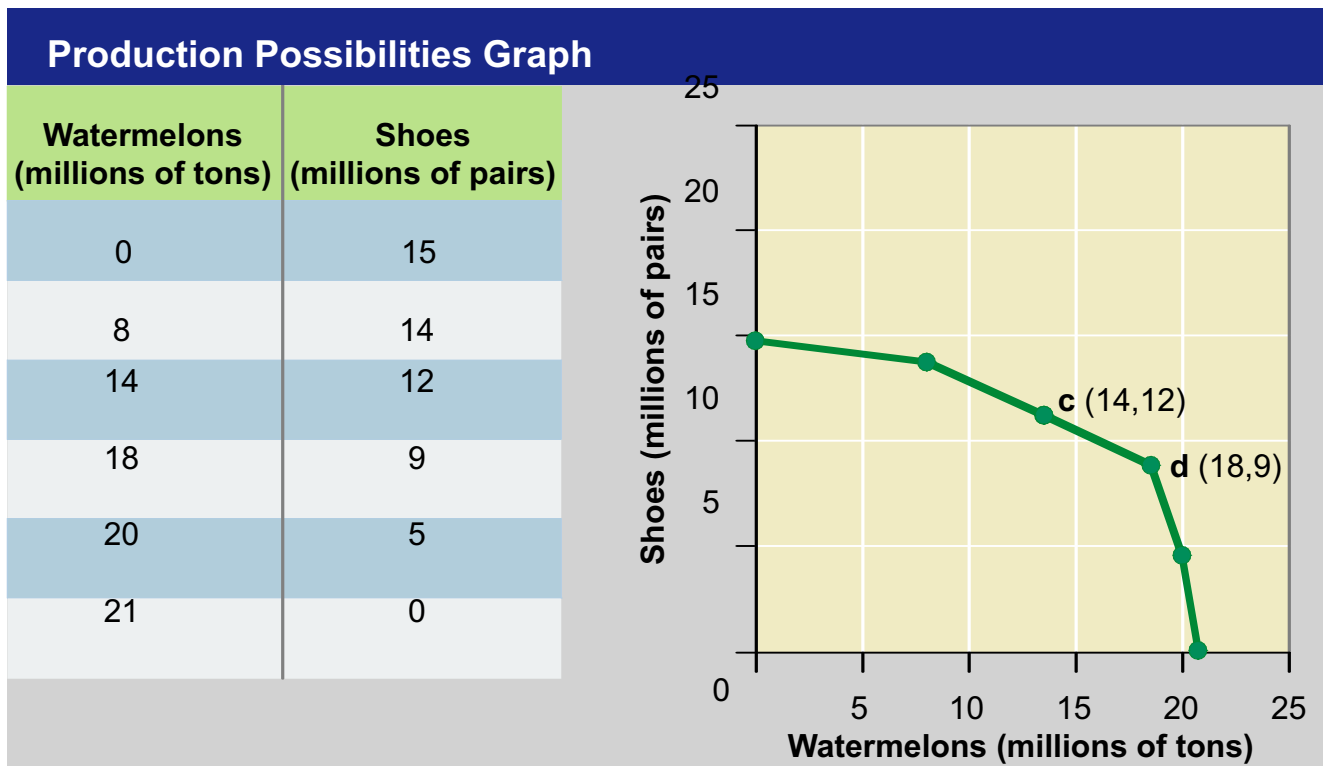
# Growth

- **Growth** If more resources become available, or if technology improves, an economy can increase its level of output and grow. When this happens, the entire production possibilities curve “shifts to the right.”



# Cost

- **Cost** A production possibilities graph shows the cost of producing more of one item. To move from point c to point d on this graph has a cost of 3 million pairs of shoes.



# Section 3 Assessment

1. A production possibilities frontier shows
  - (a) farm goods and factory goods produced by an economy.
  - (b) the maximum possible output of an economy.
  - (c) the minimum possible output of an economy.
  - (d) underutilization of resources.
2. An economy that is using its resources to produce the maximum number of goods and services is described as
  - (a) efficient.
  - (b) underutilized.
  - (c) growing.
  - (d) trading off.

Want to connect to the PHSchool.com link for this section? [Click Here!](#)



# Section 3 Assessment

1. A production possibilities frontier shows
  - (a) farm goods and factory goods produced by an economy.
  - (b) the maximum possible output of an economy.**
  - (c) the minimum possible output of an economy.
  - (d) underutilization of resources.
2. An economy that is using its resources to produce the maximum number of goods and services is described as
  - (a) efficient.**
  - (b) underutilized.
  - (c) growing.
  - (d) trading off.

Want to connect to the PHSchool.com link for this section? [Click Here!](#)