Unit 1: Basic Economic Concepts

REVIEW
1. Explain relationship between scarcity and choices
2. Differentiate between positive & normative
3. Differentiate between price and cost
4. Give the equation for profit
5. Differentiate between consumer and capital goods
6. Give examples of each of the 4 Factors of Production
7. Define tradeoffs
8. Define opportunity cost
9. Differentiate between accounting costs and economic costs
10. Name 10 different teachers at SPHS?

WE HAVE A PROBLEM!!
The Economizing Problem…
Scarcity
Society has unlimited wants but unlimited resources

What is the Production Possibilities Curve?
• A production possibilities graph (PPG) is a model that shows alternative ways that an economy can use its scarce resources
• This model graphically demonstrates scarcity, trade-offs, opportunity costs, and efficiency.

4 Key Assumptions
• Only two goods can be produced
• Full employment of resources
• Fixed Resources (Ceteris Paribus)
• Fixed Technology

The Production Possibilities Curve (PPC)
Using Economic Models…
Step 1: Explain concept in words
Step 2: Use numbers as examples
Step 3: Generate graphs from numbers
Step 4: Make generalizations using graph

Production “Possibilities” Table

<table>
<thead>
<tr>
<th>Bikes</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>12</td>
<td>9</td>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

Each point represents a specific combination of goods that can be produced given full employment of resources.

NOW GRAPH IT: Put bikes on y-axis and computers on x-axis
**AP Microeconomics**

Unit 1: Basic Economic Concepts

1-4. Production Possibilities Frontier (PPF)

**Production Possibilities**

How does the PPF graphically demonstrates scarcity, trade-offs, opportunity costs, and efficiency?

- **Impossible/Unattainable** (given current resources)
- **Efficient**
- **Inefficient/Unemployment**

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**Opportunity Cost**

**Example:**

1. The opportunity cost of moving from a to b is... 2 Bikes
2. The opportunity cost of moving from b to d is... 7 Bikes
3. The opportunity cost of moving from d to a is... 4 Computer
4. The opportunity cost of moving from 1 to c is... 0 Computers
5. What can you say about point G?

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**The Production Possibilities Curve (or Frontier)**

- **CALZONES** 4 3 2 1 0
- **PIZZA** 0 1 2 3 4

- List the Opportunity Cost of moving from a-b, b-c, c-d, and d-e.
- Constant Opportunity Cost- Resources are easily adaptable for producing either good.
- Result is a straight line PPC (not common)

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**Production Possibilities**

- **PIZZA** 20 19 16 10 0
- **ROBOTS** 0 1 2 3 4

- List the Opportunity Cost of moving from a-b, b-c, c-d, and d-e.
- Law of Increasing Opportunity Cost-
  - As you produce more of any good, the opportunity cost (forgone production of another good) will increase.
  - Why? Resources are NOT easily adaptable to producing both goods.
  - Result is a bowed out (Concave) PPC

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**Constant vs. Increasing Opportunity Cost**

Identify which product would have a straight line PPC and which would be bowed out?

- **Corn**
- **Cactus**
- **Wheat**
- **Pineapples**

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PER UNIT Opportunity Cost

How much each marginal unit costs

Example:

1. The PER UNIT opportunity cost of moving from a to b is...
2. The PER UNIT opportunity cost of moving from b to c is...
3. The PER UNIT opportunity cost of moving from c to d is...
4. The PER UNIT opportunity cost of moving from d to e is...

NOTICE: Increasing Opportunity Costs

The Production Possibilities Curve and Efficiency

Two Types of Efficiency

Productive Efficiency-
- Products are being produced in the least costly way.
- This is any point ON the Production Possibilities Curve

Allocative Efficiency-
- The products being produced are the ones most desired by society.
- This optimal point on the PPC depends on the desires of society.

Why two types of efficiency?

Is combination “A” efficient?
Yes and No. It is productively efficient but it is not the combination society wants

Shifting the Production Possibilities Curve

Productive and Allocative Efficiency

Which points are productively efficient?
Which are allocatively efficient?
Productively Efficient combinations are A through D
Allocative Efficient combinations depend on the wants of society
(What if this represents a country with no electricity?)
AP Microeconomics
Unit 1: Basic Economic Concepts
1-4. Production Possibilities Frontier (PPF)

Production Possibilities
4 Key Assumptions Revisited
• Only two goods can be produced
• Full employment of resources
• Fixed Resources (4 Factors)
• Fixed Technology

What if there is a change?
3 Shifters of the PPC
1. Change in resource quantity or quality
2. Change in Technology
3. Change in Trade

What happens if there is an increase in population?

Robots
| Pizzas |

What if there is a technology improvement in pizza ovens?

Robots
| Pizzas |

Panama – Favors Consumer Goods
Mexico – Favors Capital Goods

Countries that produce more capital goods will have more growth in the future.
1-4. Production Possibilities Frontier (PPF)

**PPC Practice**
Draw a PPC showing changes for each of the following:

**Pizza and Robots (3)**
1. New robot making technology
2. Decrease in the demand for pizza
3. Mad cow disease kills 85% of cows

**Consumer goods and Capital Goods (4)**
4. Destruction of power plants leads to severe electricity shortage
5. Faster computer hardware
6. Many workers unemployed
7. Significant increases in education

**Question #1**
New robot making technology

**Question #2**
Decrease in the demand for pizza

**Question #3**
Mad cow disease kills 85% of cows

**Question #4**
BP Oil Spill in the Gulf

**Question #5**
Faster computer hardware
1-4. Production Possibilities Frontier (PPF)

**Question #6**
Many workers unemployed

The curve doesn’t shift! Unemployment is just a point inside the curve.

**Question #7**
Significant increases in education

The quality of labor is improved. Curve shifts outward.

Paul Solman Video
Production Possibilities