### (Pushing Possibilities)

#### AUTHOR INFORMATION

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**State:** Texas

#### GENERAL INFORMATION

**Lesson Grade Span:** Middle and High School, 6-8 and 9-12  
**Targeted Grade Level/Course:** Social Studies, Economics  
**Estimated Time to Complete Lesson:** 1 class

#### FOCUSED QUESTION(S)

- What is significant about a country's production possibility?  
- What are the advantages and disadvantages between high/low capital goods production and high/low consumer production?  
- What types of governments are associated with high/low capital goods and high/low consumer goods production?

#### STANDARDS (STATE/C3)

- **D2.Eco.1.6-8.** Explain how economic decisions affect the well-being of individuals, businesses and society.  
- **D2.Eco.7.6-8.** Analyze the role of innovation and entrepreneurship in a market economy.  
- **D2.Eco.13.9-12.** Explain why advancements in technology and investments in capital good and human capital increase economic growth and standards of living.

#### STUDENT & TARGET OUTCOMES

- Understand the concept of Production Possibilities  
- Make inferences about the impact that the Korean War has had on the economy of the Republic of Korea (South Korea)
• Understand how production possibilities curves illustrate choice, how choice illustrates opportunity cost and how opportunity cost is illustrative of trade-offs encountered on a daily basis.

## LESSON OVERVIEW

Students will explore the economic differences between North Korea and South Korea and apply concepts of production possibilities in order to make informed determinations about the economic prosperity (or lack thereof) in both North Korea and South Korea.

In small groups of 4-5, students will be presented with a variety of sources. These sources will help students draw conclusions, make inferences and make comparisons of production possibilities in both North Korea and South Korea.

Students will then engage in a gallery walk to view the conclusions of the various groups in the classroom.

Finally, students will individually reflect on the activity.

## PROCEDURES

### Materials Needed:

- White Boards (Class Set)
- Dry Erase Marker (1 per student)
- Primary & Secondary Source Documents printed or, Ipad/Computers
- Production Possibilities Chart Sheet
- Korean Peninsula Compare/Contrast Sheet
- Reflective Journal

### Prior Knowledge:

**Teacher**

- The teacher should have an understanding of the implications of opportunity cost and how choice and tradeoffs are universally shared amongst everyone everywhere.
- The teacher should understand the sources used in the activity.
The teacher should understand the macro application of the Production Possibilities Curve and the differences between economies that focus on capital goods production versus those focused on consumer goods production.

The teachers should have an understanding of the micro application of the Production Possibilities Curve and how it is illustrative of maximum individual potential in relation to opportunity cost.

The teacher should have knowledge of government types and how command and free market economies relate to a focus on capital goods production over consumer goods production respectively.

**Students**

- Students should have an understanding of various types of governments.
- Students should have a basic understanding of how to draw, correctly label and interpret a Production Possibilities Curve.
- Students should have the ability to discern a primary source from a secondary source.

**Introduction (Focus, Anticipatory Set):**

In order to draw on previous knowledge, students will be asked to correctly draw and label two production possibilities curves. The first will represent an economy at full production and the second will represent an economy in a recession. Additionally, students will define Capital Goods and Consumer Goods by giving two examples of each.

**Procedure:**

**Teacher will:**

- Split students into groups of four or five
- Give each group a pre-sorted folder of primary and secondary sources, Production Possibilities Chart Sheets and Korean Peninsula Compare and Contrast Sheets
- Keep time

**Students will:**

- Individually, read/analyze primary and secondary sources looking for exemplars of production possibilities in Korea
- Collaboratively, compare and contrast North and South Korea using the Korean Peninsula Compare and Contrast Sheet
- Individually, plot North Korea and South Korea on their respective production possibilities graphs
- Collaboratively, compare their graphs, and then produce one, agreed upon, production possibilities graph for North and South Korea
Teacher will:
• Facilitate a “gallery walk” or a rotation through group areas (whichever is best for the classroom)

Students will:
• Rotate, with groups, through the gallery walk or around group areas
• Read and critique their peer group charts
• Return to their seats and individually reflect on the findings

Closing and Evaluation:

The teacher should close the lesson by making personal application of production possibilities to students’ lives. On a macro level, students should be able to determine where the United States economy would be placed on the graph. On a micro level, students should understand that production possibilities curves can illustrate our own potential. Because they are illustrative of trade-offs, full potential requires choices and choices are reflective of opportunity cost.

After the teacher will invite students to complete a personal reflection based on their observations of the activity. Students should place focus on how the production possibilities curve illustrates the economic focus of each country. Additionally, reflections should draw support from the primary sources and secondary sources included in the activity.

FORMATIVE ASSESSMENT

Students will be assessed, formatively, in various ways throughout the lesson.
• Focus, Anticipatory set (Production Possibilities Curves)
• Group participation
• Personal Reflection
RESOURCE LIST


MODIFICATIONS & EXTENSIONS (OPTIONAL)

MODIFICATIONS

The teacher is the expert in the classroom and must preview all materials prior to students completing the lesson. From there, teachers may decide which materials are most appropriate for various learner group or individuals in their classroom. Given the focus of the lesson, teachers may choose to look for pictures or materials that might better suit students in their classes.
**A Production Possibilities Curve**

**Examples of Capital Goods:**

**Examples of Consumer Goods:**

**Discussion Questions**

1. Place a X on the line where you think the economy’s production is focused.

2. Compare and Contrast the economy of the North Korea and South Korea.

3. Analyze why both types of economies are good and why focusing on one is bad.
North v South Korea

<table>
<thead>
<tr>
<th>Country</th>
<th>N Korea (Democratic People’s Republic of)</th>
<th>S Korea (Republic of)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>24,720,407</td>
<td>48,955,203</td>
</tr>
<tr>
<td>GDP (purchasing power parity), $bn</td>
<td>40</td>
<td>1,622</td>
</tr>
<tr>
<td>GDP - real growth rate (%)</td>
<td>0.8</td>
<td>2.7</td>
</tr>
<tr>
<td>GDP - per capita (PPP), $</td>
<td>1,800</td>
<td>32,400</td>
</tr>
<tr>
<td>Unemployment rate, %</td>
<td>3.8</td>
<td>3.8</td>
</tr>
<tr>
<td>Urban population (%)</td>
<td>60</td>
<td>83</td>
</tr>
<tr>
<td>Military expenditures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median age</td>
<td>33</td>
<td>39</td>
</tr>
<tr>
<td>Infant mortality rate, per 1,000 live births</td>
<td>26.21</td>
<td>4.08</td>
</tr>
<tr>
<td>Life expectancy at birth (total population)</td>
<td>69.2</td>
<td>79.3</td>
</tr>
<tr>
<td>Area</td>
<td>122,762 sq km</td>
<td>99,313 sq km</td>
</tr>
<tr>
<td>Corruption Index ranking 2012</td>
<td>174</td>
<td>45</td>
</tr>
<tr>
<td>Press Freedom Index 2013</td>
<td>178</td>
<td>50</td>
</tr>
<tr>
<td>Total executed, 2007-2011</td>
<td>105</td>
<td>0</td>
</tr>
<tr>
<td>Total sentenced to death, 2007-2011</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>CO2 Emissions (metric tons per capita)</td>
<td>3.1</td>
<td>10.4</td>
</tr>
<tr>
<td>% of rural population with access to an improved water source</td>
<td>97</td>
<td>88</td>
</tr>
<tr>
<td>Internet users per 100 people</td>
<td>&lt; 0.1</td>
<td>81.5</td>
</tr>
<tr>
<td>Intentional homicide, rate per 100,000 population</td>
<td>15.2</td>
<td>2.6</td>
</tr>
<tr>
<td>Intentional homicide, count per 100,000 population</td>
<td>3,658</td>
<td>1,251</td>
</tr>
<tr>
<td>Exports, $ billion</td>
<td>4.71</td>
<td>552.6</td>
</tr>
<tr>
<td>Imports</td>
<td>4</td>
<td>514.2</td>
</tr>
<tr>
<td>Net official development assistance (ODA) and official aid (current US$)</td>
<td>78,840,000</td>
<td>-69,070,000</td>
</tr>
<tr>
<td>Net ODA per capita (current US$)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Global Hunger Index score</td>
<td>19</td>
<td>N/A</td>
</tr>
<tr>
<td>Manpower fit for military service, males age 16-49</td>
<td>4,830,567</td>
<td>10,864,566</td>
</tr>
<tr>
<td>Manpower fit for military service, females age 16-49</td>
<td>5,230,137</td>
<td>10,168,709</td>
</tr>
<tr>
<td>Active duty</td>
<td>1190000</td>
<td>655000</td>
</tr>
<tr>
<td>Reserve</td>
<td>600,000 (Armed Forces)</td>
<td>4,500,000</td>
</tr>
<tr>
<td>Military expenditure as a percentage of GDP</td>
<td>22.3</td>
<td>2.8</td>
</tr>
<tr>
<td>Military spending, $ billion</td>
<td>8.21</td>
<td>26.1</td>
</tr>
</tbody>
</table>
Dynasty vs democracy
Leaders since 1948

North Korea
South Korea

L-r: Kim Il-sung, Kim Jong-il, Kim Jong-un
L-r: Rhee Syng-man, Yun Bo-seon, Park Chung-hee, Choi Kyu-hah, Chun Doo-hwan, Roh Tae-woo, Kim Young-sam, Kim Dae-jung, Roh Moo-hyun, Lee Myung-bak, Park Geun-hye, Moon Jae-in

Hardly anyone has a mobile
Mobile phone subscriptions, 2015

North Korea
South Korea

3.2 million
58.9 million

Source: CIA World Factbook
North Koreans are shorter than South Koreans

3 - 8cm (1.2 - 3.1in) shorter on average

173.5cm average height

Source: OEC

North Korea’s roads are bad

North Korea

Unpaved 97%
Paved 3%
Total: 25,554km

South Korea

Unpaved 8%
Paved 92%
Total: 99,025km

Source: CIA World Factbook
Coal is king in the North
Main exports from North and South Korea, 2015

North Korea: $952m Coal briquettes
South Korea: $63.8bn Circuit boards

But the Koreas used to be much more closely matched
GDP per capita in USD, 1950-2010

Source: OEC
Source: The Maddison Project
Military might

<table>
<thead>
<tr>
<th>Active Personnel</th>
<th>North Korea</th>
<th>South Korea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1,190,000</td>
<td>630,000</td>
</tr>
<tr>
<td>Army</td>
<td>1,020,000</td>
<td>495,000</td>
</tr>
<tr>
<td>Navy</td>
<td>60,000</td>
<td>70,000</td>
</tr>
<tr>
<td>Air force</td>
<td>110,000</td>
<td>65,000</td>
</tr>
<tr>
<td>Paramilitary</td>
<td>189,000</td>
<td>4,500</td>
</tr>
<tr>
<td>Reserves</td>
<td>5,700,000</td>
<td>4,500,000</td>
</tr>
<tr>
<td>Tanks</td>
<td>3,500</td>
<td>2,434</td>
</tr>
<tr>
<td>Aircraft</td>
<td>545</td>
<td>567</td>
</tr>
<tr>
<td>Submarines</td>
<td>73</td>
<td>23</td>
</tr>
<tr>
<td>Artillery</td>
<td>21,100</td>
<td>11,000</td>
</tr>
</tbody>
</table>

Source: The Military Balance 2017, IISS

South Koreans live longer

Average life expectancy, 1960-2015

Source: World Bank
... but North Koreans have more babies

Birth rate per 1,000 people

- S. Korea
- North Korea

Source: World Bank
Seoul
Before the Korean War
Seoul
During the War
Seoul
Modern Day
Schooling
Before the Korean War
Schooling During the War
Schooling
Modern Day
Businesses
Before the Korean War
Businesses During the War
Businesses
Modern Day
Transportation
Before the Korean War
Buses right after the Korean War were either donated by the U.N., or assembled with components from vehicles damaged during the war.
Transportation
Modern Day
Han River
Before the Korean War
Han River
During the Korean War
Han River
Modern Day
Homes
Before the Korean War
Homes
During the Korean War
Homes
Modern Day