

The Green Revolution

Duration

2 class sessions of 40 minutes

Resources

1. Study Guide



2. Worksheet



3. Homework



Objectives of Lesson

- To describe the characteristics, history, and consequences (positive & negative) of the Green Revolution
- To analyze stimuli and generate connections to the Green Revolution
- To analyze the overall impact of the Green Revolution
- To justify an individual stance on the Green Revolution

College Board Objectives from the 2019–20 CED

- **SPS5:** Agriculture has changed over time because of cultural diffusion and advances in technology. (page 94)
- **Learning Objective SPS-5.D:** “Explain the consequences of the Green Revolution on food supply and the environment in the developing world.”
- **SPS-5.D.1:** The Green Revolution was characterized in agriculture by the use of high-yield seeds, increased use of chemicals, and mechanized farming.
- **SPS-5.D.2:** The Green Revolution had positive and negative consequences for both human populations and the environment.

How to Use This Lesson Plan

This lesson has been designed to help students understand the key people, places, characteristics, and consequences of the Green Revolution. It provides students with lower and higher-level activities and closes with students’ showcasing their understanding by producing a superhero or villain.

This lesson will be most successful if followed in the appropriate sequence—Study Guide, Worksheet, then Homework. This document will help guide you through the lesson, along with providing different ways to adjust the lesson to best meet the needs of your students and attain optimum student engagement.

NOTES

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Part 1: Study Guide

Distribute the Study Guide to students. The completion of its two parts can be done a multitude of ways. Below are a few suggestions:

- Students can generate responses to both parts on their own.
- Collaborative groups—students can collaborate in groups to discuss and record responses.
- Class discussion—the entire class can read aloud and generate responses collectively.
- Gallery walk—students can write responses (individually or in a group) and display them around the room and conduct a gallery walk.
- Digitally—students can respond to a digital platform and view class results.

Part 2: Worksheet

After class completion of the Study Guide, distribute the Worksheet to students. Its completion can be done similarly to Part 1—with these suggestions:

- Students can generate responses to both parts on their own.
- Collaborative groups—students can collaborate in groups to discuss and record responses.
- Class discussion—the entire class can read aloud and generate responses collectively.
- Gallery walk—students can write responses on sticky notes and display them next to each stimulus and conduct a gallery walk.
- Digitally—students can respond to a digital platform and view class results.

Homework

This is the assessment component of the lesson and requires students to demonstrate a higher-level understanding of Green Revolution consequences on humans and the environment. Go over the provided example with them and encourage them to be creative!

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The Green Revolution

Part 1: Text Analysis

Directions: Read the text and complete the task that follows

The third agricultural revolution is called the Green Revolution. It began in the 1960s with the ideas and inventions of Dr. Norman Borlaug. The Green Revolution is characterized by high-yield seeds, created by seed hybridization and genetic modification, and increased use of fertilizers and pesticides. The Green Revolution significantly increased crop production, especially corn, wheat, and rice. While many hungry areas of Asia and Latin America saw improvements from the Green Revolution, African farmers were unable to reap its benefits. Lack of land, water, and financial resources to purchase and maintain the new strands proved too costly. The Green Revolution had mixed results. There were benefits for some and disadvantages for others.

Provide a 2-sentence summary of the Green Revolution:

Write or type your response in this area.

Part 2: What the?! Video Analysis “The Green Revolution: Waging A War Against Hunger”

(<https://www.youtube.com/watch?v=HucSCNQ01X4>)

Directions: As you watch the video clip, complete the What the?! Template. For the “!” you will write down something interesting that stood out to you. For the “?” you will write down a question you have.

NOTES

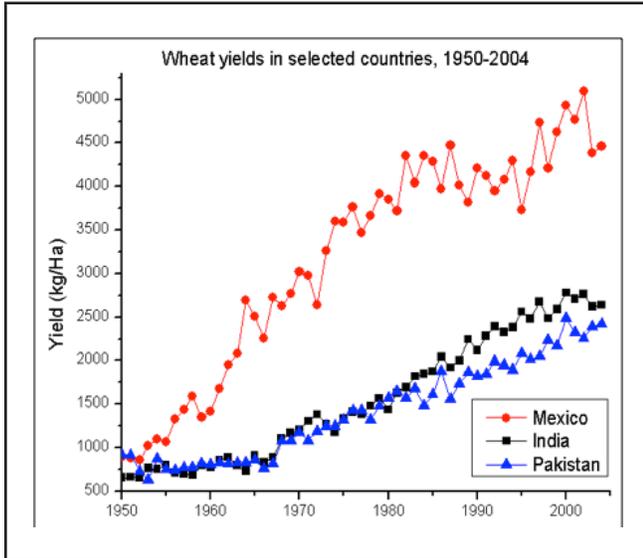
Write or type in this area.

The Green Revolution

This worksheet is designed to help students understand the consequences of the Green Revolution.

Part 1: Stimulus Analysis

Directions: For each stimulus, describe the impact of the Green Revolution.



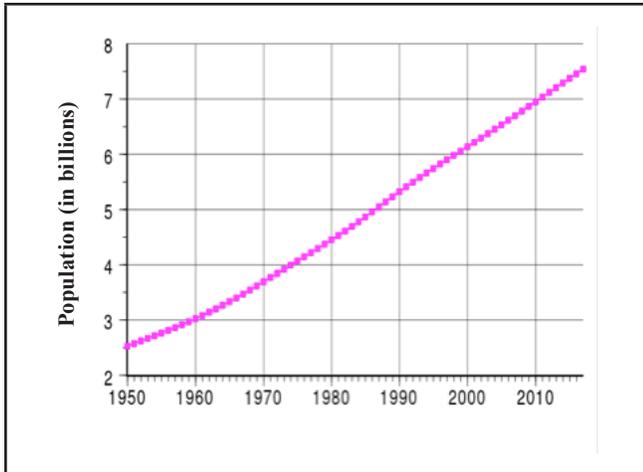
Stimulus 1: Wheat yields in Mexico, India, & Pakistan

Write or type your response in this area.



Stimulus 2: Airplane spraying chemical fertilizer

Write or type your response in this area.



Stimulus 3: World Population Growth

Write or type your response in this area.

Part 2: Pros & Cons of the Green Revolution Analysis

Directions: After researching the Green Revolution using the provided websites, fill out the T-chart below. Come up with 5 pros and 5 cons regarding the Green Revolution.

- Health Research Funding’s Pros & Cons of the Green Revolution (<https://healthresearchfunding.org/green-revolution-pros-cons/>)
- Green Garage’s Pros & Cons of the Green Revolution (<https://greengarageblog.org/14-foremost-pros-and-cons-of-the-green-revolution>)

PROS

CONS

Write or type your response in this area.

Write or type your response in this area.

The Green Revolution

Now that you've researched the characteristics and consequences of the Green Revolution, it's time to take a stance—superhero & villain style! Which one will you be?

Directions: Create a character based on your stance on the Green Revolution. If you feel there are more pros, you will create a superhero; however, if you feel there are more cons, then you will create a villain. Fill out the required information for your character. Be sure to check out the example to spark your creativity.

Example:

Superhero or **Villain** (circle one)

Character name: The Corn Reaper

Background story: The Corn Reaper was born out of an Indiana cornfield. In 1992, farmer Matthew Cottonmouth over-sprayed fertilizer onto his genetically modified corn crop. The fertilizer seeped into his scarecrow and when struck by lightning from a summer thunderstorm, the scarecrow came to life. The result was "The Corn Reaper." Since then, The Corn Reaper has wandered throughout the Midwest, seeking to end farmers' overuse and dependence on fertilizers and pesticides brought on by the Green Revolution.

Special powers: Husks of hay are razor-sharp near phalange areas, overly keen sense of smell

Weaknesses: Highly flammable

Now, it's your turn!

Superhero or Villain (circle one)

Character name: _____

Background story:

Write or type your response in this area.

Special powers:

Write or type your response in this area.

Weaknesses:

Write or type your response in this area.

Paragraph stating and justifying my PERSONAL stance on the Green Revolution—is it more good than bad?

Write or type your response in this area.

Now, design and draw your superhero or villain! Be creative!

Design and draw your response in this area.