

METHOD

Students explore historical events at www.WorldPopulationHistory.org to determine which past events they deem most important in meeting human needs and create their own chronological timelines highlighting seven influential milestones.

INTRODUCTION

Throughout history, the dynamic nature of human needs has prompted discoveries, inventions, and in some cases, revolutions. But there are parts of the world where people now live beyond the Earth's ecological means. Energy use, farmland demands, and overharvesting of ocean ecosystems are all examples of how human needs are outstripping the Earth's natural ability to regenerate natural resources. However, there are other regions where populations' basic needs are not supported due to social or political instability, or environmental volatility. Our ability to satisfy current and future needs requires sustainable solutions that will allow future generations to meet their needs without seriously endangering the planet's limited resources. Looking to the past for examples, we can find instances where population pressures influenced our ability to meet human need, and where that need has sparked or necessitated a change in the way that things were done.

Part 1 is an in-class discussion and Part 2 is an in-class activity, part of which can be completed as homework.

MATERIALS

- Websites: www.WorldPopulationHistory.org and www.tiki-toki.com (optional)
- Student Worksheet
- Index cards (7 per group)

CONCEPT

Human needs have changed over time, impacting the size and movements of population.

OBJECTIVES

Students will be able to:

- Identify and evaluate cause-and-effect relationships between historical events and human population.
- Explain how specific events impacted population size.
- Draw connections between changing human needs and historical events.

SUBJECTS

World History, AP Human Geography, World Geography

SKILLS

Classifying historic events, determining cause and effect, defending conclusions, assembling a timeline, presenting findings

PART 1

Changing Human Needs

Humans need air, water, food, and shelter to survive. But beyond these life-giving necessities, there are other “needs” required by people to live in their current society and over time, these needs have changed.

Procedure:

1. Ask students to consider the following topics – food production, energy use, human settlement and migration, and water use – and how they relate to their current everyday life. Where did their lunch come from? How did they get to school today? What woke them up this morning? How did their family come to be in the town they currently live?

2. Facilitate a class discussion based on the following agree/disagree statements.

“Human needs have changed over the past 100 years.”

“Human needs changed to keep up with technological advances.”

If the class is struggling with the debate, offer the following questions as prompts: What are basic needs for survival? What were the needs of your grandparents when they were your age? What do you consider to be the needs of someone today, in modern society?

PART 2

Selecting Important Milestones

Many human needs fall within the categories of food production, energy use, human settlement and migration, and water use. But how these needs are met has changed over time and many of these changes impacted population.

Procedure:

1. Display www.WorldPopulationHistory.org so the interactive map and five timelines at the bottom of the screen are visible. If the class is unfamiliar with the site, you may find it useful to give them a “tour” of the site’s components. You can find helpful instructions [here](#).

2. Assign each student one of the four topics discussed in Part 1 (food production, energy use, human settlement and migration, and water use).

3. Distribute the Student Worksheet and go over the instructions.

- Explore the five timeline themes (Food & Agriculture, Health, People & Society, Environment, and Science & Technology) and select 10 milestones that have had the largest impact on the assigned topic.
- The milestones they choose should be something noteworthy that changed people’s way of life.
- Consider how human needs were evolving during that time period and how human needs at that time differed from needs today.

Inform students that in a future class discussion, they will be asked how the chosen milestones impacted population growth. Point out that if an invention or event made something easier, that may connect to a changing population.

Example: In 1793, Eli Whitney invented the cotton gin, which was a mechanical device that separated cotton fibers from its seeds. This sped up production of cotton, encouraging land owners to plant more acres of the crop. In turn, there was an increased the need for labor to plant and pick the cotton, accelerating the slave trade to America and therefore influencing migration and human settlement. Additionally, the demand for cotton rose as the world population grew.

4. On the Student Worksheet, point out the framing questions that students can use to help them determine importance and influence when selecting their historical events.
 5. Assign each student one topic from the list below. You may ask them to count off 1 - 4 and assign the topic based on their number.
 1. Food production over time
 2. Energy use over time
 3. Human settlement and migration over time
 4. Water use over time
 6. Have students begin the Student Worksheet. Whatever they do not complete should be done as homework.
 7. The next day, divide students into small groups with others who investigated the same topic. Each student should report on their individual list of 10 milestones.
 8. After everyone has shared, the group selects seven milestones they collectively think are the most influential for their topic area. Students may debate and advocate for events as they see fit.
 9. Once students have a final list of seven milestones, they should discuss the immediate and long-term impacts of those events on population. Students should pay close attention to the following:
 - a. Cause/Effect – What are the cause/effect relationships between the milestones and population? Explain how and why an event came to be, as it relates to accommodating changes in human need.
 - b. Chronology – Can you associate events and their long-term impacts with change over time? Use statements such as “Without _____, we could not have had _____” and “If _____ had not happened, _____ would not have happened.”
 10. Each group should place the agreed-upon milestones on index cards and arrange them to create a chronological timeline.
- NOTE: Students can build electronic timelines using an online timeline maker like [Tiki-Toki](#). Students will need to create a free account to complete the timeline. Instructions for use are available on the website. You would need to allot more time for this, so students can find appropriate images for the online timeline.
11. Have each group prepare a 5-minute presentation explaining how they decided on their seven milestones and offering justifications for each. Presentations should include at least one of the following for each milestone: a) its long-term impact, b) its influence on human population, c) its impact on the environment, or d) how it relates to changing human needs.
 12. Groups share presentations with the class.

ASSESSMENT

Monitor each groups' discussion to ensure all members are actively engaged. Assess students' timeline presentations based on if they covered all seven milestones and for each, offered appropriate justifications and explained one additional aspect (long-term impact, influence on population, impact on environment, relationship to changing human needs).

Name: _____

Date: _____

Topic: _____

Access www.WorldPopulationHistory.org. Using the timeline at the bottom of the main screen, select 10 milestones that you would argue had the largest influence on your assigned topic. The timeline is divided into five themes to help guide your search.

List of milestones:

- | | |
|----|-----|
| 1) | 6) |
| 2) | 7) |
| 3) | 8) |
| 4) | 9) |
| 5) | 10) |

Framing Questions – As you select your 10 events, consider the following and be prepared to discuss them in class.

How have human needs changed through history? What are some results that have come of these changes?

How have actions taken to meet the demands of a rapidly growing population affected the natural environment, for better or for worse?

Do we currently meet human needs worldwide?

Is it possible to meet all the needs of the current global population?