**Big Idea/ Topic**

**Population Geography: The “Goldilocks” of Growth**

**Connecting Theme/Enduring Understanding:**

**Beliefs and Ideals:** The student will understand that the beliefs and ideals of a society influence the social, political, and economic decisions of that society.

**Culture:** The student will understand that the culture of a society is the product of the religion, beliefs, customs, traditions, and government of that society.

**Governance:** The student will understand that as a society increases in complexity and interacts with other societies, the complexity of the government also increases.

**Production, Distribution, Consumption:** The student will understand that the production, distribution, and consumption of goods/services produced by the society are affected by the location, customs, beliefs, and laws of the society.

**Rule of Law:** The student will understand that in a democracy, rule of law influences the behavior of citizens, establishes procedures for making policies, and limits the power of government.

**Essential Question:**

How do various countries measure and manage differing levels of population growth and what is “just the right amount”?

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**Standard Alignment**

SSWG4 Assess the characteristics, spatial distribution, and migration of human populations on the earth’s surface.

a. Assess demographic patterns of population using graphs, maps, and other models (e.g., Demographic Transition Model, population density maps, and global migration patterns).

b. Analyze population issues in reference to pro and anti-natal policies of different countries and their effects on population characteristics (e.g., China’s natalist policy, maternity/paternity leave policies, and child subsidies).

**Connection to Literacy Standards for Social Studies and Social Studies Matrices**

L9-10RHSS1: Cite specific textual evidence to support analysis of primary and secondary sources, attending to such features as the date and origin of the information.

L9-10RHSS7: Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text.

**Map and Globe skills** –

8. draw conclusions and make generalizations based on information from maps

**Information Processing Skills** –

3. identify issues and/or problems and alternative solutions

6. identify and use primary and secondary sources

7. interpret timelines, charts, and tables

11 draw conclusions and make generalizations

12. analyze graphs and diagrams

15. determine adequacy and/or relevancy of information
Instructional Design

*This lesson has a flexible timeline and will cross over several days.

This lesson is intended to reach students in a virtual setting, whether plugged or unplugged. See bottom of lesson for list of unplugged supplies.

Part 1: Preview the Lesson

1. Before beginning the lesson, ask students if they are familiar with the story of Goldilocks. Ask them what they remember about the story. Ask what they think the “Goldilocks Principle” might be. Tell students the principle refers to something being “just the right amount.” Explain to students that some country’s populations grow faster and slower than others. In fact, some countries in Africa are on pace to double in just a few decades and others, like countries in Western Europe are actually decreasing! Then, ask students to generate ideas responding to both parts of the essential question: How do various countries measure and manage differing levels of population growth and what is “just the right amount”? You may want to consider starting with the second part of the question first. Have students brainstorm responses in a discussion platform, live video-calling platform, in a digital journal or regular journal.

2. Use examples of population pyramids and ask students questions about them using the same format you used in #1 to teach them about the different aspects of population pyramids (see slides 5-6 in accompanying PowerPoint Presentation).

3. Use photographs of varying populations to explain to students that not all population pyramids are the same. They are based on the population being examined (see slide 7). Ask students to draw out a rough population pyramid based on what they see in each photo.

4. Use varying population pyramids to teach about rapid growth, slow growth, and negative growth pyramids (see slide 8).

5. Answer the following questions in your interactive notebook/journal: In what ways are population pyramids useful?

*Unplugged variation – Print out referenced slides from the accompanying PowerPoint for students. Have students respond to the questions listed in their interactive notebook/journal.

Part 2: Build Content Knowledge

1. Prompt students by brainstorming responses to the following
   - What is a model?
   - How are models used?
   - Set a timer for one minute. List as many models as you can.

   They might generate ideas like fashion models, model cars, planes, or trains. A model is an example or replica of something else, sometimes on a smaller scale, like in the case of model trains. Some models aren’t the real thing, but representations of real things. The Demographic Transition Model is an example of this. Not all populations follow this model exactly, but it gives demographers an example of how populations can fluctuate. Use the example of the Demographic Transition Model and accompanying questions (see slide 6) to teach students about the different stages of the Demographic Transition Model.

2. Teach students content vocabulary for this lesson (see slide 7). Consider asking students to write definitions in their own words, draw a picture/symbol for each term, and/or have students use the word in a sentence including a contextual term like “population.”
3. Help students apply their newly acquired content vocabulary by connecting it back to what they previously learned about population pyramids (see slide 13).

4. Have students start to become demographers by having them make predictions about what will happen to the population pyramids (see slide 14).

5. Have students do independent research on and summarize the problems associated with rapid and negative growth of populations. Students should focus on 1) specific causes of rapid and negative growth, 2) specific effects of rapid and negative growth, and 3) changes in government policy to address rapid and negative growth. The websites or informational text you have your students explore for this segment will vary depending on district resources and may include informational texts in book form, online encyclopedias, or other reliable websites. If you are lacking resources, see slides 15-19 in the accompanying PowerPoint for reference material for you and/or your students to use.

6. Have students do independent research about three foreign countries. Students should use: Population growth rate - The World Factbook (cia.gov) to select: 1) a country with a natural rate of increase (growth rate) of at least 3% (rapidly growing), 2) The United States – a slow growth population, and 3) a country with a natural rate of increase below 0% (negative growth). Students can filter results by region if they want. Countries in Africa and Asia tend to have higher growth rates, while countries in Europe tend to have lower growth rates. Students should click on each country they chose to create a “country profile” for each country (see attachment at the end of this document).

   a. Note: a partially completed country profile is included for the United States to use as needed for differentiation.

*Unplugged variation* – Print out referenced slides from the accompanying PowerPoint for students and, the country profile handout attached below. Additionally, provide students with a print out of the country profile and pertinent information from The World Factbook for these three countries to share with students: Democratic Republic of the Congo (rapid), The United States, and Germany.

   • Note: adjust the instructions in the checklist to reflect which countries students complete as you may want to differentiate for individual students.

**Part 3: Assessment:** Have students create a presentation/infographic acting as a demographer, presenting information, including data like population pyramids, to a country with a rapidly growing or negatively growing population that includes the following information:

   o Country name as the title
   o A map of the country
   o A summary of the current demographic information from their country profile
   o A demographically informed prediction about where the country’s population is headed
   o An informed recommendation to the leaders of the country to help that country find the “Goldilocks” zone of slow population growth

Students can use PowerPoint, Prezi, Canva, etc. to create their presentations.

*Unplugged variation* – Students may illustrate their presentation on paper. Print out the country profile and pertinent information from The World Factbook for the Democratic Republic of the Congo (rapid) and Germany to share with students.

**Opportunities for Extension:**

1. Students may use the population pyramid provided in The World Factbook country profile to create their own population pyramids for each country they completed profiles for.
Ideas for Differentiation:

Our goal is for all students to be actively engaged using speaking, writing, illustrating, reading, and listening. Below are changes to the lesson to help achieve that goal for students who need additional support. Note: Be careful using these lessons for all students. If students can complete the activities on their own, it would be best to let them do this independently.

- Consider allowing students to record their thoughts in a variety of ways: using the talk to text/dictate feature, making an audio recording of their responses, creating illustrations, annotating maps, etc.
- Consider reading research materials to students or copying materials into a Word document to allow that students may use the “read aloud” feature.
- Consider asking some students to only complete a country profile for two one rapidly growing country and one negatively growing country, instead of all three including the United States.
- Consider adapting the requirements of the summative assessment to suit the needs of the learner.
- Consider providing research materials or specific websites to conduct directed research.
- For the country profile, consider allowing students to highlight their answers to the top portion on the factbook printout, or allowing them to write responses to the second half of the partially complete profile for the United States.

Evidence of Student Success

Information for diagnostic, formative, and summative assessments are described within the Instructional Design.

Engaging Families

Materials included to support unplugged learners: Accompanying PowerPoint presentation which can be printed, The World Factbook which can also be printed, and the country profile which can be printed.

Optional materials to support learning not included: blank paper, notebook, scissors, glue sticks, colored pencils, markers, etc. as available.
Population Geography Checklist

SSWG4 Assess the characteristics, spatial distribution, and migration of human populations on the earth’s surface.

Essential Question:
How do various countries measure and manage differing levels of population growth and what is “just the right amount”?

Part 1:
☐ Follow the instructions and complete the activities in slides 1-9 in your interactive notebook/journal.

Part 2:
☐ Follow the instructions and complete the activities in slides 10-15 in your interactive notebook/journal.
☐ Complete independent research on and summarize the problems associated with rapid and negative growth of populations. Use slides 15-19 in the PowerPoint for your research.

Focus on:
1. specific causes of rapid and negative growth,
2. specific effects of rapid and negative growth, and
3. changes in government policy to address rapid and negative growth.

☐ Complete the country profile worksheet for the assigned countries.

Part 3:
☐ Follow the instructions and complete the task on slide 20.
Country Profile

Country Name: United States of America

Geographic information from The World Factbook provided map:

- Relative location: North America, bordering both the North Atlantic Ocean and the North Pacific Ocean, between Canada and Mexico.
- Significant physical features: Vast central plain, mountains in the west, hills and low mountains in east; rugged mountains and broad river valleys

This country is (circle one):

Rapidly Growing (3%↑)

Slowly Growing (.5-1%)

Negatively Growing (0%↓)

<table>
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<tr>
<th>Metric</th>
<th>Value</th>
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<tr>
<td>Total Population</td>
<td>334,998,398</td>
</tr>
<tr>
<td>Population Growth Rate</td>
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<tr>
<td>Birth Rate</td>
<td>12.33/1,000</td>
</tr>
<tr>
<td>Death Rate</td>
<td>8.35/1,000</td>
</tr>
<tr>
<td>Total Dependency Ratio</td>
<td>53.9</td>
</tr>
<tr>
<td>Infant Mortality Rate</td>
<td>5.22/1000</td>
</tr>
<tr>
<td>Life Expectancy at Birth</td>
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<tr>
<td>Total Fertility Rate</td>
<td>1.84 per woman</td>
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<tr>
<td>Real GDP per capita</td>
<td>62,530</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>3.89 (2018)</td>
</tr>
<tr>
<td>Population below poverty line</td>
<td>15.1%</td>
</tr>
<tr>
<td>Percentage of Population using internet</td>
<td>87.27% (2018)</td>
</tr>
</tbody>
</table>

1) As a demographer, what stands out to you about this country’s data? Why?

2) What demographic challenges do you think this country will face in the future? Why?

3) As a demographer, what advice would you give to the leaders of this country about how to steer this country’s growth rate into the “Goldilocks” zone? Why do you think your advice will work?

4) Compared to the other countries you completed a profile for, how does the data of this country compare? Do you think this country has a higher or lower standard of living? Why?
Country Profile

Country Name:

Geographic information from The World Factbook provided map:

- Relative location:
- Significant physical features:

This country is (circle one):

- Rapidly Growing (3%↑)
- Slowly Growing (.5-1%)
- Negatively Growing (0%↓)

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5) As a demographer, what stands out to you about this country’s data? Why?

6) What demographic challenges do you think this country will face in the future? Why?

7) As a demographer, what advice would you give to the leaders of this country about how to steer this country’s growth rate into the “Goldilocks” zone? Why do you think your advice will work?

8) Compared to the other countries you completed a profile for, how does the data of this country compare? Do you think this country has a higher or lower standard of living? Why?