Grade Levels: 9-12 (especially AP Human Geography classes)

Length of Time: Several class periods

Objectives:
Students will be able to …
1. Analyze population composition using relevant demographic data
2. Utilize demographic data to predict future population growth/decline
3. Identify the factors that determine birth and death rates
4. Explain why population growth has dropped so precipitously in many developed countries (esp. South Korea)
5. Propose potential policies that countries facing population decline might adopt (esp. South Korea)

AP Human Geography Standards:
II. Population and Migration
A. Knowledge of the geographic patterns and characteristics of human populations
B. Populations grow and decline over time and space
C. Causes and consequences of migration are influenced by cultural, demographic, economic, environmental, and political factors.

Virginia World Geography Standards:
WG.5   The student will compare and contrast the distribution, growth rates, and characteristics of human population in terms of settlement patterns and the location of natural and capital resources.
WG.6   The student will analyze past and present trends in human migration and cultural interaction as they are influenced by social, economic, political, and environmental factors.
WG.7   The student will identify types of natural, human, and capital resources and explain their significance by
a)   showing their influence on patterns of economic activity and land use;
b)   evaluating perspectives and consequences regarding the use of resources.
WG.8   The student will distinguish between developed and developing countries and relate the level of economic development to the standard of living and quality of life.
WG.12   The student will apply geography to interpret the past, understand the present, and plan for the future by
a)   using geographic knowledge, skills, and perspectives to analyze problems and make decisions;
b)   relating current events to the physical and human characteristics of places and regions.

Lesson Content:

1.   **Anticipatory Set –** Teacher will survey students on how many children they would ideally like to have as adults. The discussion will focus on their reasons for wanting large families, small families, no families, etc.

2. **Presentation of Content**
   General Population Concepts – Instructor will provide students with the basics of population geography in a PowerPoint presentation, focusing on those factors that cause populations to grow or shrink and the consequences of rapid population growth and/or decline (see attached PPT – **"Population Intro (FPRI)")**
   - Baby Boom: Any sudden large increase in the birthrate (e.g. post-WWII United States)
   - Cohort: Any group of people sharing some common time-based characteristic (e.g. year of birth)
   - Crude Birth Rate: Annual number of live babies born per 1,000 individuals within a given population
   - Crude Death Rate: Annual number of deaths per 1,000 individuals within a given population
   - Demographic Momentum: The tendency of a population to continue growing in the short term despite a reduction in the total fertility rate below replacement level
   - Demographic Transition Model: A graphic depiction of the typical changes in population growth and birth/death rates experienced by countries as they industrialize
   - Demography: The statistical study of patterns and rates of population change
   - Dependency Ratio: The number of young (0-15) and elderly (65+) people present in a population for every 100 people of working age
   - Doubling Time: Time required for a population to become as twice as large as it is
   - Emigration: The permanent movement of a people away from a given location
   - Guest Worker: A foreign laborer permitted to work in another country on a temporary basis
   - Immigration: The permanent movement of people to a new location
   - Infant Mortality Rate: The number of babies that die within the first year of their lives for every 1,000 live births within a given population
   - Life Expectancy: Average number of years that a person in a given society will live
   - Natural Increase Rate: Percentage growth of a population in a given year (discounting the impact of migration)
   - Neo-Malthusian: Anyone who advocates strong population control measures out of concern that population growth is outstripping the planet's available resources
   - Population Pyramid: A bar graph commonly used by demographers to represent the distribution of people within a given society by age and sex
   - Pronatalism: Government policy of encouraging a higher birthrate
   - Total Fertility Rate: Average number of children to which a typical woman will give birth during her lifetime within a given population
   - Zero Population Growth: A condition in which the crude birth rate and crude death rate are roughly equal, resulting in little if any population increase

3. **Activity – South Korea's Demographic Challenge**
   Students will develop a 2-5 minute pronatalist public service announcement for South Korea that identifies the reasons for the countries low total fertility rate (1.2), explains the potential problems that South Korea faces as a result of its low fertility rate, and proposes policies to address the low fertility rate.

   Students may use whatever medium they choose for their PSA, including …
   - PowerPoint
   - Windows MovieMaker

- Powtoon (www.powtoon.com)

The PSA will be assessed on how well it …
- Clearly identifies the problem(s) South Korea is facing **(20%)**
- Seeks to solve the problem (s) by encouraging changes in the viewers' behavior/attitudes AND/OR in government policy **(40%)**
- Includes accurate, relevant statistics **(10%)**
- Demonstrates a thorough, sophisticated understanding of the topic **(20%)**
- Utilizes images and sounds in a creative, effective manner **(10%)**

Web Sources:
The Population Reference Bureau – World Population Data Sheet
http://www.prb.org/Publications/Datasheets/2015/2015-world-population-data-sheet.aspx
The Population Reference Bureau – "Did South Korea's Population Policy Work Too Well?"
http://www.prb.org/Publications/Articles/2010/koreafertility.aspx
BBC News – "South Koreans Told to Go Home and Make Babies"
http://news.bbc.co.uk/2/hi/asia-pacific/8469532.stm
The Economist – "Breaking the Baby Strike"
http://www.economist.com/news/international/21659763-people-rich-countries-can-be-coaxed-having-more-children-lazy-husbands-and
The Economist – "A Pram Too Far"
http://www.economist.com/news/international/21659763-people-rich-countries-can-be-coaxed-having-more-children-lazy-husbands-and
Korea Joongang Daily – "New Solution For Low Birthrate"
http://koreajoongangdaily.joins.com/news/article/Article.aspx?aid=2949905
The Brookings Institution – "Korea Should Face Its Demographic Crisis Head On"
http://www.brookings.edu/blogs/up-front/posts/2015/06/18-korea-faces-demographic-crisis-moon
The Diplomat – "Seoul's Losing Birthrate Battle"
http://thediplomat.com/2014/11/seouls-losing-birth-rate-battle/
The Globe and Mail – "A Bleak Future and Population Crisis for South Korea"
http://www.theglobeandmail.com/news/world/a-bleak-future-and-population-crisis-for-south-korea/article21249599/
Al Jazeera – "Are South Koreans at Risk of 'Extinction'?"
http://www.aljazeera.com/indepth/opinion/2014/09/are-south-koreans-at-risk-extin-201491013445124904.html
CNBC – "Aging to Challenge South Korea's Economic Transformation"
http://www.cnbc.com/2013/10/29/aging-to-challenge-south-koreas-economic-transformation.html
The Nation – "The Economics of South Korea's Declining Birth Rate"
http://www.nationmultimedia.com/opinion/The-economics-of-South-Koreas-declining-birth-rate-30260719.html
The Wall Street Journal – "South Korea Birthrate Hits Lowest on Record"
http://blogs.wsj.com/korearealtime/2014/08/26/south-korea-birthrate-hits-lowest-on-record/
The Washington Post – "Why South Korea Predicts Its End Will Come in 2750"
https://www.washingtonpost.com/news/worldviews/wp/2014/08/30/why-south-korea-predicts-its-end-will-come-in-2750/

The Independent – "South Koreans To Become Extinct By 2750 Due To Dangerously Low Birthrate"
http://www.independent.co.uk/news/world/asia/south-koreans-to-become-extinct-by-2750-due-to-dangerously-low-birth-rate-9691258.html

YouTube Sources:
"Low Birthrate Shrinks South Korea's Youth Population"
https://www.youtube.com/watch?v=tXGfNjVC2RU
"Nation's Decreasing Birth Rate Leads to Lowest No. of Children"
https://www.youtube.com/watch?v=b8pPtc3GiJQ
"Rise of Singletons Cause of Concern in South Korea"
https://www.youtube.com/watch?v=qaWMX8JIw_4
"Aging Trend and Low Birth Rate in South Korea"
https://www.youtube.com/watch?v=6WKBJAFmqjc
"Korea's Fertility Rate Among the Lowest in the OECD"
https://www.youtube.com/watch?v=iUGk_6BZ7g0

Modifications & Extensions:
- Lesson may be adjusted to focus on any developed country or region
- Lesson may be expanded to include other global demographic concerns (e.g. refugees, sex-ratio imbalance, child marriage, resource depletion, disease control)