Learning Target: I can describe the impacts of an aging population and other effects of demographic transition.
DEMOGRAPHY?

What is it?
“DEMO” & “GRAPHY”?

...human population statistics

the study of...

Example “Stat” types: births, deaths, income, disease
Why do Populations Change?

“Population Dilemmas in Europe”

*Geography Alive Text*

*Chapter 15 pg. 225*

Essential Vocab:

1) Demography
2) Dependency Ratio
3) Life Expectancy
4) Replacement Rate
5) Total Fertility Rate

*All Above terms can be found in text*
Birthrate: the number of births in a year for every 1,000 people in a population

Death rate: the number of deaths in a year for every 1,000 people in a population

Immigration: movement of people into a country

Emigration: movement of people out of a country
3 Factors Influence Population

1. **Total Fertility Rate**: average number of children a woman will have in her lifetime

2. **Replacement Rate**: total fertility rate needed for a population to replace itself (usually about 2)

3. **Life Expectancy**: average age a person can expect to live
How do you get a STABLE Population?
3 Factors Influence Population

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What affects these/the why?
Quick Question...

Is the population of the world growing or shrinking?

Please visit...
http://www.worldometers.info/world-population/
World Population Growth

What happened here?

100 years

300AD 1000AD 2000AD

= today

= world population
The **Industrial Revolution** is the name given the movement in which machines changed people's way of life as well as their methods of manufacture. About the time of the American Revolution, the people of England began to use machines to make cloth and steam engines to run the machines.

Why did world populations spike up?

http://www.history.com/topics/industrial-revolution/videos/the-industrial-revolution
Group Question Set #1

“5 Q’s about World Population”

http://www.worldometers.info/world-population/
Group Question Set #1

#1 – What is the approximate World Population today?

#2 – What year is it projected that the World Population will exceed 10 billion?

#3 – What was the approximate World Population the year you were born?

#4 – What is the 3rd largest country by population in the world?

#5 – Throughout history how many people have lived on earth?
Why are population pyramids useful? How do population pyramid trends affect a country’s future?

**Population pyramid**: a graph that shows the makeup of a country’s population by gender and age groups.

These diagrams are called **population pyramids**. They show the makeup of a country’s population by sex and age groups. Geographers use such diagrams to study population trends in a country. Notice how each pyramid has a different shape. Keep these pyramids in mind as you try to answer the Essential Question.

- **Rapid growth**
- **Slow growth**
- **Negative growth**
• What do the axis’ represent?
• How many years does each cohort/age band represent on this graph?
• Which cohort has the largest percent of the population in this country? Predict why.
• Where do you fall on this graph?
Intro to Population Pyramids

https://www.youtube.com/watch?v=RLmKfXwWQtE
India—a growing population

United States—a stable/slow growth population

*What shape describes each pyramid?

*Where are total fertility rate, replacement rate, and life expectancy reflected on the pyramid?
Germany's population by age and sex, 1996. Source: Population reference bureau
Shrinking Populations of Europe Video

https://www.youtube.com/watch?v=qn9DDsxfpCA&index=1&list=PLvE3wdHK8_0MHMwQ-3P13KLbEBKFQ8eHU
Group Question Set #2

“World vs. Europe”

http://www.census.gov/popcloc/k/
in the United States (Country)
1) How often is a baby born?
2) US Gains a person every ______ seconds
3) What region of the US is the most populated?

in Europe (Continent)
1) Can you find any counties with positive growth (List)
2) Name the 3 Largest Countries of Europe (Population)
3) In regards to economics ($) who is the most Important country in Europe for the USA?
HANDS ON: Using Population Pyramids

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Please complete “Population Pyramid” section of worksheet with group members

http://populationpyramid.net/
Model is simplified to make predictions about population that is...

A. Growing    B. Stable/Slow    C. Shrinking/Negative
Dilemma’s in Europe
Complete your assigned W.S. using the textbook pages

1. Dilemma One: Italy Shrinking Population p. 229-230
3. Dilemma Three: Germany Declining Workforce p.233-234