

# DEMOGRAPHY & Europe

*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*

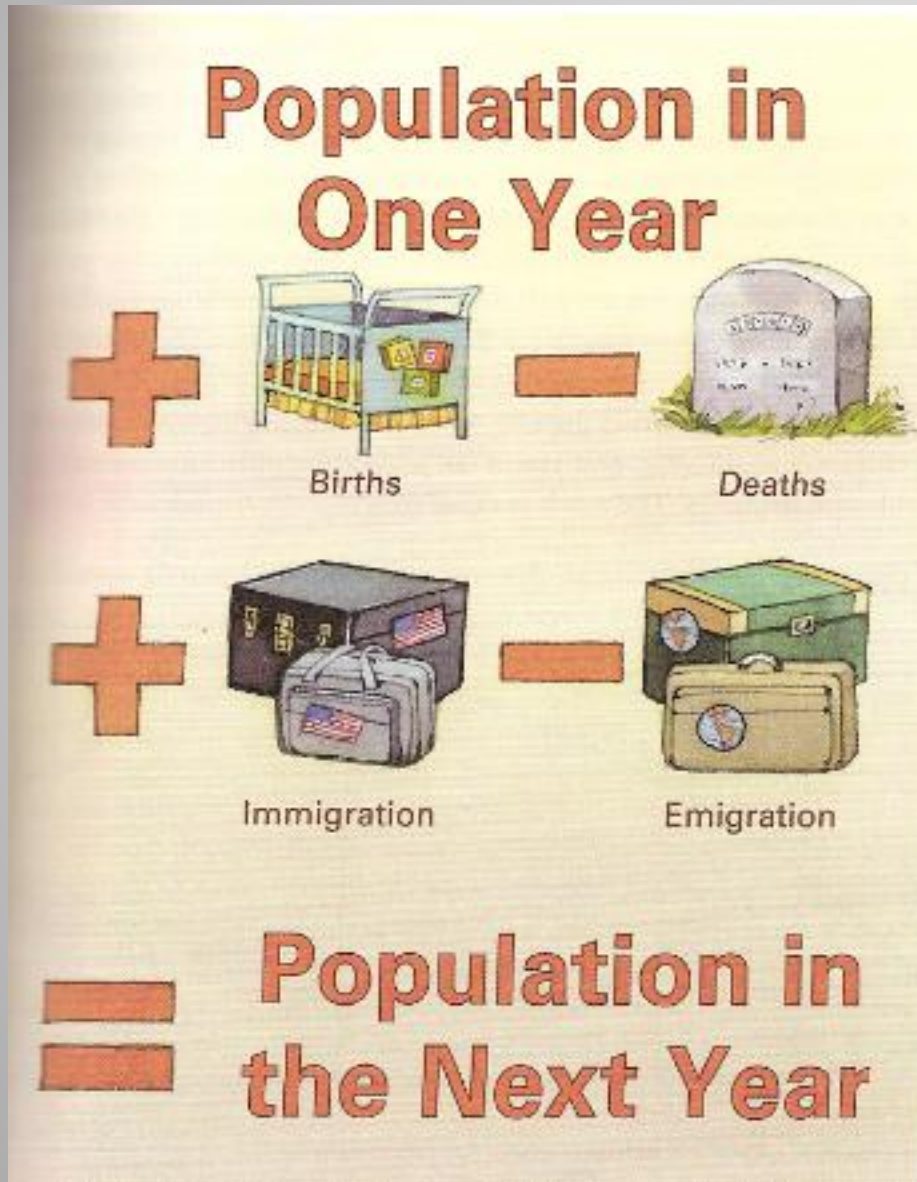
## Essential Vocab:

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



*\*All Above terms can be found in text*

# the Population Equation



**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 1000 people in a population

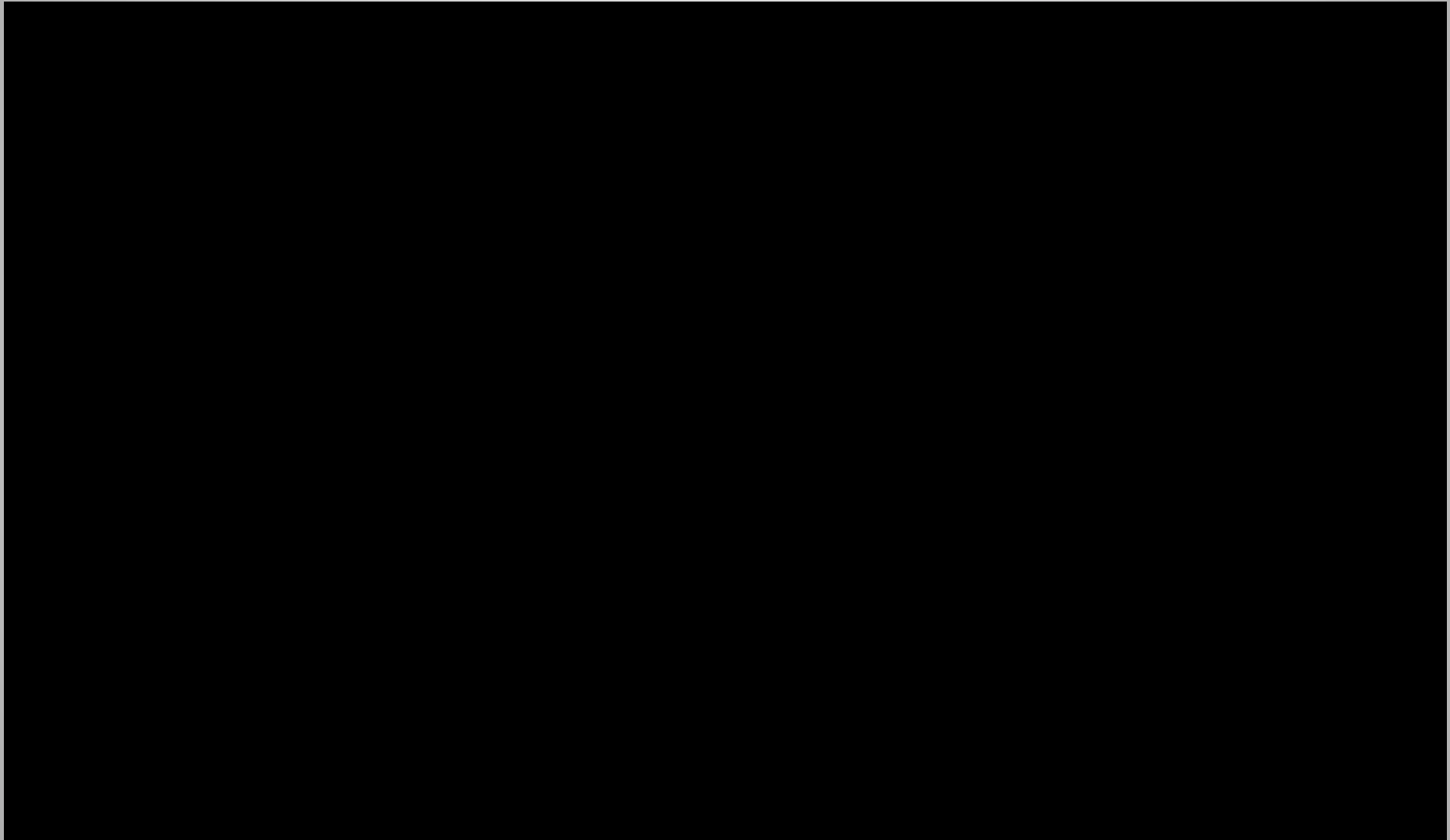
**Immigration:** movement of people into a country

**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?



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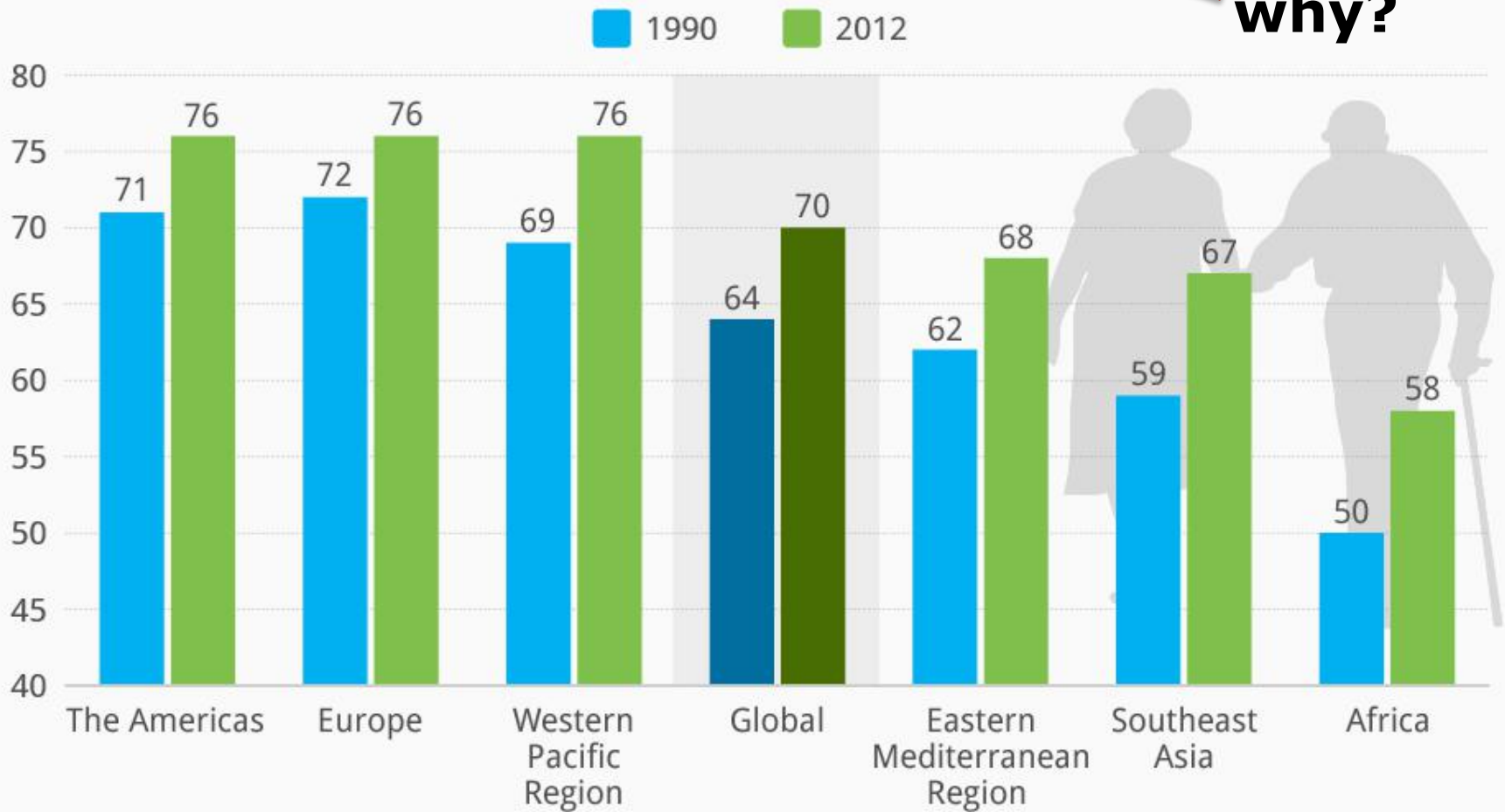


**What affects these/the why?**



# Life Expectancy Rises as Regional Differences Remain

Life expectancy at birth for both sexes, by region (in years)



Source: World Health Organization

# Quick Question...

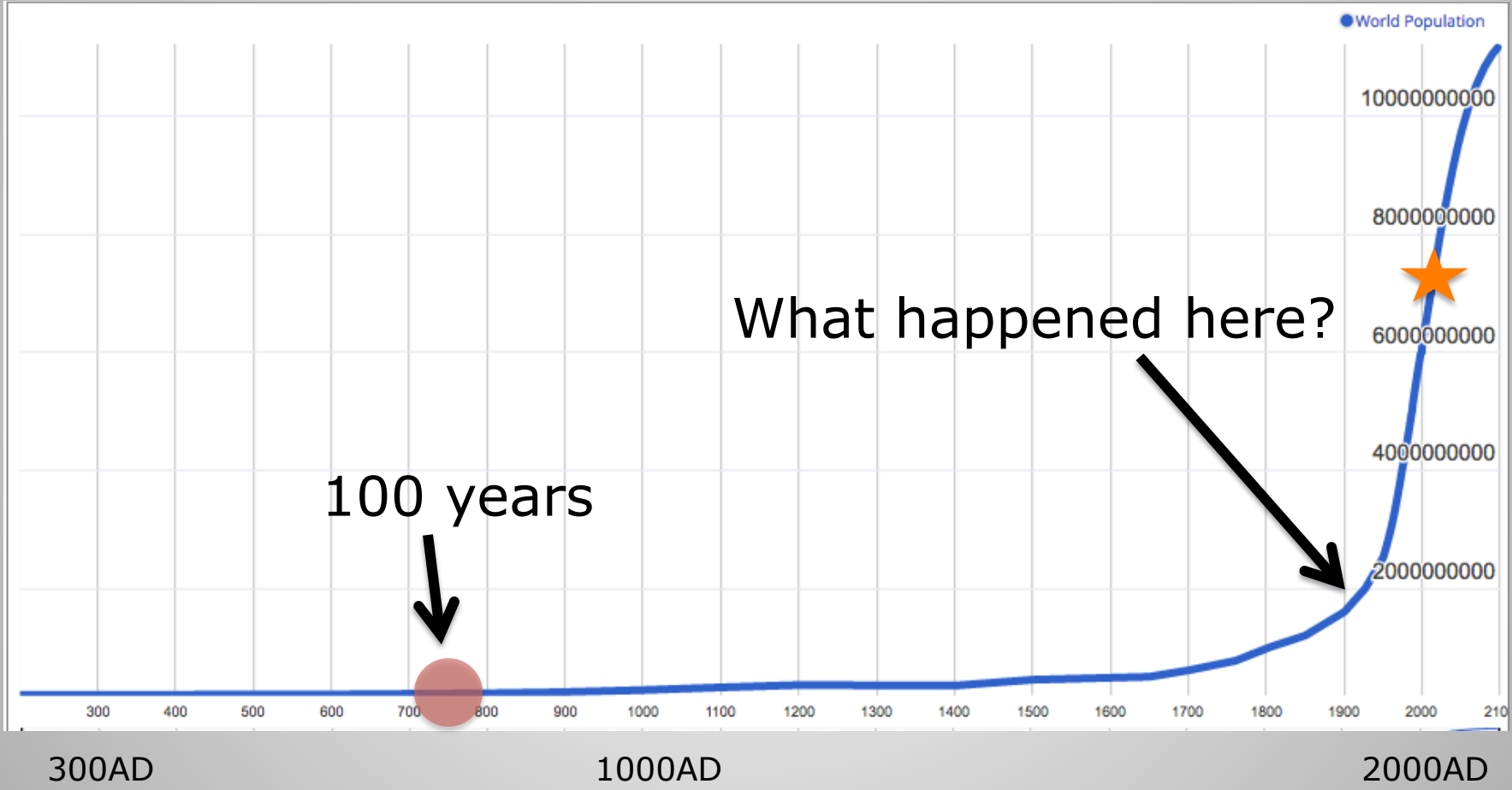
Is the population of the world growing or shrinking?

*please visit...*

[http://www.worldometers.info/  
world-population/](http://www.worldometers.info/world-population/)



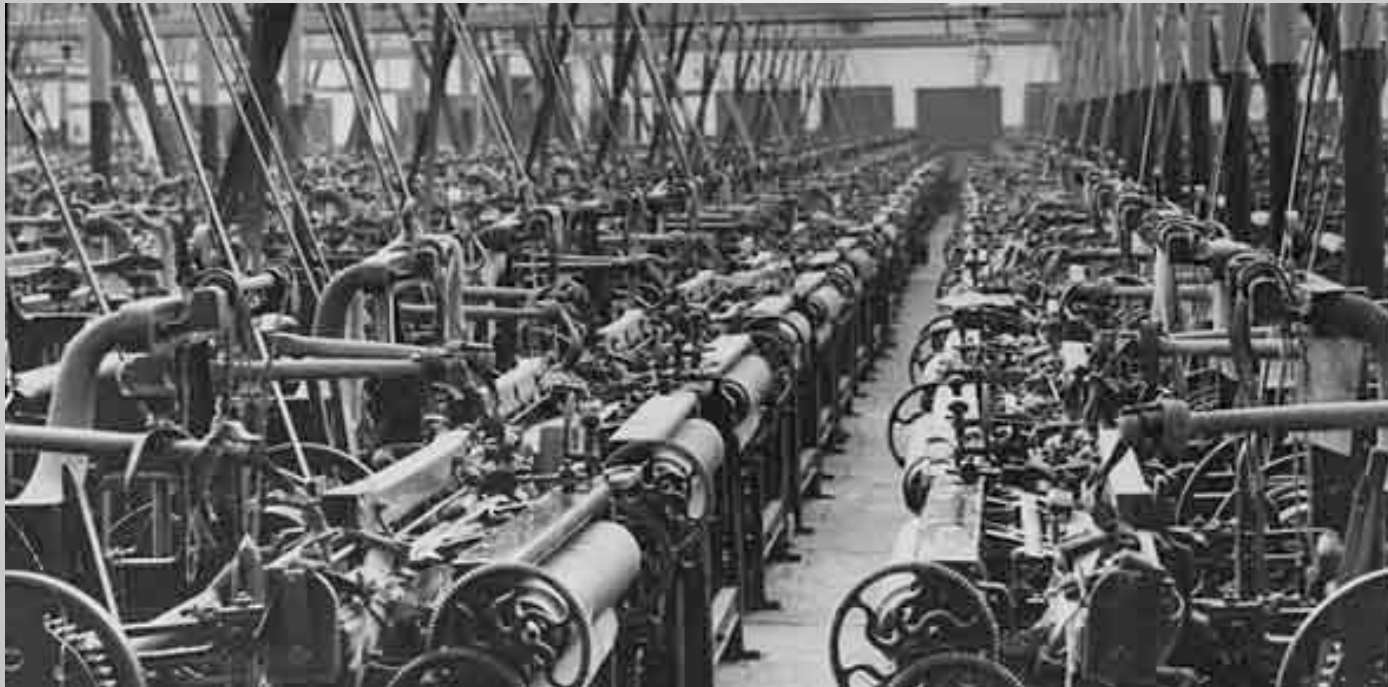
# World Population Growth



★ = 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?**

# 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 3<sup>rd</sup> 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?

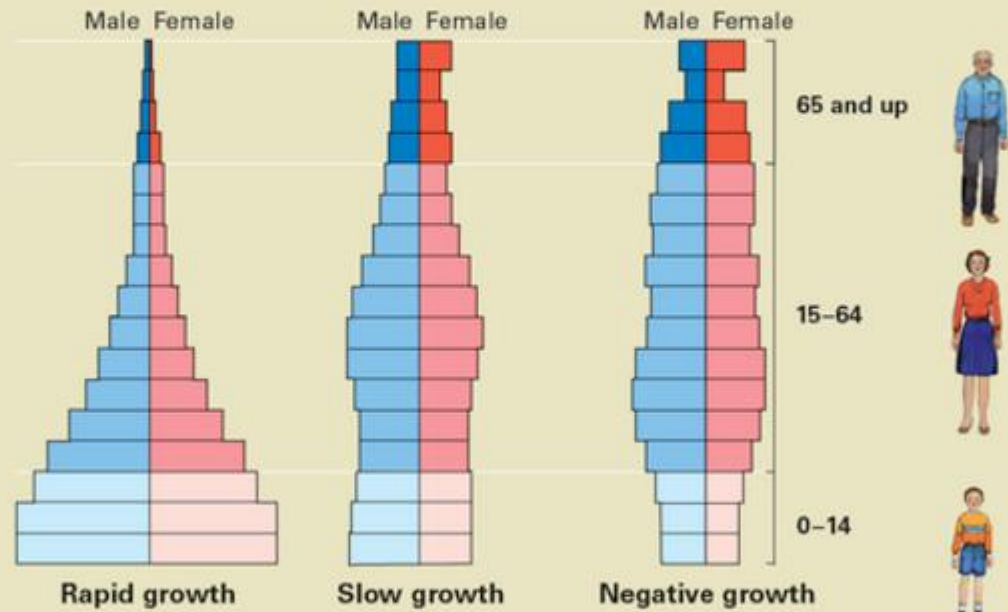
Population pyramid: a graph that shows the makeup of a country's population by gender and age groups

## Essential Question

How do population trends affect a country's future?

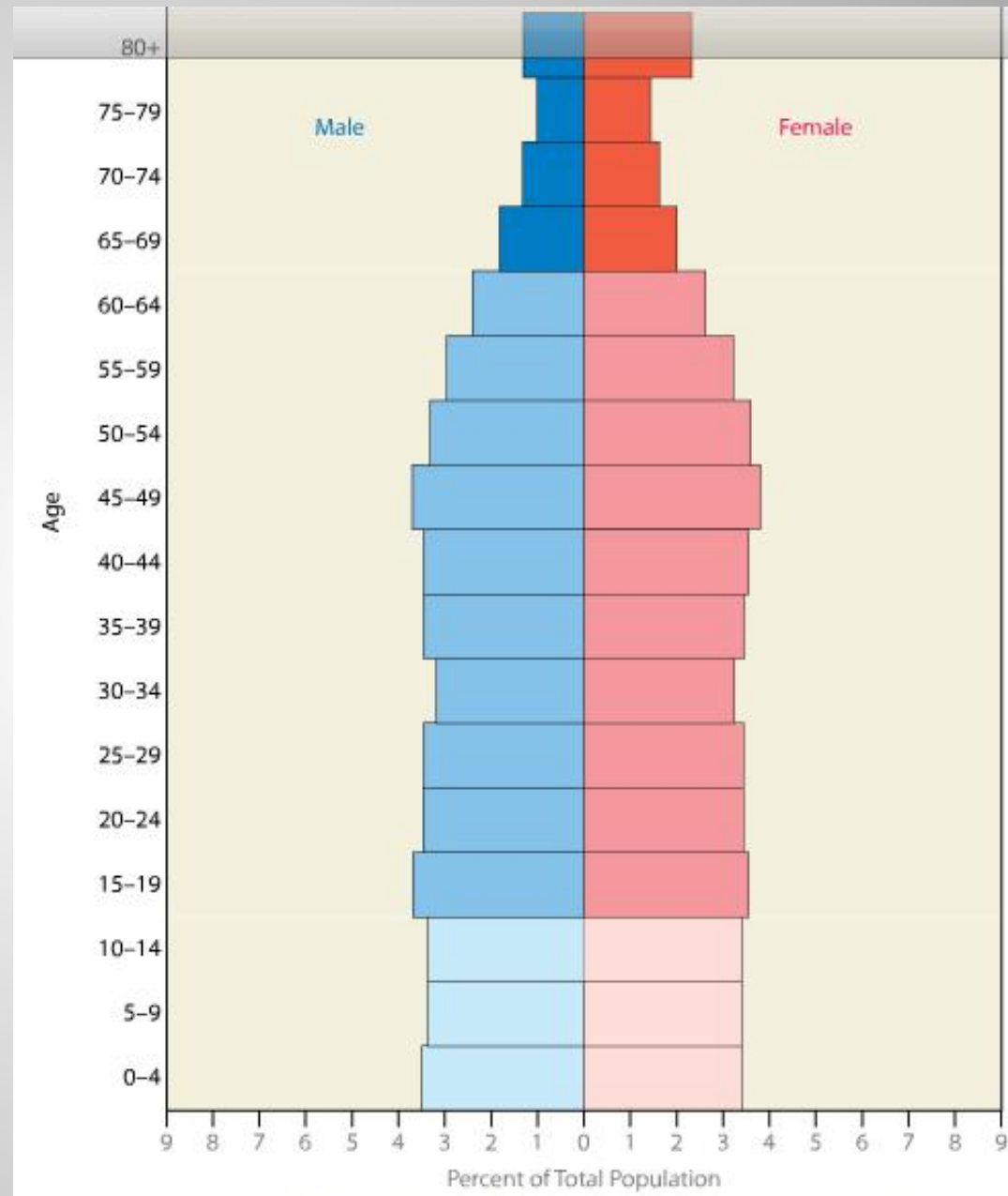
These diagrams are called **population pyramids**. They show the makeup of a country's population by sex and age groups. Geographers use such diagrams to study population trends in a country. Notice how each pyramid has a different shape. Keep these pyramids in mind as you try to answer the Essential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

## Graphic Organizer



# Population Pyramid Basics

- 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?



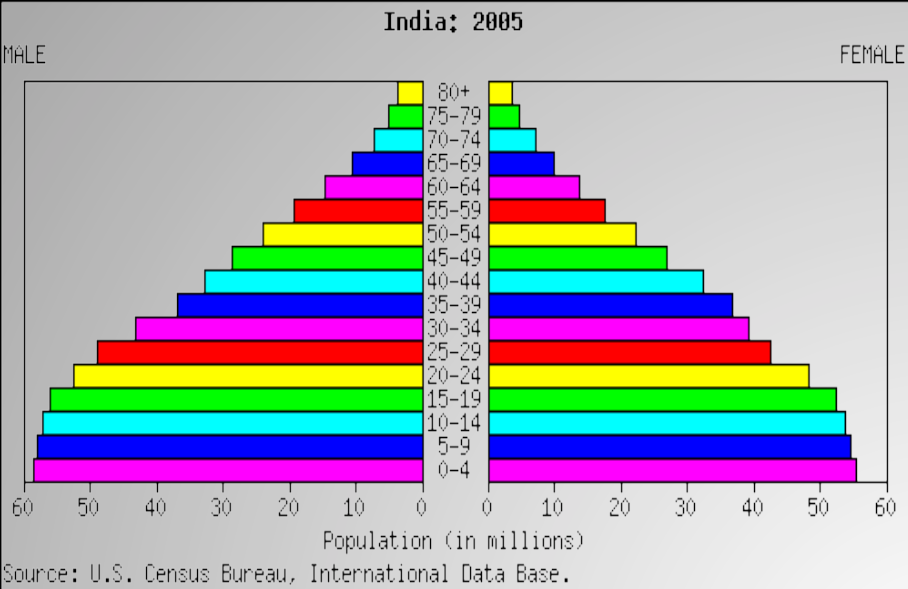


# Intro to Population Pyramids

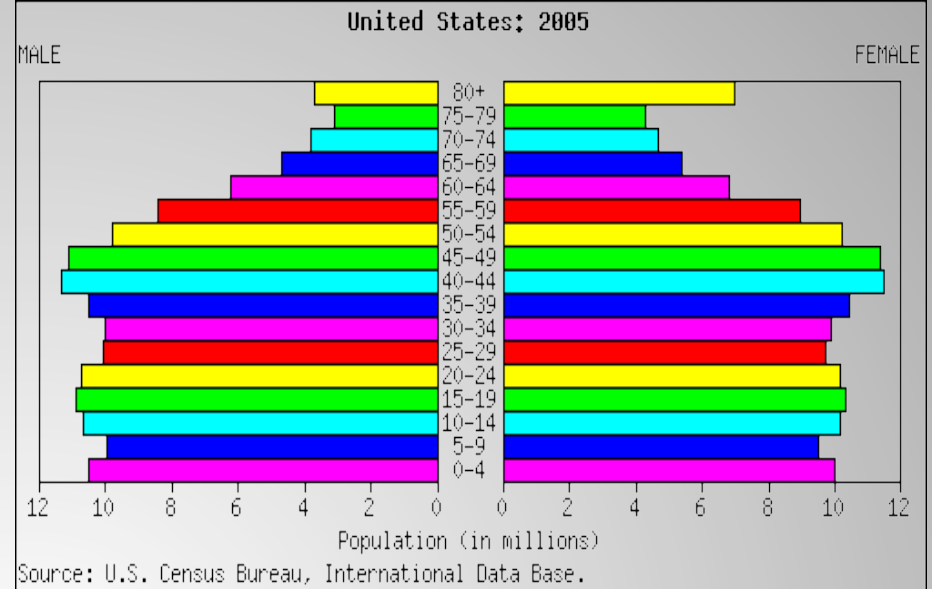
A photograph of a large audience at a TED event. The audience is seated in a dark theater, illuminated by blue stage lights. A speaker is visible on the stage to the right. The TED logo is prominently displayed in the center of the image, with the text "Ideas worth spreading" to its right.

**TED** Ideas worth spreading

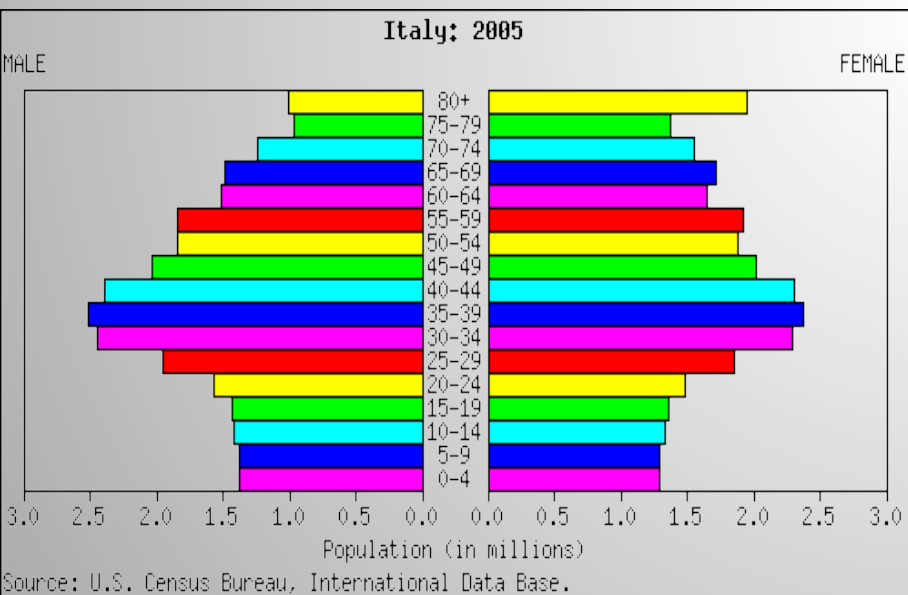
<https://www.youtube.com/watch?v=RLmKfXwWQtE>



India-a growing population



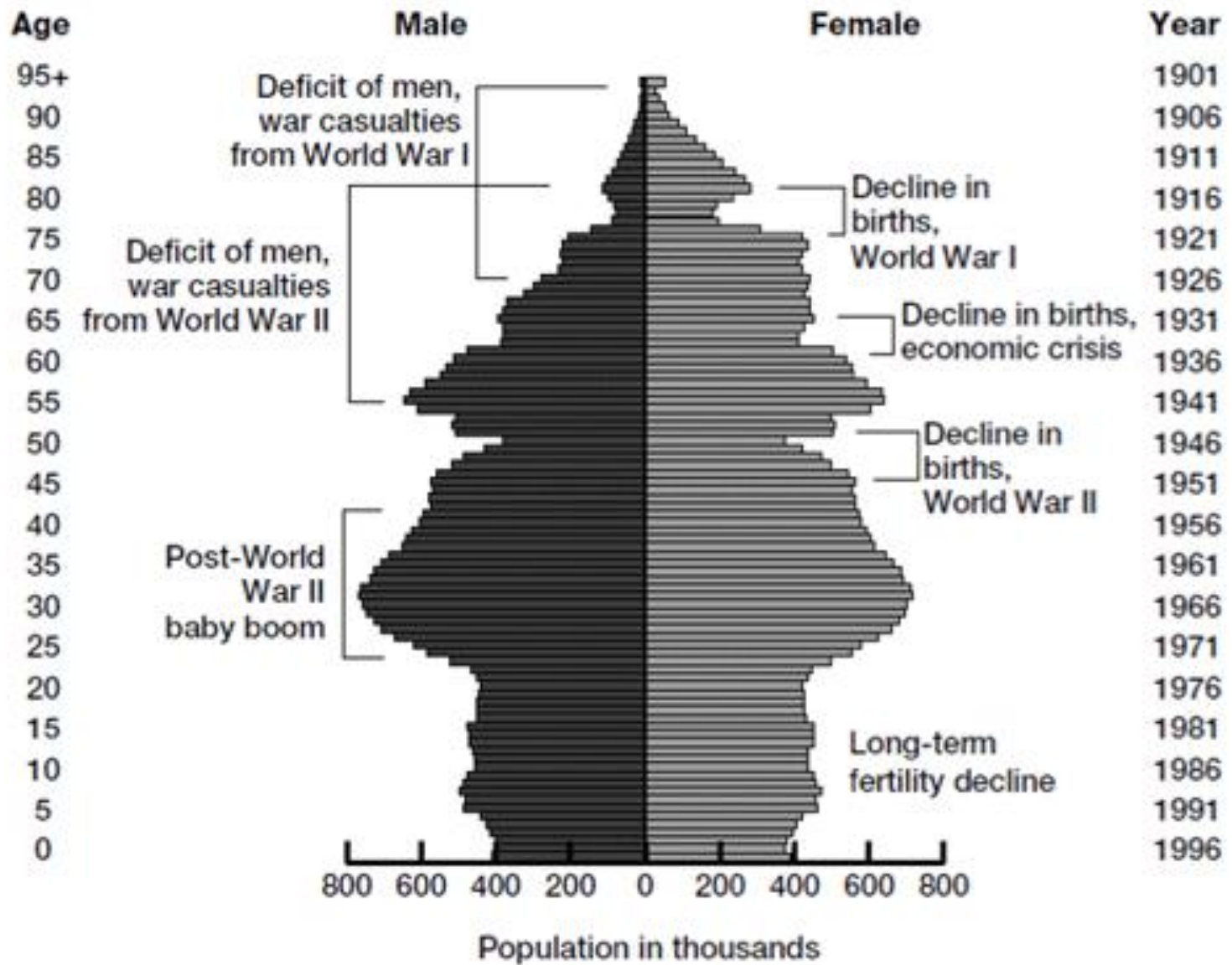
United States-a stable/slow growth population



Italy-a declining/negative 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](https://www.youtube.com/watch?v=qn9DDsxfpCA&index=1&list=PLvE3wdHK8_0MHMwQ-3P13KLbEBKFQ8eHU)

# Group Question Set #2

"World vs. Europe"

<http://www.census.gov/popclock/>

<http://www.census.gov/popclock/>

Please answer Q's using above website...

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

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

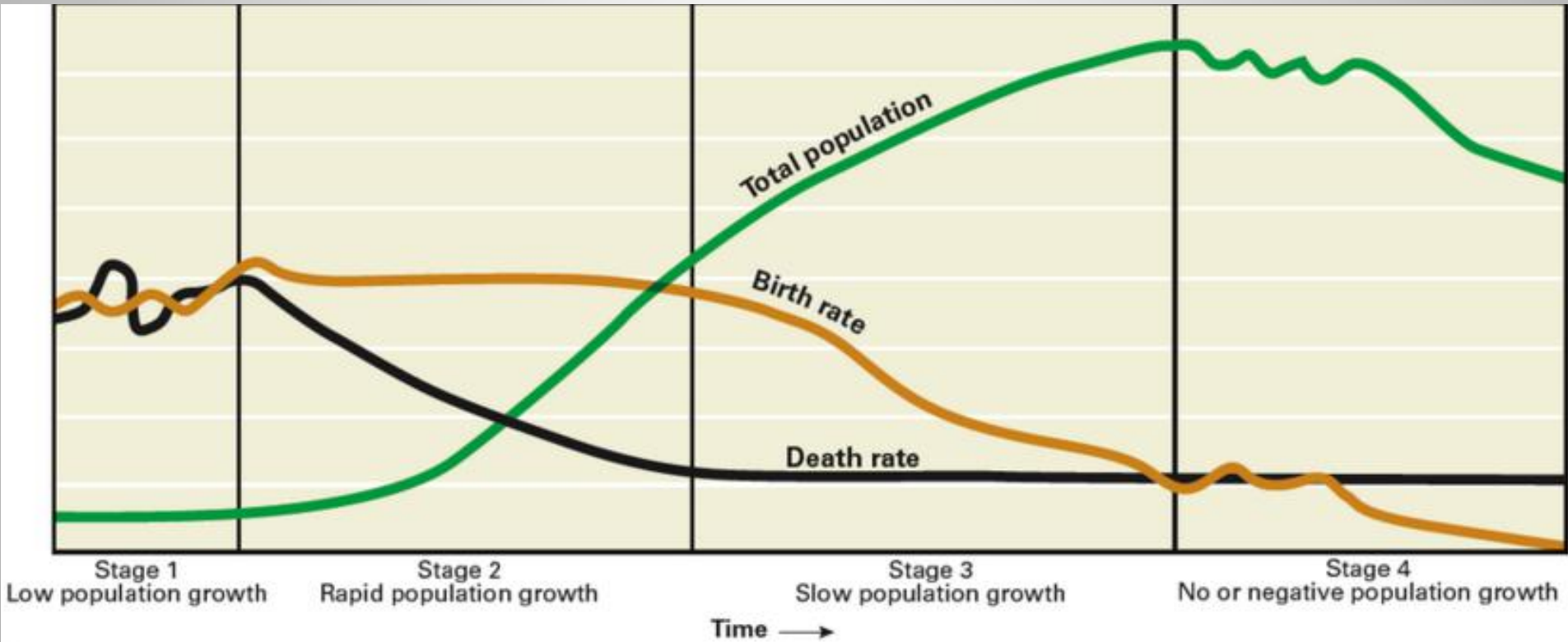
Please complete “Population Pyramid” section of worksheet with group members

<http://populationpyramid.net/>

# Demographic Transition Model p.228

*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
2. Dilemma Two: Spain Aging Population p.  
231-232
3. Dilemma Three: Germany Declining  
Workforce p.233-234