AP Human Geography: Unit 2: Population and Migration

2019-2020

THE CULTURAL LANDSCAPE, RUBENSTEIN, 11TH ED.
Part 1: Population
Agenda:
1) Population Party
2) Population Guided Notes & Lecture
Bellwork

1) Grab an overview! I.e... Vocab ID’s
2) Make a cover page for
   Unit 2 Population & Migration!
3) In what kind of environments do people want to live?
   Come up with 3 examples!
Agenda:
Population Party
Notes: Population Distribution
4 Level Map Analysis
Objective:

You will be able to analyze a map of population density in writing.
Pyramids around the world

TUBI “Totally useless bit of info”
Ch. 2 Population
I. Population Distribution
Population Concentrations

**Demography**: the study of population

**Ecumene**: the portion of the Earth’s surface where people can live
Population Clusters

- East Asia
- South Asia
- Europe
- Southeast Asia
B. Sparsely Populated

- Aka where people don’t live
- **Nonecumene**: the uninhabited parts of the planet, where people can’t easily survive
Deserts/Tundra
Swamps, River deltas, everglades
Arctic and Antartica
Tops of mountains, high plateaus
3. Natural Hazards

These show up in both Nonecumene AND ecumene

- Hurricanes, Typhoons, Flooding
- Desertification, Earthquakes, Volcanoes
- Avalanches, Mudslides
Discuss

What are some ways that humans change the environment so that we can turn nonecumene into ecumene?
Summary

Define ecumene and nonecumene.
Describe relationship between ecumene and population.
4 Level Map Analysis  —  p 48 & p 50 Handout

1. **What do you see?**
   - Do you comprehend the map?

2. **Where do you see things?**
   - (patterns, unique things)

3. **Why there?**

4. **So what?**
   - Connect this to what we know about geography. Summarize what the map is saying. Why is this map important?
Day 2
Bellwork

What country do you think has the highest birthrate? Why?
Agenda:

Notes: Population Growth
Objective:

You will be able to describe how geographers analyze population change in writing.
TUBI:

Pangea!
PERMIAN
225 million years ago

TRIASSIC
200 million years ago

JURASSIC
135 million years ago

CRETACEOUS
65 million years ago

PRESENT DAY
Let’s Predict the Future
NO NAMES!!!!!

Write down:
◦ ON ONE HALF: The age and sex of every person living in your house
◦ ON THE HALF: How many kids you plan on having eventually
I. Population Growth
Video: How did we get so big so fast?
Demographic Vocab

Crude Birth Rate (CBR): # of births per 1,000 ppl

- Influenced by age, development, culture, laws
Demographic Vocab

Crude Death Rate (CDR): How many people die per 1,000 people

- **Infant mortality rate**: infants 1 year and younger die per 1,000 live births
Natural Increase Rate

- Percentage by which population grows in a year
- Current NIR on Earth: 1.2
- NATURAL = birth not migration
7.3 Billion people on Earth

**Doubling time**: how long it takes to double the population
Fertility

Total Fertility Rate (TFR): Average # of babies a fertile woman will have

- More accurate than CBR
- CBR = population right now
- TFR = population in future
Central Africa
West Africa
East Africa
West Asia
North Africa
South Central Asia
South Africa
Central America
Southeast Asia
Caribbean
South America
Oceania
North America
Northern Europe
East Asia
Western Europe
Eastern Europe
Southern Europe

TFR
Fertility

Replacement Level Fertility: # of babies born ensure the same # of women will survive to have babies
  ◦ So no population increase! Your population stays the same
  ◦ You are replacing yourself
Total Fertility Rates, by State — United States, 2003
Discuss

How do you think the development of a country affects the CBR & CDR?
Population Density

**Arithmetic Density**: Crude density, population ÷ unit of land area

**Physiological Density**: # of ppl a unit of arable land can support

**Agricultural Density**: # of farmers to unit of arable land
DRAW THE FOLLOWING SLIDE
Country of BOX - Population: 6 Area: 6 sq miles

<table>
<thead>
<tr>
<th>Arithmetic Density</th>
<th>Physiological Density</th>
<th>Agricultural Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 person per 1 Mile</td>
<td>3 people per 1 Mile of ARABLE LAND</td>
<td>1 FARMER per 1 Mile of ARABLE LAND</td>
</tr>
</tbody>
</table>
Summary:

Explain the ways human geographers analyze population change.

Describe the relationship between population growth, population density and development.
New Day
Bellwork

Why would a family choose to have 1 or 0 kids?

Complete sentences!
Agenda:

Notes: Population Structure
Population Pyramid Activity
Objective:
You will be able to create a population pyramid.
TUBI:

Where was the first dinosaur skeleton found?

NEW JERSERY!
Class of 2023 TFR

2.1
So if we leave the future up to you guys, our population will increase.
Population Structure

![Population Structure Diagram]

The diagram illustrates the population structure by age for males and females, showing the distribution of population in millions across different age groups from 0-4 to 80+ years.
Vocab

Population Pyramid: A bar graph to show population structure by comparing pop. age & sex

- **Cohort**: population group unified by the same time constraints
- **CLASS OF 2023**
Video: POPULATION PYRAMID
Dependency Ratio: # of people who are too young/old to work compared to people who can work

Life Expectancy: the average length of life
Figure 1  Progress of Baby Boom and Baby Boom Echo Cohorts Through U.S. Population Age-Sex Pyramid: 1960-2020

Age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>1960</th>
<th>1980</th>
<th>2000</th>
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<td>85+</td>
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<td>10-14</td>
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<td>5-9</td>
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<td>0-4</td>
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</tbody>
</table>

- Baby Boom Cohort
- Baby Boom "Echo"
3 Types of Pyramid

Rapid Growth
Democratic Republic of Congo

Slow Growth
United States

Negative Growth
Germany

Age
80+
75-79
70-74
65-69
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
10-14
5-9
0-4

Year of birth
Before 1920
1920-24
1925-29
1930-34
1935-39
1940-44
1945-49
1950-54
1955-59
1960-64
1965-69
1970-74
1975-79
1980-84
1985-89
1990-94
1995-99
CLASS OF 2023
From pyramid to kite

Japan’s population by age group, m

1950

2005

2055 forecast

Source: National Institute of Population and Social Security Research
Discuss

Why would a population pyramid be useful for human geographers?
Sex ratio: # of males per 100 females in a population
4. Baby Boom: a sudden increase in birth rates for a generation
Malthus & Overpopulation

Thomas Malthus
◦ British, lived in 19th century
◦ SAID: Earth’s population is growing faster than its food supply
◦ Overpopulation: there are more people than the environment can support
Malthus’s Theory
Neo Malthusians

Some people still believe this!

1968: Paul Ehrlich
Critics of Malthus

Resource Depletion
◦ Our resources are expanding

Population Growth
◦ More population isn’t necessarily bad
◦ More people = more innovations
Discuss
What do you think?
Do you agree with Malthus?
Is our growing population ultimately going to doom us or save us?
Summary

Define population pyramid.
Discuss the different challenges a country might face based on the shape of their population pyramid.
Population Pyramid Activity

Tunisia

Male

Female

1988
2014
2044
New Day
Bellwork:
How old are your grandparents?
What age do you want to live to? Why?
Agenda:

Notes: Demographic Transition Model
Objective

You will be able to describe the Demographic Transition Model in writing.
TUBI:

Communist countries today!
China, Cuba, Laos, North Korea & Vietnam
Demographic Transition Model

- Stage 1: High stationary
- Stage 2: Early expanding
- Stage 3: Late expanding
- Stage 4: Low stationary
- Stage 5: Declining?

Graph showing birth and death rates, total population, and natural increase and decrease.
Demographic Transition Model*: the way a country’s demographics change as the country develops in 4 stages

*DTM is slightly different for APES
Draw it in notes:

![Graph showing Birth Rate, Death Rate, and Total Population over time.](image)
Stage 1: LOW GROWTH

VERY high birth and death rates with almost no long term natural increase

Early humans: hunting/gathering

This doesn’t really exist now
Stage 2: HIGH GROWTH
Rapid decline in death + high birth rates = high natural increase
Ex: Industrial Revolution
Stage 3: Decreasing Growth

Birth rates rapidly decline, death rates decline, and natural increase begin to balance.
Stage 4: LOW GROWTH

Very low birth and death rates = no natural increase and maybe even a decrease

Zero Population Growth (ZPG): when CBR = CDR
5. HYPOTHETICAL STAGE 5

Population starts to decline, CDR > CBR, Negative NIR

**Pro-Natalist Policies**: Laws and programs to encourage reproduction (ex. Denmark)

- **Anti-Natalist Policies**: laws to discourage reproduction (China’s One Child Policy)
Video: Do it For Denmark

DO IT FOR DENMARK
Save Denmark with a romantic city holiday
Discuss:

Come up with an example country for:

◦ Stage 2:
◦ Stage 3:
◦ Stage 4:
◦ Stage 5:
What stage is it in?
Cameroon

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Mauritius

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United Kingdom

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<td>2005</td>
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Video: Hans Rosling
What does this mean for the old people?
Discuss
What is the socio-economic status of the world’s aged population now?
What will it be in the future?
Video: BBC
Summary

Discuss the Demographic Transition Model and its significance.

Describe a country in stage 2 verses a country in stage 4. Use real examples.
New Day
Bellwork:

When was the last time you got sick? What did you have?

What are some ways you can prevent yourself from becoming sick this semester?
Agenda:

Notes: Health
Objective:

You will be able to discuss the relationship between demographics, development and health.
Octopii move with elegance but no rhythm, unlike other animals.
Population and Health
Epidemiologic Transition: The way health evolves as demographics and development change
• lines up with the DTM
Stage 1: PESTILENCE & FAMINE

Infectious and parasitic diseases (+ animal/human attacks and accidents)

HIGH CDR

Example: BUBONIC PLAGUE
Stage 2: RECEDING PANDEMICS

**Pandemic**: disease that happens all over the world

Rapidly declining CDR

EX: Cholera!

- Dr. John Snow figured out the problem and fixed it!
Stage 3: DEGENERATIVE DISEASES

More human created diseases and disorders, less infectious ones

◦ Like, chronic problems b/c of aging OR CANCER OR HEART ATTACKS

Moderately declining CDR
Stage 4: DELAYED DEGENERATIVE

We are delaying the things that could kill us with medicine

Ex: Heart surgery, chemotherapy
Infectious Diseases

Hypothetical Stage 5: Infectious Diseases
Return
◦ EX: Ebola, Malaria, Polio, Tuberculosis, New Infectious Diseases!
◦ HIV/AIDS!!!
Discuss:

What do you know about HIV/AIDS?
Video: HIV/AIDS

WHY IT'S SO HARD TO CURE HIV/AIDS
HIV/AIDS

35 million people live with HIV/AIDS - 3.2 million are children

Spreads through body fluids (blood, breast milk, or sexual contact)

The virus breaks down your immune system
33.2 million people were living with HIV/AIDS in 2007.

- Sub-Saharan Africa: 22.5m
- South & South-East Asia: 4m
- East Africa: 760,000
- Middle East & North Africa: 380,000
- Eastern Europe & Central Asia: 1.6m
- Western & Central Europe: 1.6m
- Caribbean: 230,000
- Latin America: 1.3m
- Oceania: 75,000

Living with HIV/AIDS
Number of people with infection 2007
- percentage infected during 2007

Legend:
- Red: percentage infected during 2007
C. Epidemic diseases become endemic

With more food, sanitation and hygiene

**Epidemic**: Widespread disease

**Endemic**: disease within a community
Discuss

How can habitat, population and behavior affect human health?
D. Health Care

Habitat, population and behavior affect health

- Habitat: Air or water quality, exposure to viruses, quality of home
- Population: age, sex, genetics
- Behavior: cultural practices, diet, smoking
More developed countries have better health care

- Leads to lower CDR, IMR
- Longer life expectancy

Immunizations save lives!!!
Summary

Explain the difference between an endemic, epidemic, and pandemic disease.
Discuss the relationship between demographics, development and health.
Use at least 2 vocab words.
New Day
Bellwork:
How does how you live influence your health positively? Negatively?
Agenda

Quiz
TUBI:

Who lives in Australia?
QUIZ

Write clearly.
New Day
Bellwork

What are challenges of an aging population?
Agenda:
Practice FRQ
Objective:
You will be able to identify and explain the consequences of an aging population.
When we shiver, our bodies are doing the opposite of sweating. Sweating cools the body by putting a layer of liquid on the skin. Shivering tightens the skin and shakes the muscles, a process that conserves and generates heat.
Get out your FRQ cheat sheet and a piece of paper
Mark up the prompt and write an outline – 10 minutes!
Use your notes and the people around you
WRITE THE FRQ

20 minutes
Write in pen
You can still use your notes!
Staple prompt to back and turn in when done.
SAMPLE FRQ RESPONSES

What did these students do well?

Is this what you expected?
SCORE THE FRQ

USE A DIFFERENT COLORED PEN/PENCIL/HIGHLIGHTER

Mark where they get the point

Put the score at the top of the page

Add a compliment and a constructive criticism.