Day 4: Essential Question

 How do countries move from developing to developed?

> https://www.youtube.com/watch?v=tr_B13q7 Ycw

	MEDC	LEDC		
Birth Rate	Low 10-16 babies born per 1000 people	High 20-45 people born per 1000 people		
Death Rate	Low due to good health care	High due to poor health care and widespread disease		
Natural Increase	Low (below 1%)	High 2-3.5% or more		
Infant Mortality	Very few children die before the age of 5 in MEDCs	A high proportion of children die before the age of 5 in LEDCs due to poor health care. About 35,000 babies die every day in LEDCs due to poor health care and lack of food		
People per doctor	A majority of people in MEDCs have access to a doctor	Few people in LEDCs have access to a doctor unless they are wealthy		
Life Expectancy	Life expectancy is high in MEDCs due to good medical care and quality of life	Life expectancy is low in LEDCs due to poor medical care and quality of life		
Housing	Housing in MEDCs is adequate for a majority of people. Most people have access to clean running water and electricity	Housing in LEDCs is often inadequate with no access to clean running water or electricity. Shanty towns are large areas which develop in LEDCs and consist of poorly built properties		
Literacy	Literacy rates in MEDCs are high because a majority of children have access to a free education	Literacy rates in LEDCs are low because people cannot afford to send their children to school and some areas may not even have schools due to a lack of teachers		
GNP	The rich MEDCs (with a GNP over US\$10000) are in the continents of North America, Europe and Australasia. Japan in Asia is also in this group	The poorest LEDCs (with GNPs under US\$1250) are mainly in the continents of Africa and Asia. They lie on the southern side of the North-South Line		

Learning Targets. I can...

- SEV5 LR3: Compare/contrast developing and developed countries
- SEV5 LR6: Predict where a country is in their demographic transition based on death and birth rates.

Review of factors that drive human population.

Factors that drive population growth include:

Population size – where is the population starting?

- Birth and death rates
- Fertility
- Mortality rates
- Life expectancy
- Migration

Demographic Transition

- Model of how **economic** development alters population dynamics.
- critical shift in population growth and age structures that distinguish developed from developing nations
- Moving from a high birth and death rate to a low birth and death rate
- Responsible for the *gradual* reduction in pop. growth rates during the late-20th century

Demographic Transition

- Consequences?
 - Improved standard of living
 - Increased confidence children will survive
 - Improved social status of women
 - Increase availability and use of birth control

The demographic transition's four stages



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Preindustrial

- little population growth (balanced) because harsh social conditions lead to both high death and high birth rates.
- Food shortages, malnutrition, lack of sanitation and medicine keep death rates high.
- Birth rates tend to match death rates to maintain the population.

Transitional Stage

- industrialization begins/health care improves leading to lowered death rates. Birth rates remain high.
- Most of the developing world
- Early and Late Stages within

Transitional Stage Cont.

Early Transitional

- Hygiene, nutrition, and education improve.
- Death rates drop dramatically.
- Birth rates remain high initially.
- Population increases very quickly.

Late Transitional

- Birth rates begin to fall.
- Population may have increased from 2x to 4x by this point.

Industrial

- birth rate drops due to modernization (and its accompanying social changes).
- Many developed countries and a few developing countries here.
- Transition is complete.
- Both death and birth rates are low.
- Population is in equilibrium.

Post-Industrial

- further reductions in birth rates, approaching or even below zero population growth.
- approximately 13% of the world population (mostly European countries) is in this stage.
- A complete DT exhibits both declining birth and death rates

Historical differences between 19th century Europe and Third World countries experiencing demographic transitions today:

1) population growth rates in many countries are much more rapid now that they were in 19th century Europe;

2) recent mortality transitions have been much faster than in Europe;

3) fertility levels in many countries are or were even higher than in pretransition Europe

4) less migration is possible now;

5) the rate of change in economic development and education is more rapid;

6) there is a lot more government involvement now, demographic change is planned and sometimes forced by the state;

7) contemporary demographic transitions are occurring in a context of economic and social globalization.

Other problems with the Demographic Transition Model:

A. Times of declines in mortality and fertility vary and cannot be predicted

B. Model ignores migration

C. Model assumes simple causal relationship between economic development and demographic change...that relationship isn't clear



QUESTION: Review Describe the relationship between growth rates and

Current world population (ranked)

rank	country	area so km.	population yesterday 2017-01-02	yearly growth	daily increase
World		510,072,000	7,474,539,610	1.112%	226,359
1.	China	9,596,960	1,385,318,488	0.427%	16,190
2.	India	3,287,590	1,334,764,751	1.184%	43,044
3.	United States of America	9,826,630	325,312,532	0.727%	6,453
4.	Indonesia	1,919,440	262,065,685	1.124%	8,025
	nonulation				

population

- c) Falling growth rates means we no longer have a population problem
- d) Falling growth rates does not mean a smaller population, but that rates of increase are slowing

Day 5: Essential Questions

• How do we minimize population growth?

Learning Targets. I can...

- SEV5 LK7: Explain methods for limiting population growth
- SEV5 LK8: Explain population density and its impact on organisms

Review of Population

Human population has seen exponential growth

– What does that look like?



- There are several factors that determine population size.
 - Birth Rate
 - Death Rate
 - Immigration & Emigration

Growth rate = (birth + immigration) – (death + emigration)

Human Population History



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Review of Population

 Population density - The number of individuals in the population per unit area (or unit volume if talking fish).

– Which state has the largest population density?

United States: 2010



the number of individuals per unit of **PopulationDensity** area

Master Challenge

• Do you think the government should be able to dictate how many children you have?

Factors for Babies (pro-natalist)

- Why would people want children?
- Help provide for family
- Easy for children to die*
- Social stigma for not having children

Factors Against Babies (anti-natalist)

- Why would people not want children?
- Choose career
- Cost too much
- Smaller family size



Managing Population

- Society
 - China 2 child policy to limit growth
 - Germany paid childcare leave
- Improving Womens' roles
- Family Planning

Women's Role

• Women have smaller families when they are sure their child will survive

– How do you think we can do that?

• Estimated that saving 5 million children a year avoids 20 or 30 million extra births

Family Planning

- What does family planning mean?
 - Couples determine the number and spacing of their children
- Birth control is central to helping family planning be successful



Current Family Planning

- Major form of birth control
 - Avoiding sex during fertile periods
 - Mechanical Barriers (condoms)
 - Surgically (vasectomy, tubes tied)
 - Chemicals (the pill)
 - Physical barriers (IUD)
 - Abortion



The future of our population

- Population should become stable between 8 and 10 billion people.
- This won't happen without:
 - Improved status of women
 - Higher values of individual children
 - Knowledge, availability and use of effective birth control
 - Social and political stability