

Unit 5 exam Preview/ Review

<p>Population</p> <ul style="list-style-type: none"> • Population Biology <ul style="list-style-type: none"> ○ Dynamics of Population Growth ○ Factors that Increase or Decrease Populations ○ Factors that Regulate Population Growth ○ Conservation Biology • Human Populations <ul style="list-style-type: none"> ○ Population Growth ○ Limits to Growth: Some Opposing Views ○ Human Demography ○ Population Growth: Opposing Factors ○ Demographic Transition ○ Future of Human Populations • Urbanization and Sustainable Cities <ul style="list-style-type: none"> ○ Urbanization ○ Causes of Urban Growth ○ Current Urban Problems ○ Sustainable Development in the Third World 	<ul style="list-style-type: none"> • Read Chapters 11, 12, and 25. Complete Questions for Review and Questions for Critical Thinking for each chapter. • Review STF
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Key Terms:

Population dynamics	Emigration	Population momentum
Demography	Fertility	[Rule of 70 how to calculate doubling time]
Demographer	Replacement Level	$70/\text{growth rate} =$
Biotic potential	Fertility	Doubling time (of population)
Carrying capacity	Total fertility rate (TFR)	Cultural carrying capacity
Linear growth	Life expectancy	Pension
Logistic growth	Infant mortality rate	Family planning
Density Dependent controls	Child mortality rate	Census
Density Independent controls	Age structure diagram	GDP, GNP per capita
R strategist	Baby boom	I=PAT
K strategist	Echo boom	Affluence
Population Density	Developing country	Prereproductive age
Births (crude birth rate)	Developing country	Reproductive age
Death (crude death rate)	Demographic transition:	Postreproductive age
Net migration	(1)Preindustrial stage,	
Immigration	(2)transitional stage, (3) industrial,	
	(4)postindustrial stage)	

APES students should be able to:

- Explain factors that may potentially limit the carrying capacity of humans on Earth
- Describe factors that drive or inhibit human population growth
- Read and interpret an age structure diagram. Relate to countries and explain examples.
- Describe how demographic transition follows economic development and how it predicts global population patterns
- Explain the interactions of the factors of the impact of human population (I=PAT)
- Describe the goals and challenges of sustainable development

DISCUSSION- no "right answers"

Voluntary population control?

- 1) What are the pros and cons of voluntary sterilization?
- 2) What is the feasibility of limiting family size to one or two children?
- 3) Should the size of a family be determined by its economic status?

Involuntary control of population?

- 4) What do you see as the possible role of compulsory sterilization or abortion for those couples exceeding the mandated allotment of children?
- 5) Is there ever a case in which you can see compulsory sterilization as just? Mental illness? Violent crime?
- 6) Can immigration limitations realistically play a role in population control programs?
- 7) Are you aware of any countries that currently utilize involuntary population control programs? Why do government mandate work in some countries and not in others?
- 8) Do international organizations or other countries have the right to influence population controls in other countries? (Through: propaganda, economic sanctions/incentives, family planning, woman's rights, etc.)

Legislation and Economic Incentives/Ties to population control

- 9) Should population control efforts constitute a major goal for the United States; for countries low on the socioeconomic scale; for the world?
- 10) How will my future changes in our population structure affect the world economy?
- 11) Should the elimination of income tax deductions for dependents be used as a possible incentive for having smaller families?
- 12) Could population control efforts affect our Social Security System?
- 13) How does population affect resources? Sustainable use?
- 14) How does population size affect the economics? Locally/ globally?

The "Big picture"

- 15) What affects human population size?
- 16) How does overpopulation affect the planet/environment?
- 17) What do you think of I=PAT?
- 18) How does the "American Lifestyle" affect the planet?
- 19) What is working against the reduction of the affects of "affluence."
- 20) Do you believe that we have reached our carrying capacity? How do you judge?