**Unit 5: Population**

Population, Resources, and Sustainability

Population size depends on:

Population change = (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) – (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)

When births and immigration are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ than deaths and emigration, the population is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

When deaths and emigration are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ than births and immigration, the population is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Crude birth rate:

Crude death rate:

**Birth Rates and Death Rates**

Every time your heart beats, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ babies are added to the world’s population

More \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are occurring than \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

We share the Earth’s resources with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ MORE people each day.

This is the equivalent to filling a jumbo jet with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ new passengers every \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ minutes.

Annual rate of population change (%) =

The world growth rate is \_\_\_\_\_\_\_% which adds about \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ people per year to the world’s population! This is equivalent to adding a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ each month!

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ together make up \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the world’s population.

The U.S. has the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ largest population, but only \_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the world’s people.

1. Replacement fertility:

Replacement fertility is slightly higher than \_\_\_\_\_\_\_\_\_\_ in developed countries and \_\_\_\_\_\_\_\_\_\_ in most developing countries. Reason?

2. Total fertility rate:

TFRs have \_\_\_\_\_\_\_\_\_\_\_\_ slightly since 1950.

**Fertility Rates**

**Birth Rates**

Birth rates fell sharply because of the demographic transition:

THEN, baby boom period:

And echo boom period:

**What factors affect birth rates?** **What factors affect death rates?**

Importance of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as part of labor force \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ supply and distribution

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Cost of raising \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Improvements in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ technology

Employment opportunities for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Improvements in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and

Infant \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ rate personal \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Average age at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Safe \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ supplies

Availability of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Availability of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Religious beliefs, traditions, and cultural norms

Life expectancy:

In the world’s poorest countries, life expectancy is \_\_\_\_\_\_\_\_\_\_ years or less.

High infant mortality rate = not enough food, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, or high rate of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ diseases.

U.S. has the highest \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ rate of any developed country.

Each year, over \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ teenage girls become pregnant and about \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ have abortions.

Babies born to teenage mothers usually have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ birth weights which causes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mortality.

Age structure:

Age Structure Diagrams plot percentages of males and females in 3 categories:

 1.

 2.

 3.

As the percentage of people over 60 increases, more countries will experience \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. By \_\_\_\_\_\_\_\_\_\_\_\_, 1 billion people will be 60 or older. Rapid population decline can lead to serious \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ problems.

*Example: Older people consume a large part of medical care, Social Security, and other services funded by taxpayers. However, there are less and less taxpayers as the population ages.*

Population is affected when death rates increase:

 Sharp drop in life \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Loss of most \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ young adult workers

 Sharp rise in number of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

We need to:

 1. Reduce the spread of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 2. Provide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and financial \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 3. Send \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ teachers and social workers

Stages of Development of Countries:

 Preindustrial:

 Transitional:

 Industrial:

 Post-industrial:

Cutting global population growth requires:

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ planning

2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ women: women have fewer and healthier \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ when they have

 access to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ jobs AND when they live in societies with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Reducing \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_