

7 Billion and Counting: Lessons for our Planet's Future

Population Connections Workshop Oregon Council for the Social Studies Oct 1, 2011

Gayle Y. Thieman, Ed.D. Portland State University thiemag@pdx.edu

Food for Thought Activity Vocabulary and Statistics

POPULATION DEMOGRAPHIC

- A. Population: number of people living in a region (2009: world pop= 6.8 billion)
- B. Birth Rate: number of births per 1000 people per year (2009: 20/1000)
- C. Death Rate: number of deaths per 1000 people per year (2009: 8/1000)
- D. Rate of Natural Increase: growth caused by having more births than deaths; does not include immigration or emigration (annual growth rate is 1.2%)
- E. Doubling Time: number of years it will take a population to double in size at current growth rate (currently world's population will double to 13 billion in 58 years)

QUALITY OF LIFE

- F. Literacy Rate: ability of an individual to read and write with understanding a simple statement related to his/her everyday life. (worldwide: of adult population 15+ years of age, 88% of males and 79% of females are literate)
- G. Total Fertility Rate: average number of children a woman will have in her lifetime (world's women bear average of 2.6 children)
- H. Infant Mortality Rate: yearly number of children who die before reaching one year of age per 1000 live births (world infant mortality rate is 46/1000)
- I. Life Expectancy: average number of years a person born today could expect to live under current mortality rates (average human life expectancy is 69 years)
- J. Access to adequate sanitation: percentage of population with access to toilets or latrines (only 59% of world's population have access to adequate sanitation)
- K. Medical Doctors: number of people per one medical doctor (1 MD/709 people)

LAND USE PATTERNS

- L. Land Use Patterns: percentage of the total population living in areas termed urban by that country—typically towns of 2000 or more in national or provincial capitals (50% of world's population, approximately 3.4 billion people) live in urban areas
- M. Arable Land: farmland, land capable of growing crops (.6 acres per person on earth)

ENERGY CONSUMPTION and WEALTH

- N. Energy Consumption: total amount of energy used by each region per year divided by the number of people living in the region, including industrial use
- O. Gross Domestic Product: commonly used measure of a nation's wealth, determined from annual profits created by all goods and services exchanged that year

PROPS:

- Toothpicks represent total energy sources (wood, coal, natural gas, nuclear power, & oil) expressed in terms of oil. Each toothpick represents average amount of energy used by ONE citizen in each region (1 toothpick = energy generated from burning 1 barrel of oil.
- Candies represent amount each person would get per year if region's annual GDP was divided equally. Indicates average annual income (1 kiss=\$500)