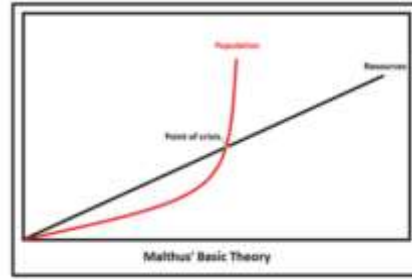Date _____

AIM:

Thomas Malthus - Malthusian Theory (1798)

Linear resource growth (mainly food supply) with simultaneous exponential human population growth predicted a future when humans would have no resources to survive on. To avoid such a catastrophe, Malthus urged controls on population growth.

Malthus' Basic Theory

1. Demographic Studies:

Demographics:

Criteria Considered:

Current World Population -   _____

Top 3 Most Populous Countries in 2020 and their Populations (use the July estimates – round if you like):

1. _____ **Pop:** _____

2. _____ **Pop:** _____

3. _____ **Pop:** _____

U.S. Population in 2000 -   _____

U.S. Population in 2010 -   _____

Population change
+/- _____

2. Average World Growth Rate Calculation

Use the population doubling time formula: doubling time = $\dfrac{70}{r}$

r = population growth rate (the variable you are solving for in this problem)

What was the average world growth rate between the years 1960-1999?
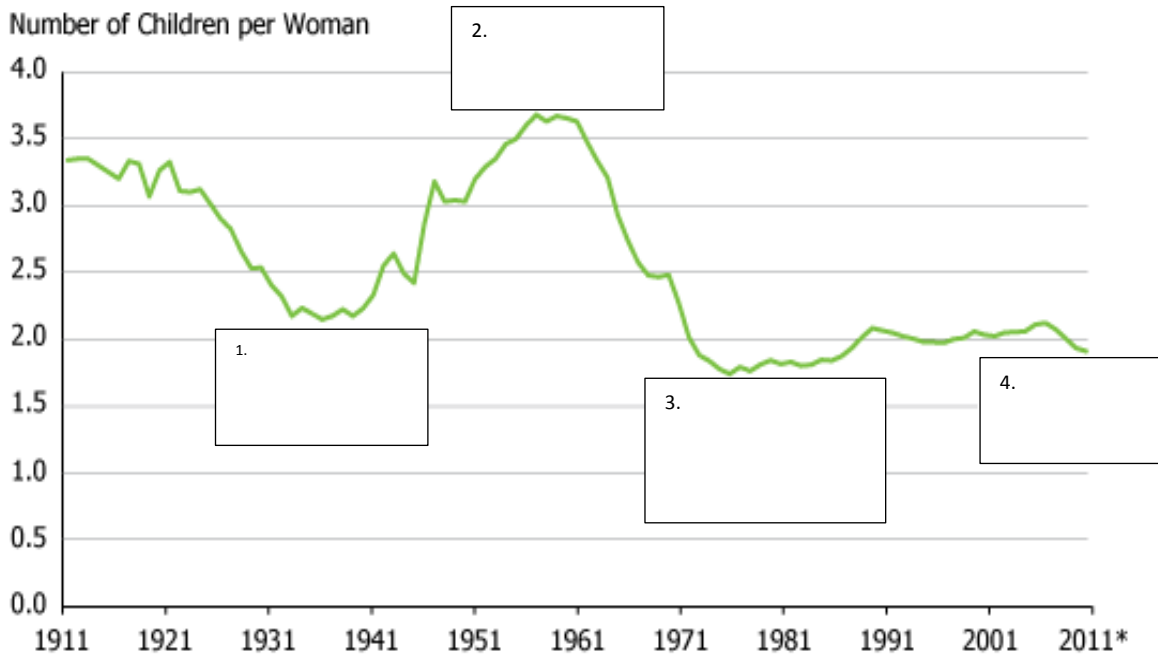(Show our work and/or explain how you came up with your answer.)

3. Fertility Rates:

Total Fertility Rate (TFR):

TFR Stats:	1950	2020
World -	_____	_____
U.S. -	_____	_____
China -	_____	_____
Africa -	_____	_____
Singapore -	_____	_____

Replacement Level Fertility:

Replacement Fertility in most developed nations is - _____

Average Replacement Fertility in developing nations is - _____

Historical Trend of U.S. TFR

4. Factors Affecting Birth and Death Rates:

BIRTH rates are affected by:

1. _____
2. _____
3. _____
4. _____
5. _____

6. _____
7. _____
8. _____
9. _____
10. _____

DEATH rates are affected by:

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

The overall quality of life of a country is best indicated statistically by:

Date _____

Aim: _____

Developed Countries

1. _____

2. _____

3. _____

4. _____

    _____

Examples:

_____

An estimated value of the total worth of a country's production and services, <u>within its boundary</u>, by its nationals and foreigners, calculated over the course of one year.

_____

An estimated value of the total worth of production and services, by citizens of a country, on its land or on foreign land, calculated over the course of one year.

Developing Countries

Examples:

"Moderately Developed" Countries

Examples:

Date _____

AIM: Developed v. Developing Countries: a Comprehensive Comparison

The United Nations groups nations as developing or developed based on their economic development. We also spoke about the fact that there are some countries that are transitioning from developing to developed; these countries are sometimes referred to as newly industrialized.

For developed and developing countries, decide if the characteristic is higher or lower. For the newly industrialized, indicate if the characteristic trend is increasing or decreasing. As a developing country is becoming more developed it is said to be undergoing a **demographic transition**.

Characteristic	Developed	Newly Industrialized / Emerging	Developing
Country Examples	U.S., Canada, Western European countries, Japan, Australia	China, India, Mexico, Brazil, Russia	Most Countries in Africa, Central and South American Countries, Middle Eastern Countries
Industry	high level	increasing	low level
Birth rate	low	decreasing	high
Population Growth rate	slow	decreasing	high
Population Doubling time	long period	increasing	short period
Infant mortality	low rate	decreasing	high rate
Life expectancy	longer	increasing	shorter
Total fertility rate	lower	decreasing	higher
Gross National Product	higher	increasing	lower
Standard of Living	higher	increasing	lower
Quality of Life	higher	increasing	lower
% of Women in School	greater	increasing	less
Use of Contraception	higher (better family planning)	increasing	lower
Age at Marriage	higher	increasing	lower

Date _____

AIM: _____

The DTM -

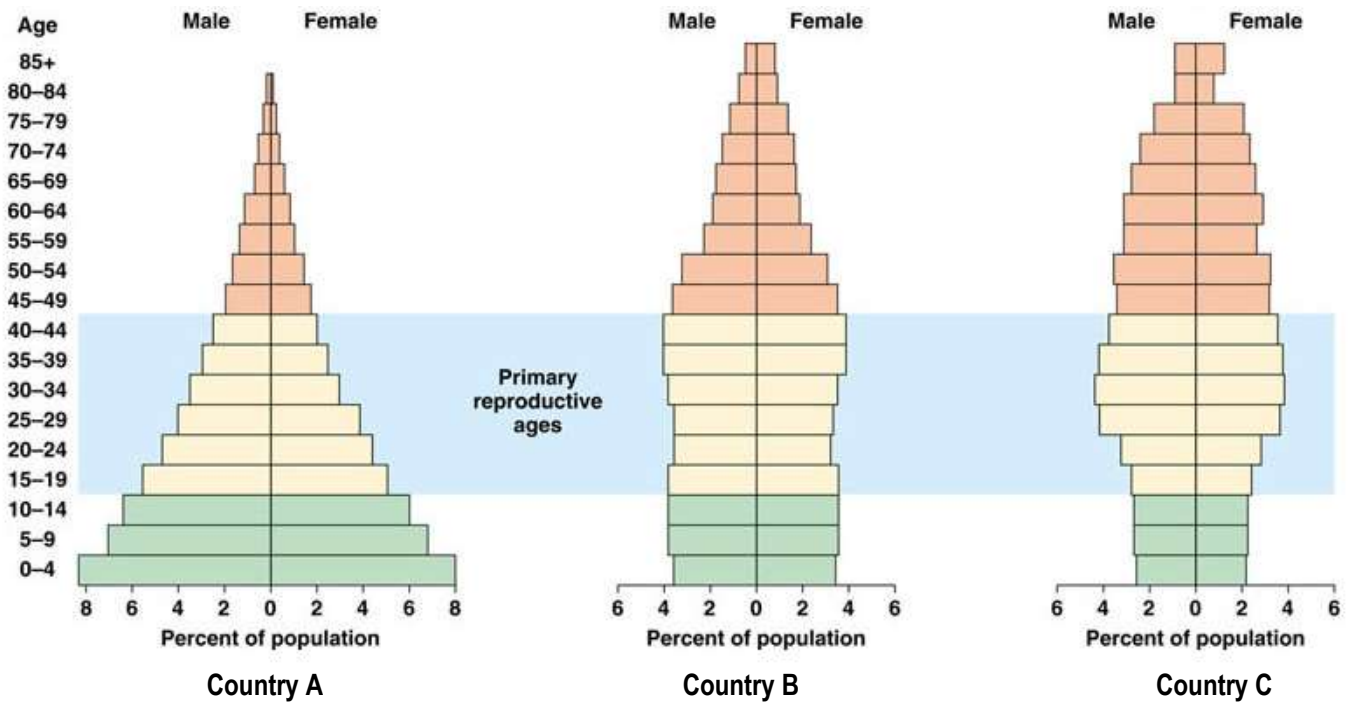|	
STAGE 5:	
STAGE 4:	
STAGE 3:	
STAGE 2:	
STAGE 1:	

time

CBR, CDR, Total Population

Date _____

AIM: _____

Age Structure Diagrams indicate:
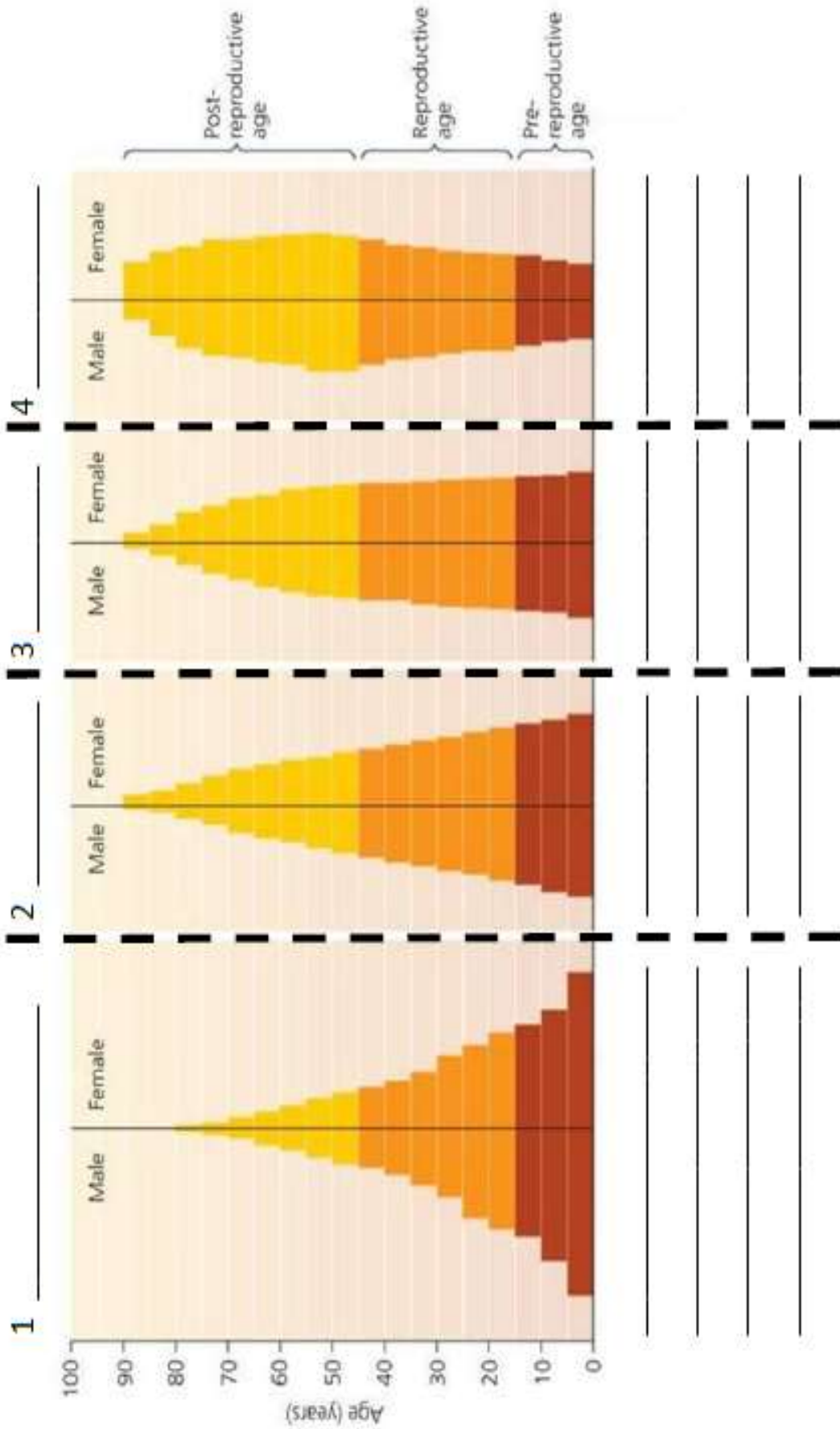
1. **male-female ratio (# or %)**

2. **age groups (prereproductinve 0-14,   reproductive 15-44,   postreproductive 45+)**

3. **Population growth potential (as indicated by # in prereproductive and reproductive cohorts)**

Country A   Country B   Country C

Sample Questions:

1. Approximately what percent of females of Country A are in their prereproductive stage of life?   _____

2. Which country has a consistently higher male to female ratio in each age group?   _____

3. Which country will probably experience a decrease in population?   _____

4. Which country seems to have the most stabilized population?   _____

5. Which country has the population with the highest average age?   _____

Types of Age Structure Diagrams / Population Pyramids

Date _____

AIM: _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

A side-by-side comparison of TFR rates as influenced by government policies

CHINA	
Year	**TFR**
1970	**5.8**
1981	**2.1**
2018	**1.6**

INDIA	
Year	**TFR**
1980	**5.3**
1981	**3.5**
2018	**2.3**

RUSSIA	
Year	**TFR**
1970	**2.2**
1981	**1.1**
2018	**1.6**

CHINA

1979 - China One Child Policy (not technically a written law, but strictly adhered to in locations)
- targeted at 50% of the population that lived in urban areas
- many exclusions (rural areas, multiple births, parents were single children, first child was a girl)
- enforced by individual cities and towns in different ways
- if not followed could face: hefty fines, higher taxes, forced sterilization, family-members
 detained, children banned from education, property and homes confiscated

2016 - Two Child Policy enacted because of emerging industry and need for workers and caregivers of older population

INDIA

1952 – - 1st government established national family planning (but wasn't very effective)

       - cultural, social, and religious norms prevailed

       - India is culturally/ethnically/and religiously diverse and communication/mutual understanding was difficult

       - lacked incentives

       - poor administration and lack of funding

1970-2016 – coerced (basically forced) sterilization of women and men

        withheld irrigated water, food rations, salary from those who didn't comply

RUSSIA

1991 - collapse of Soviet Union in 1991 caused a sharp decline in birthrates, high mortality rates, and increases in emigration

     - monetary bonuses for 2nd and 3rd child ($9000+)

     - "prizes" of Russia's National Day – cars, appliances, electronics ("have a baby win a fridge")

IRAN

1967 - "birth control is a human right" campaign

Early 1980's – Ayatollah Khomeini, Iran's supreme leader, dismantled family planning program and

        promoted a "baby boom" to produce soldiers for war against Iraq

Late 1980's – made contraception readily available to curb population growth that the economy could not support

2012–2014 - new supreme leader promoting population growth for aging society

      - cut budget for family planning / free contraception and made any type of sterilization illegal

    -

THAILAND

1971 - very effective , aggressive family planning program with strong government oversight

     - cut TFR from 6.4 → 2.0 in just 15 years

     - supported by Thai Buddhists and taught in sermon

     - family education and clinics – handed out birth control – "Cops and Rubbers" day

JAPAN

Present TFR = 1.4

marriage age – under 20 need parental consent - might have to change?

very strict immigration laws