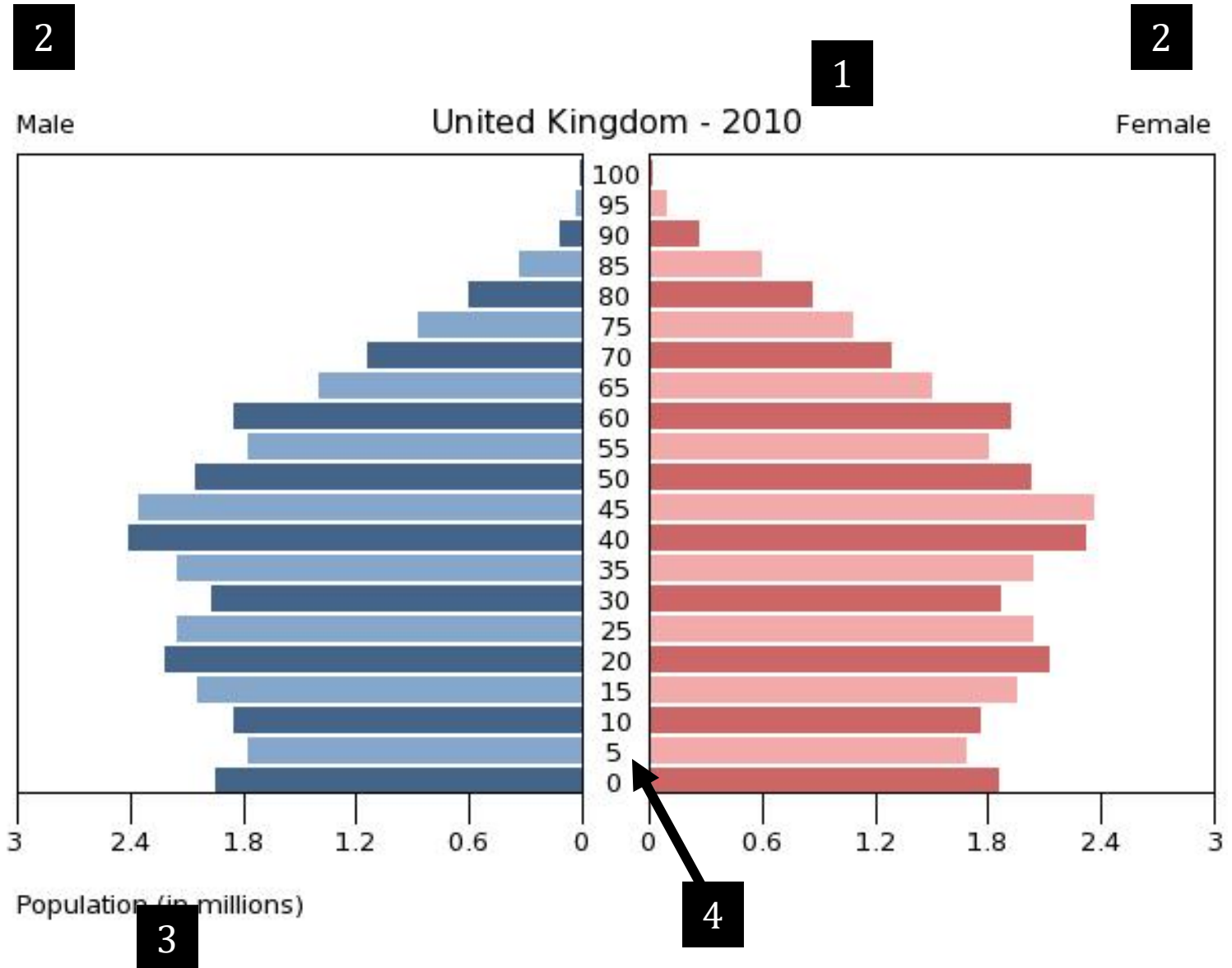


# Population Pyramids

*What is a population pyramid?*

A population pyramid is a pyramid-shaped diagram illustrating the age distribution of a population; the youngest ages are at the bottom ascending in age till the oldest age at the top of the pyramid.

*How do you read a population pyramid?*



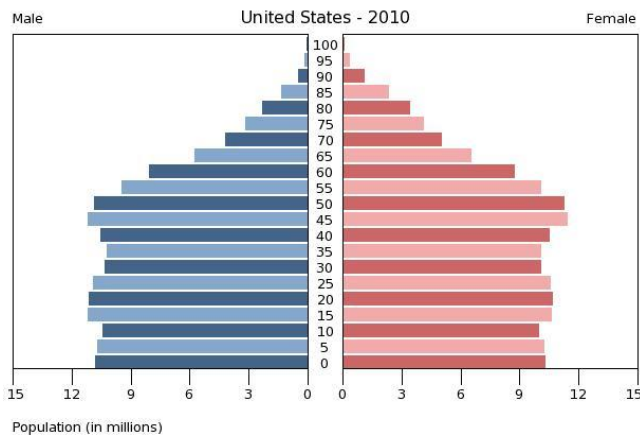
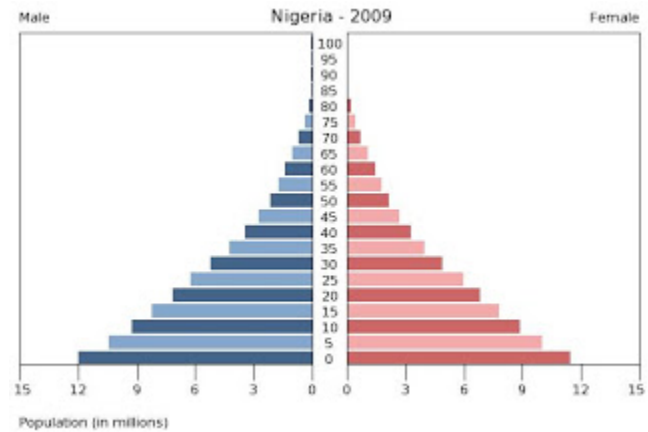
1. The title. Usually, this is the name of the location along with the year.
2. In this case, the left side of the pyramid shows the population distribution of the males while the right side shows the population distribution of the females of the location.
3. Horizontal axis shows the populations (in this case) in millions.
4. Vertical axis lists the age group; typically by five year increments.

# Types of Population Pyramids

A population pyramid shows the age and gender of a society. Population pyramids allow statisticians analyze a place and identify its rate of growth. There are three types of growth; rapid, slow/stable and negative/declining. Below are examples of each stage.

## **Rapid Growth Population Pyramid**

Looks like a typical pyramid with a large base that gets smaller as you ascend. This type of population typically has poor health care and short life expectancies. Mostly found in under developed and developing countries.

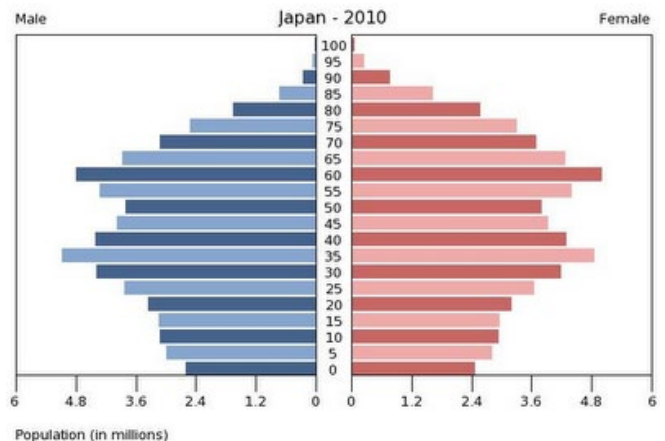


## **Slow or Stable Growth Population Pyramid**

There is little change in the lower sections of the pyramid. Only after the upper ages do you see a marked change in population. This type of population pyramid is mostly found in developed countries sometimes middle income countries. These countries have good health care, long life expectancies and stable governments.

## **Negative or Declining Growth Population Pyramid**

The top third and bottom third are both smaller than the middle section of the pyramid. This type of population pyramid is mostly found in developed countries. These countries have good health care, long life expectancies and stable governments. However, their birth rates are lower than needed to replace the population.



DRAWING POPULATION PYRAMIDS WORKSHEET 1.

Use the data to create your population pyramid in the chart provided below.

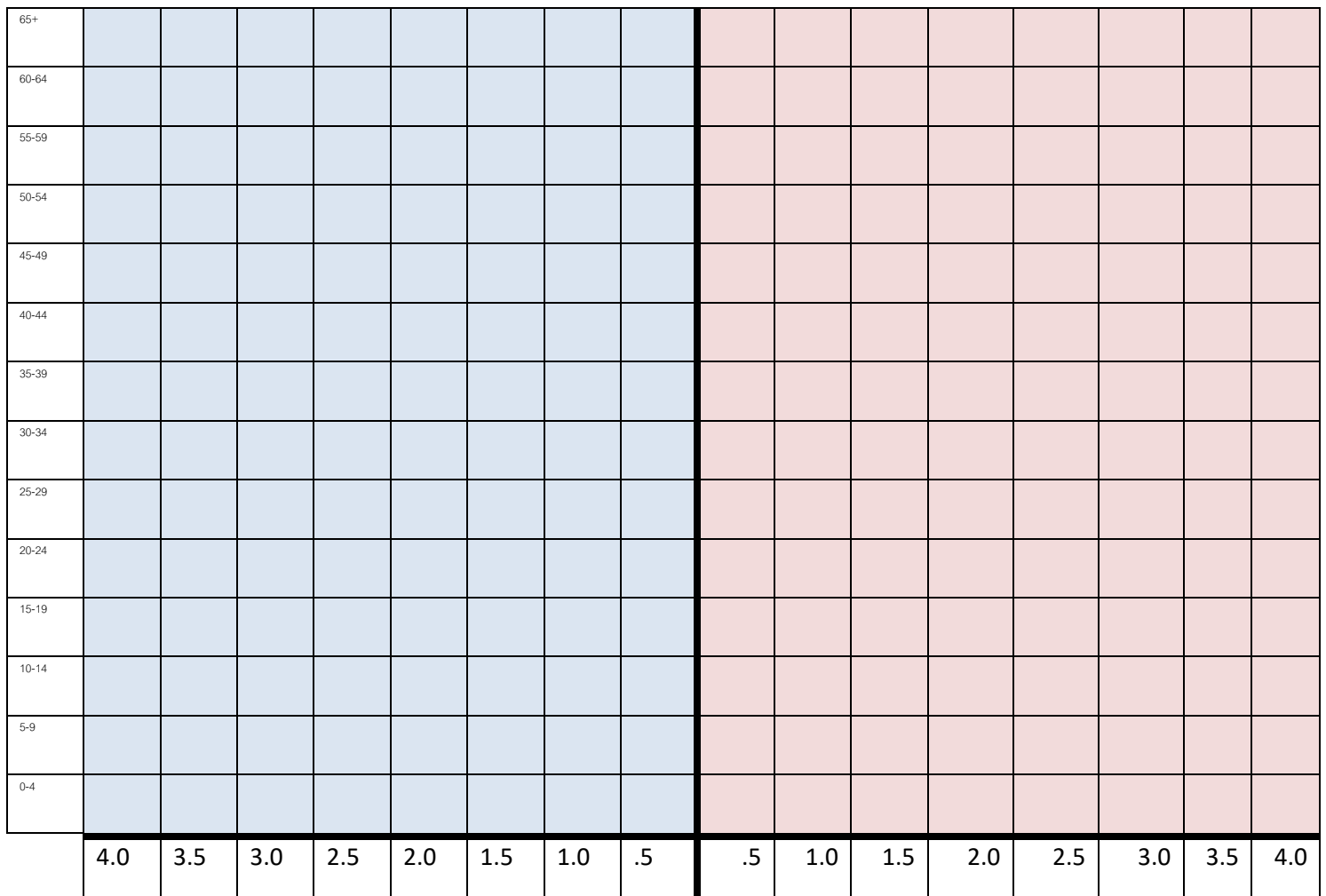
Use one colour for Males one colour for females.

Label the Male and Female sides

Be neat and accurate.

AGE GROUP	POP IN MILLIONS	
	Male	Female
65+	2.2	2.4
60-64	2.2	2.3
55-59	2.7	2.8
50-54	3.1	3.0
45-49	3.6	3.4
40-44	3.4	3.3
35-39	2.6	2.5
30-34	2.4	2.3
25-29	2.4	2.4
20-24	2.5	2.4
15-19	2.1	2.0
10-14	2.0	1.9
5-9	1.8	1.7
0-4	1.7	1.6

Country: Germany, 2010



Population in Millions

DRAWING POPULATION PYRAMIDS WORKSHEET 2.

Use the data to create your population pyramid in the chart provided below.

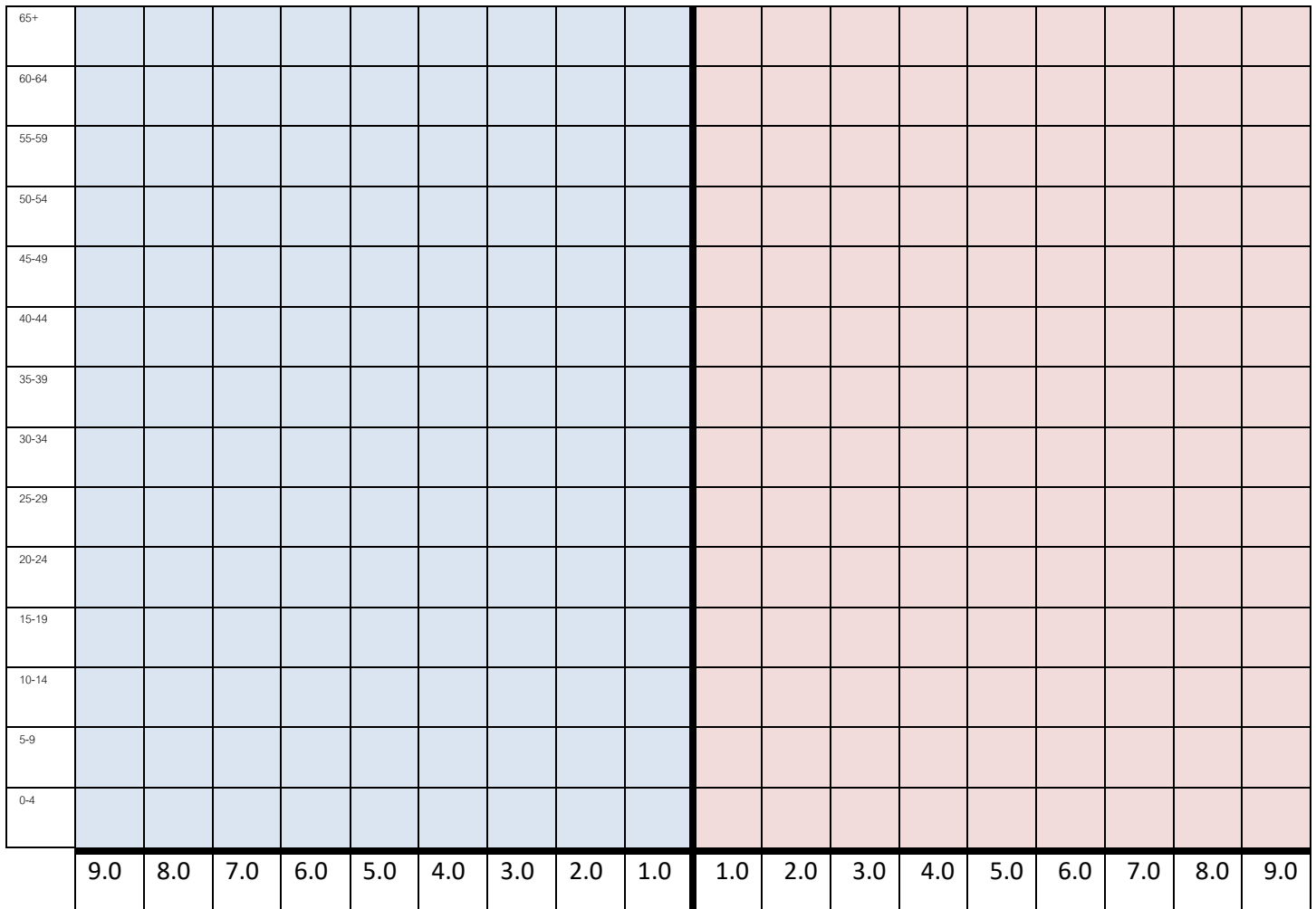
Use one colour for Males one colour for females.

Label the Male and Female sides

Be neat and accurate.

AGE GROUP	POP IN MILLIONS	
	Male	Female
65+	2.1	2.6
60-64	3.0	3.5
55-59	4.0	4.3
50-54	5.0	5.3
45-49	6.0	6.2
40-44	6.6	6.7
35-39	7.1	7.2
30-34	8.0	8.0
25-29	8.8	8.7
20-24	8.7	8.5
15-19	8.5	8.2
10-14	8.7	8.4
5-9	8.7	8.3
0-4	8.0	7.7

Country: Brazil, 2010



Population in Millions

DRAWING POPULATION PYRAMIDS WORKSHEET 3.

AGE GROUP	POP IN MILLIONS	
	Male	Female
65+	.6	.8
60-64	.9	1.1
55-59	1.4	1.7
50-54	2.1	2.4
45-49	2.7	2.8
40-44	2.9	3.0
35-39	3.3	3.3
30-34	3.7	3.
25-29	4.3	4.2
20-24	4.6	4.3
15-19	4.5	4.2
10-14	3.9	3.6
5-9	3.9	3.6
0-4	4.0	3.6

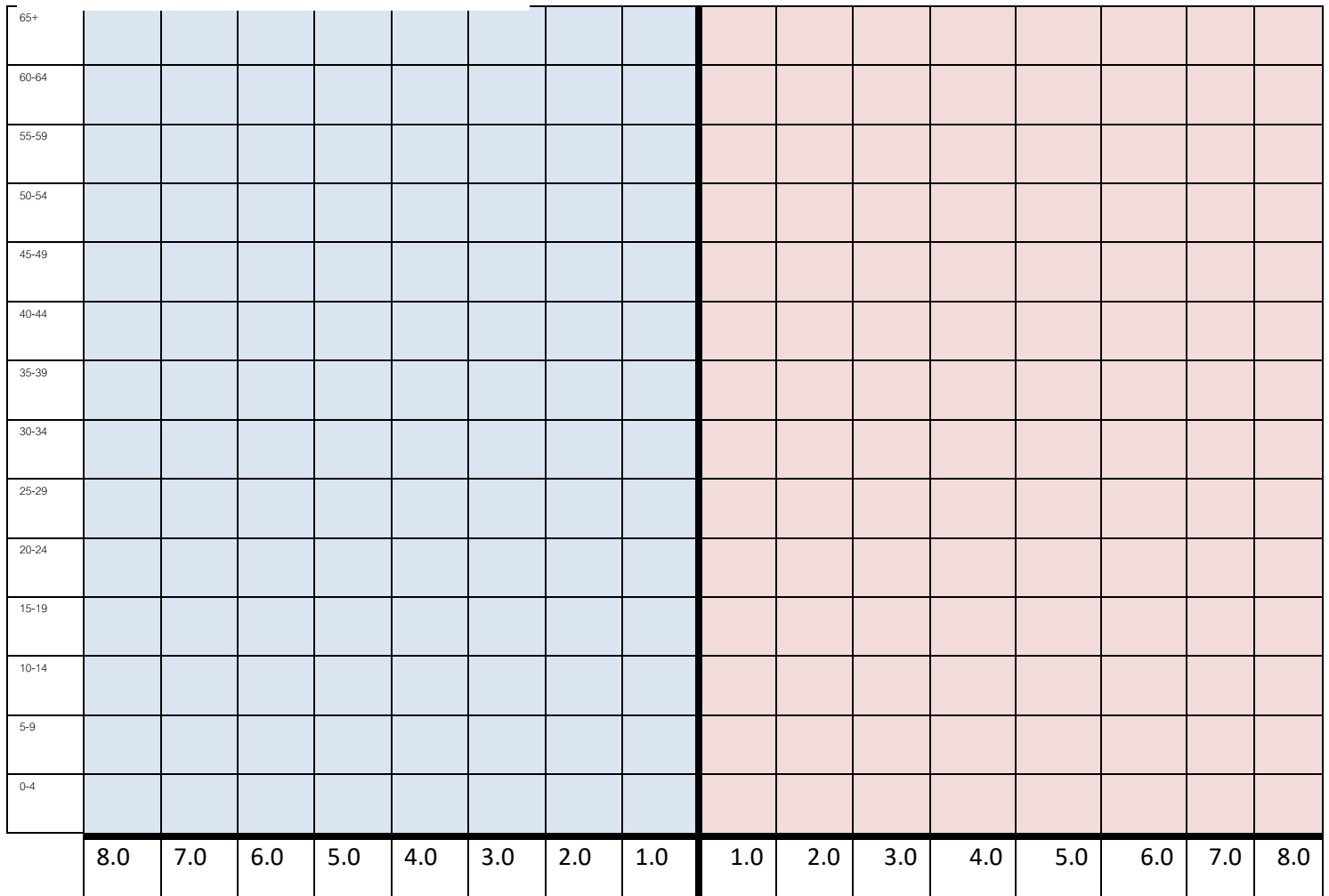
Use the data to create your population pyramid in the chart provided below.

Use one color for Males one color for females.

Label the Male and Female sides

Be neat and accurate.

Country: Vietnam, 2010



**Population Pyramids Comparisons**  
Population in Millions

In a group of three, (each member must have a different country) answer the following questions below using your population pyramids.

1. Identify the which countries are:

a. Rapid Growth \_\_\_\_\_

Why? \_\_\_\_\_

b. Stable Growth \_\_\_\_\_

Why? \_\_\_\_\_

c. Negative Growth \_\_\_\_\_

Why? \_\_\_\_\_

2. Why are there, generally, more females than males in the older age groups? \_\_\_\_\_

\_\_\_\_\_

3. What could a negative growth country do to increase the population of the younger age groups to become more stable? \_\_\_\_\_

\_\_\_\_\_

4. What infrastructures might a rapid growth country improve to stem the high infant mortality rate allowing their growth to become more stable? \_\_\_\_\_

\_\_\_\_\_

5. What factors must a stable growth country focus on to remain stable? \_\_\_\_\_

\_\_\_\_\_

## Population Pyramids Comparisons (ANSWERS)

In a group of three (each member must have a different country) answer the following questions below using your population pyramids.

1. Identify the which countries are:

a. Rapid Growth \_\_\_\_\_ **Vietnam** \_\_\_\_\_

Why? \_\_\_\_\_ **large young population with small older population** \_\_\_\_\_

b. Stable Growth \_\_\_\_\_ **Brazil** \_\_\_\_\_

Why? \_\_\_\_\_ **the younger and middle age levels are about the same with smaller decrease in the older ages** \_\_\_\_\_

c. Negative Growth \_\_\_\_\_ **Germany** \_\_\_\_\_

Why? \_\_\_\_\_ **The age groups at 40 and above are larger than the groups below them.** \_\_\_\_\_

2. Identify another country that we have studied that would be considered: **(Answers will vary)**

a. Rapid Growth \_\_\_\_\_

b. Stable Growth \_\_\_\_\_

c. Negative Growth \_\_\_\_\_

3. Why are there, generally, more females than males in the older age groups? \_\_\_\_\_ **They tend to live longer lives than males** \_\_\_\_\_

4. What could a negative growth country do to increase the population of the younger age groups to become more stable? \_\_\_\_\_ **Encourage younger couples to have multiple children with government programs, increase immigration to the country** \_\_\_\_\_

5. What infrastructures might a rapid growth country improve to stem the high infant mortality rate allowing their growth to become more stable? \_\_\_\_\_ **hospitals, education systems, food services, clean water and sanitation** \_\_\_\_\_

---

6. What factors must a stable growth country focus on to remain stable? \_\_\_\_\_ immigration laws, quality health care, education \_\_\_\_\_

7. Pick one country to analyze further. List that country's name here:

\_\_\_Brazil\_\_\_ Germany \_\_\_ Vietnam \_\_\_\_\_

a. What age group has the largest population? \_\_\_25-29\_\_\_ 45-49 \_\_\_20-

24 \_\_\_\_\_

b. Why might this age group be the largest? \_\_\_Answers will vary\_\_\_ Answers will vary \_\_\_Answers will vary\_

c. What age group has the largest population for males? \_\_\_25-29\_\_\_ 45-49 \_\_\_20-24\_\_\_\_\_

d. What age group has the largest population for females? \_\_\_25-29\_\_\_ 45-49 \_\_\_20-24\_\_\_\_\_

e. What observations can you make about this country's health care system and life expectancy? \_\_\_\_\_

\_\_\_That their health care system must be average to good because there is not a significant drop off

between age ranges and their life expectancy must be in the 60's because this group is really small

compared to lower age ranges. \_\_\_ That they have excellent health care because their older population

is rather large. Their life expectancy is also great because many people live well into their late 60's \_\_\_\_\_

Not good because there is a significant drop off from younger ages to older. Life expectancy is probably

in the 50's.