**Sample Preparatory Assignment**

### Who is the wealthiest?

Is the United States the wealthiest country in the world? If not, what country do you think is the wealthiest? How should we measure “wealth”? Should it only be measured by income, or should we also look at other variables such as health or life expectancy?

The graphs for this preparatory activity and the upcoming in-class activity are taken from the Gapminder website. The Gapminder is “fighting devastating ignorance with fact-based worldviews everyone can understand.”¹ This nonprofit organization uses large amounts of social, health, economic and environmental data to help people understand world issues. Its website www.gapminder.org provides interactive statistics and videos to support understanding of global issues.


The graph shows health and wealth data for all United Nations member countries as well as other countries and territories with more than 1 million people. The wealth is income per person in U.S. dollars for one year (annual income).

1) Inspect the axis labels and other explanatory information on the graph.

**Part A:** Which of the following is equated with life expectancy?

- a) Average income
- b) Health
- c) Country land area
- d) Country population
- e) Region

**Part B:** What does it indicate if a country is in the lower left corner?

- a) The lowest population countries are all in that corner.
- b) The smallest countries are all in that corner.
- c) The countries with low average incomes and low life expectancies are in that corner.
- d) The countries with low average incomes and high life expectancies are in that corner.
- e) The countries with high average incomes and low life expectancies are in that corner.
- f) The countries with high average incomes and high life expectancies are in that corner.

¹ See http://www.gapminder.org/about-gapminder/our-mission
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Part C: True or false: According to the graph, Nigeria is a much larger country than South Africa. Justify your response.

2) Find the two light blue/green lines going through the graph, a horizontal line labeled “Life expectancy of the world” and a vertical line labeled “Income per person of the world.” These two lines divide the graph into four quadrants.

Part A: What is the largest country in the relatively healthy but poor quadrant?

   a) China  
   b) United States  
   c) Russia  
   d) India

Part B: What is the largest country in the relatively rich but unhealthy quadrant?

   a) China  
   b) United States  
   c) Russia  
   d) India

3) Locate the information that explains the colors used in the graph.

   Part A: Which color represents North America and South America?

   a) Green  
   b) Blue  
   c) Pink  
   d) Yellow

   Part B: Which color represents Africa?

   a) Green  
   b) Blue  
   c) Pink  
   d) Yellow
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Part C: Use the graph and your answers to Parts A and B to compare the health and wealth of the people in Africa to the people in both North and South America.

Part D: Afghanistan and Pakistan are neighboring countries. Find them on the graph and compare their average wealth and health.

4) The World Bank defines an individual as living in “absolute poverty” if the individual has approximately $1.25 per day (in 2005 dollars) to use to obtain at least a minimal amount of shelter, clothing, food, and health care.2

Part A: What is the annual income of someone who makes $1.25 per day?

   a) About $15 per year  
   b) About $38 per year  
   c) About $65 per year  
   d) About $500 per year  
   e) About $5,000 per year

Part B: Which of the following countries has an income level that is below the absolute poverty level?

   a) Zimbabwe  
   b) Mozambique  
   c) Ethiopia  
   d) Haiti  
   e) North Korea

5) Watch the video “200 Countries, 200 Years, 4 Minutes” at http://www.gapminder.org/videos/200-years-that-changed-the-world-bbc/#.U2V-mtx_h94. It explains the data and the type of chart that will be used in the upcoming lesson. The video offers a very good context for the data, for history, and for the approach to presenting that information. Use the information to answer the questions on the following page.

2 Source: http://povertydata.worldbank.org/poverty/home
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Part A: List one observation you made from watching the video.

Part B: Experiment with the graph at http://www.gapminder.org/world/. For example, select a country other than the United States and then click “Start” to activate the graph. Explain why you chose that particular country and list one observation you made from watching the animated graph.

Monitoring your readiness

6) To effectively plan and use your time wisely, it helps to think about what you know and do not know. How confident are you that you can:

   Part A: Identify variables displayed on a graph?
   Part B: Divide a graph into quadrants (or regions)?
   Part C: Identify specific parts of a complex graph and determine the related quantitative information?

If you are not confident in the above skills, you should seek help by:

- seeing your instructor before class,
- asking your instructor for on-campus resources,
- setting up a study group with classmates, or
- working with a tutor.