AP COGO: Gapminder Questions – Comparing Variables

Directions: Go to [www.gapminder.org](http://www.gapminder.org) and click on Gap Minder World. Adjust the graph according to the following variables and answer the 10 question sets below.

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|  | X (I.V.) | Y (D.V.) |  Countries | Tasks/Questions |
| #1 | Income per Person | LifeExpectancy | All | 1. Describe what happens to life expectancy as income increases.
2. Identify which region has the lowest life expectancy.
3. Within each region, describe the range of life expectancies and identify which countries are at each extreme.
4. Explain why there might be such a range.
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| #2  | Time | Private Share of Total Health Spending | USA, Nigeria, UK | 1. Predict the rank order of private share of total health spending, then record the actual rank order.
2. Explain factors that may be causing the differences.
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| #3 | HDI (Human Development Index) | Income per Person | Core Countries | 1. Explain what general conclusions can be drawn about the relationship between income and quality of life
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| #4 | Time | Cumulative CO2 Emissions | Core Countries | 1. Identify which country has the highest emissions.
2. Explain possible factors leading to the increases over time.
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| #5 | Time | Poverty (% below $2/day) | Core Countries | 1. Hypothesize/explain why poverty increased in Russia from 1989 to 1999.
2. Hypothesize/explain why Russia experienced a major drop in poverty after 1999.
3. Describe the trend of poverty in the past twenty years for each of the core countries.
4. Explain possible factors leading to the trends described.
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| #6 | Time | Gini Coefficient (Inequality Index) | Core Countries | 1. For the most recent years, compare the Gini coefficients across countries.
2. Within a country, describe how the Gini coefficient has changed over time.
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| #7 | Children per Women (Fertility) | Life Expectancy | All | 1. Describe what has happened to life expectancy and fertility in most countries over time.
2. Compare the developing countries to the developed countries. What trends do you see?
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| #8 | Income | ChildMortality | All  | 1. Describe what has happened to child mortality in most countries over time.
2. Compare the developing countries to the developed countries.
3. Describe the possible factors that explain these differences.
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| #9 | Income per Person | Democracy Score | All/Core | 1. Describe the relationship that exists between income per person and its democracy score.
2. Identify factors that might explain these differences.
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| #10 | Life Expectancy | Democracy Score | All/Core | 1. Describe the relationship that exists between life expectancy and its democracy score.
2. Identify factors that might explain these differences.
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