

Hook Exercise: Your School's Report Card

Directions: You and your fellow students earn grades on a regular basis during the school year. Now it's your turn to do the grading. If you were to grade your school, what grade would it earn? On what basis would you assign that grade?

Below is a list of ten different ways to measure how your school is doing. With a partner, identify the four most important measurements you would use to assign a grade. Prioritize these four choices. Also, identify which measure is least important. Note that there are two empty spaces for adding a measurement that isn't on the list. Be prepared to share your thinking with the class.

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1. Number of Advanced Placement courses offered
 2. Percentage of students that go to college
 3. Quality of the food in the cafeteria
 4. State-wide rankings of athletic teams
 5. Quality of relationships among students and faculty
 6. Student-teacher ratio
 7. Schoolwide math and reading test scores
 8. Number of computers in the school
 9. Ethnic and racial diversity
 10. Student work ethic
 11. _____
 12. _____

Does GDP Tell the Right Story?

In December of 2014, an article on the financial website MarketWatch sounded the alarm:

“Hang on to your hats, America.... We’re no longer No. 1. Today, we’re No. 2. Yes, it’s official. The Chinese economy just overtook the United States economy to become the largest in the world.”

The news story referred to a report showing that the **gross domestic product (GDP)** of China had surpassed the GDP of the United States. For the first time since the 1870s, the US was no longer the largest economy in the world.

What does this mean for the US? Will our nation begin to lose some of its influence in the world? If China was now the largest economy, would it soon be the largest military power, too? Should the US be taking drastic measures to move back into first place?

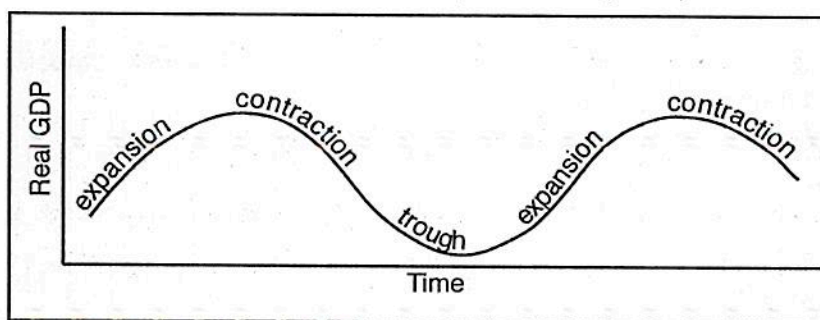
Although the answers to these questions are debatable, it is clear that a nation’s GDP says much about that country. Economists often refer to GDP as “the mother of all economic indicators.” A closely followed statistic, it provides a snapshot of all the economic activity going on in a country. When GDP increases, so does the confidence of government officials, businesses, and consumers. When GDP decreases, those same folks bite their nails and worry whether or not the economy will recover.

So what does GDP measure? In short, GDP is the “price tag” (the total dollar amount) for all the goods and services produced in a country in one year. It includes every haircut paid for and iPhone purchased. It includes each iced mocha cappuccino sold at Starbucks and every dollar collected at a toll booth. This total “price tag” represents the size of a country’s economy.

GDP first came into use in the United States in the mid-1930s, when the nation was struggling through the Great Depression. A

presidential advisor, Simon Kuznets, promoted GDP as a way of measuring the national economy. This new indicator allowed economists to gauge whether or not new government spending programs were boosting production.

Government officials still rely upon GDP numbers to guide the economy through the ups and downs of the **business cycle**. When GDP increases, the economy is experiencing an **expansion**. Expansions are generally good, but if they happen too quickly, **inflation** (increase in prices) can occur. Periods of infla-



tion can hurt businesses and consumers. On the flip side, if GDP decreases over time, the nation is in a **contraction** and heads toward a

trough. If it is a serious trough, it is called a **recession**. In recessions, workers lose their jobs and businesses close. GDP data helps officials see these trends coming.

Because GDP is so important for making comparisons over time and with other nations, certain adjustments are often made to it. First, economists figure out **real GDP**, which accounts for inflation. Second, they calculate **purchasing power parity (PPP)**, which takes into account different values of international currencies. Third, economists determine **GDP per capita**, which accounts for the size of a country’s population. A fuller understanding of these adjustments will come from doing this Mini-Q.

The following eight documents reveal some of the strengths and limitations of GDP as a measure of a country’s economic health. Your task is to examine these strengths and limitations and then answer the question: *Does GDP tell the right story?*

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Background Essay Questions

1. What are examples of things that are included when GDP is calculated?
2. What is the possible danger if a country's GDP expands too rapidly over time?
3. What is the danger if a country's GDP contracts over time?
4. Name three adjustments that can be made to GDP to allow for better comparisons over time and between countries.
5. Define these terms:

gross domestic product (GDP)

business cycle

expansion

inflation

contraction

recession

real GDP

purchasing power parity (PPP)

GDP per capita

Timeline

- 1937** — Simon Kuznets presents his concept of GDP to the US Congress
- 1944** — GDP becomes a standard international measure for looking at a nation's economy
- 1968** — Robert F. Kennedy gives campaign speech criticizing GNP as measure of a country
- 1972** — King of Bhutan says he hopes to raise GNH (Gross National Happiness) rather than GDP
- 1999** — US Commerce Department calls GDP "one of the great inventions of the 20th Century"
- 2000** — US GDP tops \$10 trillion for the first time
- 2014** — China becomes the world's largest GDP nation, passing the United States
- 2017** — US GDP approaches \$20 trillion

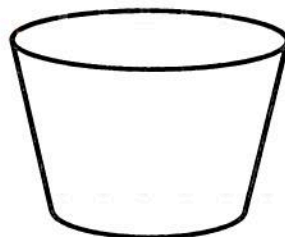
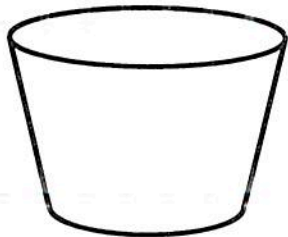
Understanding the Question and Pre-Bucketing

Understanding the Question

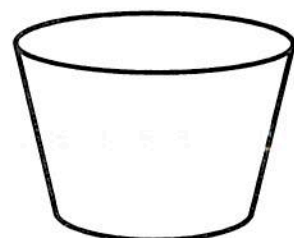
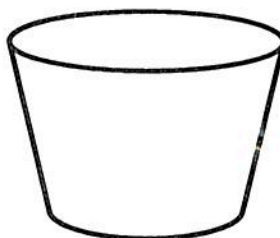
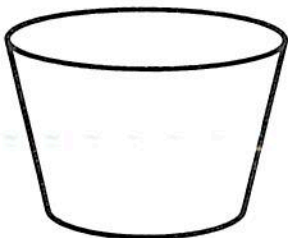
1. What is the analytical question asked by this Mini-Q?
2. Which term or terms in the question need to be defined?
3. Rewrite the question in your own words.

Pre-Bucketing

Directions: Using clues from the Mini-Q question, write down labels for the buckets. At this point, your labels should be generic, that is, quite general. As you actually go through the documents, the labels can be changed to become more specific. We suggest a two-step process, as shown below.



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Document A

Source: Paul A. Samuelson and William D. Nordhaus, *Economics: An Introductory Analysis*, 2010.

Note: Paul Samuelson (1915–2009) was the first American to win the Nobel Prize in Economic Sciences. Said to be the most influential economist of the later 20th century, Samuelson served as an economic advisor to presidents John F. Kennedy and Lyndon B. Johnson. His book *Economics* is the best-selling economics textbook of all time.

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- Much like a satellite in space can survey the weather across an entire continent, so can the GDP give an overall picture of the state of the economy. It enables the President, Congress, and the Federal Reserve to judge whether the economy is contracting or expanding, whether the economy needs a boost or should be reined in a bit, and whether a severe recession or inflation threatens.
- Without measures of economic aggregates like GDP, policymakers would be adrift in a sea of unorganized data. The GDP and related data are like beacons that help policymakers steer the economy toward the key economic objectives.

Document Analysis

1. Why do the authors compare GDP to a satellite that surveys weather from space?
2. Samuelson and Nordhaus say there is a possible connection between GDP and a recession. What is that connection?
3. Samuelson and Nordhaus say there is a possible connection between GDP and inflation. What is that connection?
4. What useful information does GDP provide for policymakers (i.e. president, Congress, Federal Reserve Bank)?
5. How does this document help answer the question, “Does GDP tell the right story?”

Document B

Source: Chart compiled from data from the International Monetary Fund World Economic Outlook, 2015.

Note: The chart below includes GDP data in terms of purchasing power parity (PPP) from 10 nations. The most accurate way to compare GDP across countries is to calculate how much someone can purchase with the currency in each country. Economists create a hypothetical “basket of goods” made up of everyday items, like food and clothing and services, like haircuts and oil changes. Then they compare how much that “basket of goods” would cost in the US in dollars with how much it would cost in a country like China in yuan. This calculation results in GDP adjusted for PPP.

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GDP for 10 Selected Nations in Billions of Dollars

(Calculated in PPP; dollars current to the given year, not adjusted for inflation)

Country (2015 rank)	1980	2000	2015
China (1)	\$298	\$3,608	\$19,524
United States (2)	\$2,862	\$10,285	\$17,947
India (3)	\$386	\$2,101	\$7,983
Germany (5)	\$867	\$2,429	\$3,848
Brazil (7)	\$572	\$1,585	\$3,192
Mexico (11)	\$389	\$1,211	\$2,194
South Korea (13)	\$83	\$773	\$1,749
Egypt (22)	\$86	\$406	\$997
Qatar (47)	\$18	\$53	\$321
Norway (48)	\$61	\$209	\$319

Document Analysis

1. This chart uses GDP data that is listed in terms of purchasing power parity (PPP). Why would economists use PPP when giving GDP data?
2. This chart does not adjust for inflation over time by reporting “real GDP” numbers. Why does that exaggerate the growth in GDP that these nations show in the document?
3. According to the chart, which nation has the highest GDP in each of the three years shown? In each instance, record the GDP adjusted for PPP. (Be careful with your zeroes.)
4. How does this document help answer the question, “Does GDP tell the right story?”

Document C

Source: Chart compiled from data from the International Monetary Fund World Economic Outlook, 2015.

Note: The chart below uses GDP to calculate per capita data from 10 nations. Per capita GDP is the total GDP of a nation divided by its population. This adjustment allows comparisons between countries with big or small populations. Some countries might have a small national GDP, but its GDP per person might be one of the highest in the world.

GDP per Capita for 10 Selected Nations

(Calculated in PPP; dollars are current to the given year, not adjusted for inflation)

Country (2015 rank)	1980	2000	2015
Qatar (1)	\$74,038	\$89,092	\$143,788
Norway (6)	\$14,973	\$46,488	\$61,471
United States (11)	\$12,576	\$36,432	\$55,836
Germany (20)	\$11,222	\$29,529	\$47,268
South Korea (30)	\$2,184	\$16,452	\$34,549
Mexico (67)	\$5,470	\$11,998	\$17,276
Brazil (75)	\$4,825	\$9,139	\$15,359
China (79)	\$302	\$2,846	\$14,238
Egypt (99)	\$2,135	\$6,370	\$10,891
India (123)	\$566	\$2,041	\$6,088

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Document Analysis

1. What is the meaning of “GDP per capita”?
2. According to the chart, which nation has the highest GDP per capita in each year shown? Which nation has the lowest?
3. Refer to both Document B and Document C. In each chart, what is the world rank of Qatar? What explains the difference in Qatar’s rankings?
4. How does this document help answer the question, “Does GDP tell the right story?”

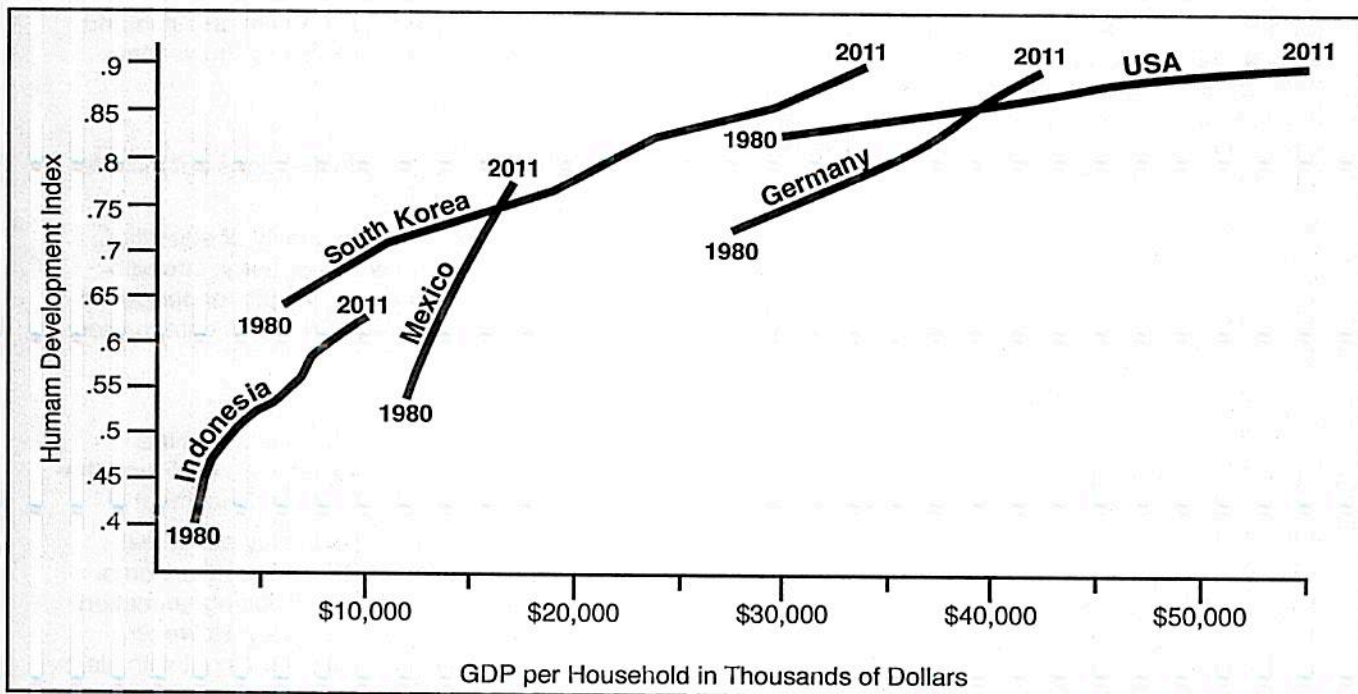
Document D

Source: The Gapminder Foundation, 2011.

Note: The Gapminder Foundation is a non-profit organization in Stockholm, Sweden, that promotes sustainable global development through the analysis of data. The Human Development Index is a statistic published by the United Nations that combines life expectancy and education data to measure the standard of living in different countries.

Household GDP and the Human Development Index, 1980-2011

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Note: Household GDP has been adjusted for inflation and PPP. Regarding PPP, see Document B Note.

Document Analysis

1. What two measures is this graph correlating? (Hint: Read the X and Y axes)
2. Between 1980 and 2011, what was the correlation, that is, the relationship, between household GDP and the Human Development Index for the United States?
3. Between 1980 and 2011, what was the correlation between household GDP and the Human Development Index for Indonesia?
4. What generalization can you make about the correlation between household GDP and life expectancy/education in all five countries?
5. How does this document help answer the question, "Does GDP tell the right story?"

Document E

Source: From a speech delivered by Robert F. Kennedy at the University of Kansas, March 18, 1968.

Note: Robert F. Kennedy talks about gross national product, not gross domestic product. GDP became the preferred measure in the 1980s. While there is a distinction between the two measures, RFK's words and ideas apply to the concept of GDP as well as GNP.

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Too much and for too long, we seem to have surrendered personal excellence and community values to the mere accumulation of material things. Our Gross National Product, now, is over \$800 billion dollars a year, but that Gross National Product—if we judge the United States of America by that—that Gross National Product counts air pollution and cigarette advertising, and ambulances to clear our highways of carnage. It counts special locks for our doors and the jails for the people who break them. It counts the destruction of the redwood and the loss of our natural wonder in chaotic sprawl. It counts napalm and counts nuclear warheads and armored cars for the police to fight the riots in our cities. It counts Whitman's rifle and Speck's knife, and the television programs which glorify violence in order to sell toys to our children. Yet the gross national product does not allow for the health of our children, the quality of their education or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country. It measures everything in short, except that which makes life worthwhile. And it can tell us everything about America except why we are proud that we are Americans.

Document Analysis

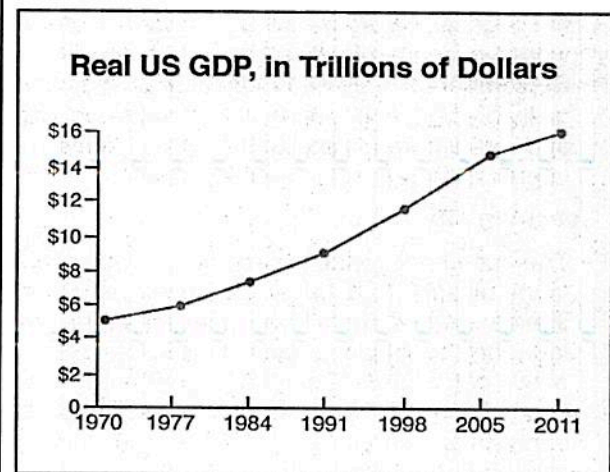
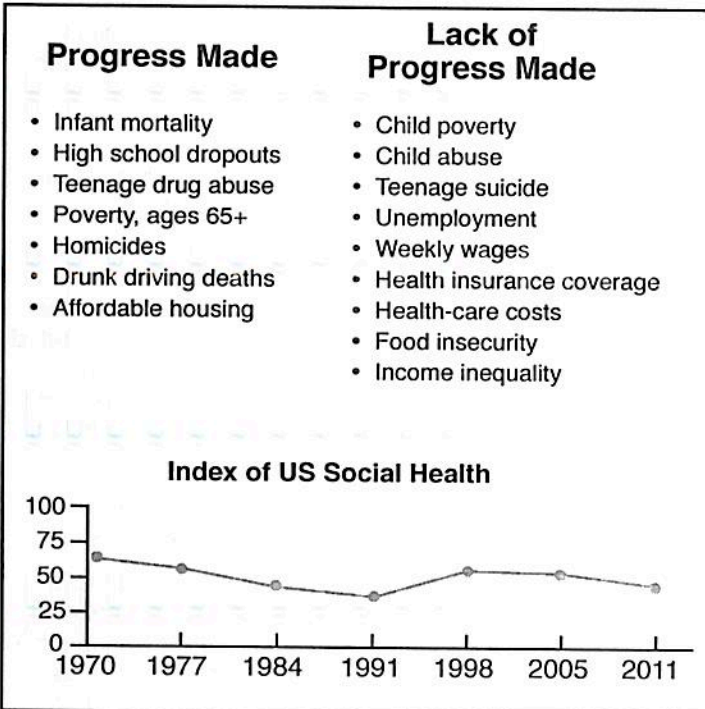
1. According to Robert Kennedy, what was the United States' gross national product in 1968?
2. List five things that GNP includes, according to RFK.
3. List five things that GNP does not include, according to RFK.
4. What might Robert Kennedy think about the positive relationship between GDP and the happiness index shown in Document D?
5. How does this document help answer the question, "Does GDP tell the right story?"

Document F

Source: Compiled from various sources, including The Fordham Institute for Innovation in Social Policy, 2011.

Index of Social Health in US

The Index of Social Health is a composite of 16 measures that gauge the social well-being of the nation. Since 1970, these indicators show the following pattern:



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Document Analysis

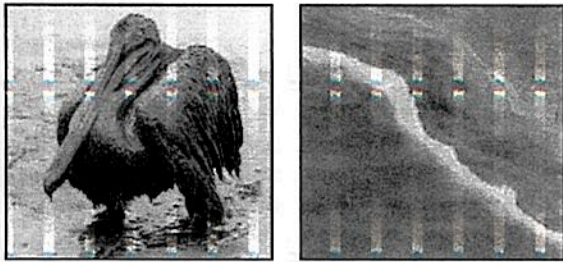
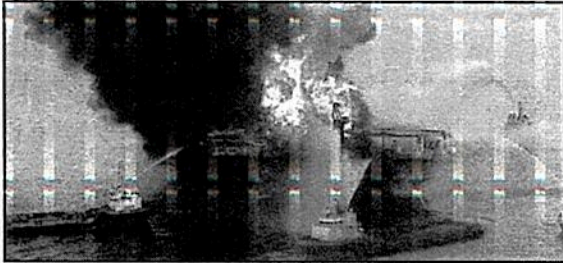
1. What does the Social Health Index measure?
2. What does the real GDP graph measure?
3. What generalization can you make about the relationship between the Index of Social Health and US GDP during the period from 1970-2011? Provide evidence from the document that supports this generalization.
4. How does this document help answer the question, “Does GDP tell the right story?”

Document G

Source: Photos and oil spill data compiled from various sources.

Note: The Deepwater Horizon oil spill occurred on April 20, 2010, when an offshore drilling unit exploded 40 miles off the coast of Louisiana and gushed 4.9 million barrels of oil into the Gulf of Mexico for 87 days straight. Eleven people died as a result of the explosion. This oil spill is considered the largest offshore oil spill in the world, and the worst environmental disaster in US history. In September 2014, British Petroleum Oil was found guilty of gross negligence and reckless conduct, and was ordered to pay \$18.7 billion in fines, the largest corporate settlement in history.

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- 16,000 total miles of coastline have been affected, including the coasts of Texas, Louisiana, Mississippi, Alabama, and Florida.
- Between 27,000 and 65,000 sea turtles are estimated to have died in 2010, and the annual numbers of nests have declined in the years since the spill.
- In 2014, dolphins on the Louisiana coast were found dead at four times historic rates.
- Twelve percent of the brown pelicans and 32 percent of the laughing gulls in the northern gulf are estimated to have died as a result of the BP oil spill.
- \$2.5 billion: The initial estimated cost of the oil spill to the US fishing industry
- \$23 billion: The initial estimated cost of the oil spill to the Gulf Coast tourist industry
- \$18.7 billion: The cost to BP Oil for cleanup efforts in the Gulf of Mexico.

Document Analysis

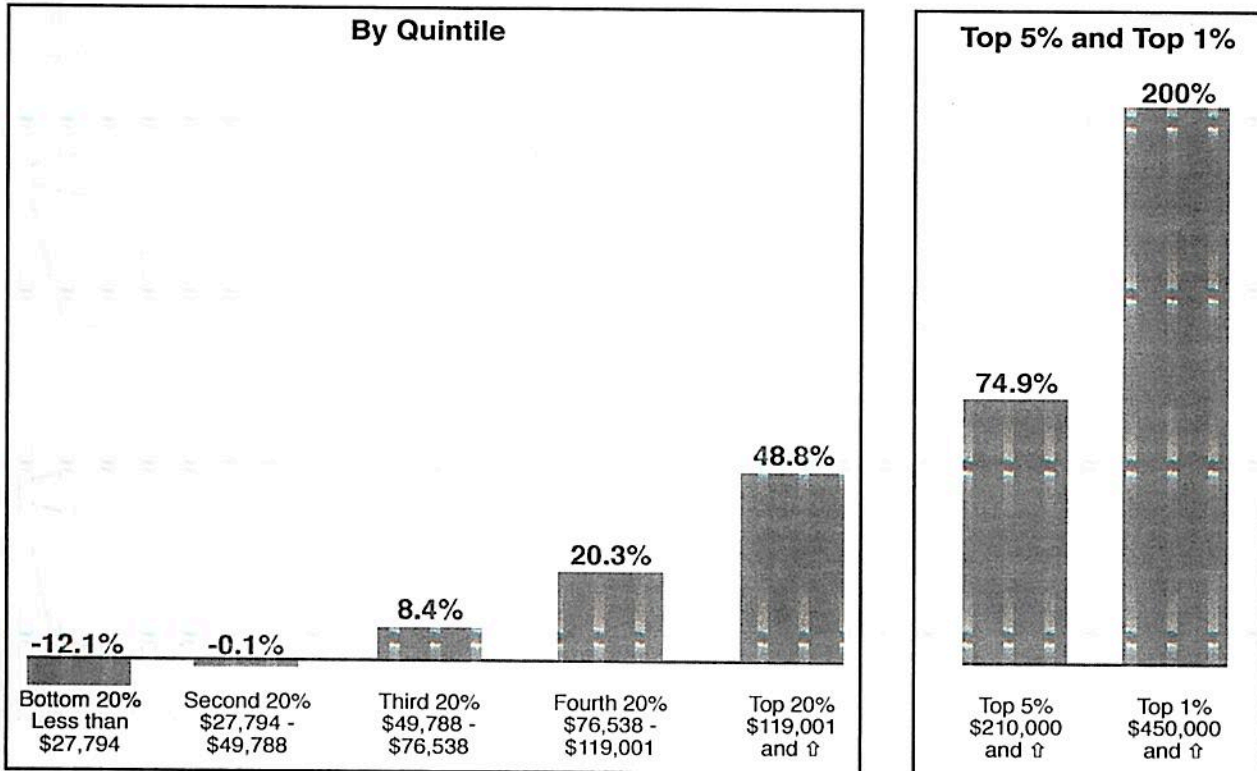
1. What series of events are displayed in these photos? That is, summarize the photo story in your own words.
2. Economists refer to the impact of the Deepwater Horizon disaster as a “negative externality,” an undesirable consequence not included in GDP. What specific negative externalities are suggested or revealed by either the pictures or text?
3. Which of the numbers in the document are included in GDP totals? Explain.
4. Which of the numbers in the document are not included in GDP totals? Explain.
5. How does this document help answer the question, “Does GDP tell the right story?”

Document H

Source: The Institute for Policy Studies, 2015.

Note: A quintile is one-fifth of a whole.

Changes in Real Family Income in the US from 1979 to 2012



Historical Note: This data contrasts sharply with the 1947-1979 period, in which all income groups saw similar income gains, with the lowest income group actually seeing the largest gains.

Document Analysis

1. What is a quintile?
2. We learned in Documents B, C, and D that real GDP in the United States increased between 1979 and 2012. Which quintile groups in the chart benefited from this growth in GDP?
3. Which income group on this graph experienced the biggest change in income from 1979 to 2012?
4. Which income group experienced the smallest positive change in income from 1979 to 2012?
5. Which income groups experienced a negative change in income from 1979 to 2012?
6. How does this document help answer the question, "Does GDP tell the right story?"