

Name: _____

Investigating Oil Production and Consumption with My World GIS Investigation Sheet

Crude oil (petroleum) was formed from the remains of tiny sea animals and plants that lived millions of years ago in marine (water) environment. In this activity, you will use My World GIS to investigate patterns of crude oil (petroleum) production and consumption. You will,

1. Examine countries with oil reserves.
2. Analyze crude oil production and consumption of countries in 1980 and 2008.
3. Investigate the relationship among countries' crude oil consumption and their populations.

Read **all** instructions on your handout and answer **each** question.

1. How many countries in the world have oil reserves? _____
Helpful hint: Click the **Oil Reserves (Billions Barrels)** column twice to sort it in descending order.
2. Which 4 countries have the most oil reserves in the world? List each country and the amount of oil reserves in the **Top 4 Countries with Oil Reserves Data Chart** below.

Top 4 Countries with Oil Reserves Data Chart

| Country Name | Total (Billions Barrels) |
|--------------|--------------------------|
| | |
| | |
| | |
| | |

3. Which 3 countries **increased** their oil production the most between 1980 and 2008?
Helpful hint: Click the **Oil Production Difference** column twice to sort it in descending order.
 - i. _____
 - ii. _____
 - iii. _____
4. Which 3 countries **decreased** their oil production the most between 1980 and 2008?
Helpful hint: Click the **Oil Production Difference** column twice to sort it in ascending order.
 - i. _____
 - ii. _____
 - iii. _____

5. How many countries produced oil in 2008? _____
Helpful hint: Click the **OP2008 (Thousand Barrels per Day)** column twice to sort it in descending order and scroll down.

6. Which 3 countries **increased** their oil consumption the most between 1980 and 2008?
Helpful hint: Click the **Oil Consumption Difference** column twice to sort it in descending order.

- i. _____
- ii. _____
- iii. _____

7. Which 3 countries **decreased** their oil consumption the most between 1980 and 2008?
Helpful hint: Click the **Oil Consumption Difference** column twice to sort it in ascending order.

- i. _____
- ii. _____
- iii. _____

8. How many countries consumed oil in 2008? _____
Helpful hint: Click the **OC2008 (Thousand Barrels per Day)** column twice to sort it in descending order and scroll down.

9. Based on the colors on the map, list two countries that had the largest population differences between 1980 and 2008.

Helpful hint: Look for countries that are dark blue in color.

- i. _____
- ii. _____

10. Which 3 countries' populations increased the most between 1980 and 2008?
Helpful hint: Click the **Population Difference** column once to sort it in descending order.

- i. _____
- ii. _____
- iii. _____

Oil Data Chart

| Country | Oil Produced in 2008 (Thousand Barrels per Day) | Oil Consumed in 2008 (Thousand Barrels per Day) | Per Capita Consumption 2008 (Barrels per Year) | Population in 2008 |
|---------------|---|---|--|--------------------|
| United States | 8,498.418 | 19,418.6895 | | 303,824,640 |
| Norway | 2,465.9551 | 217.3 | | 4,644,457 |
| Russia | 9,789.7627 | 2,900 | | 140,702,096 |
| China | 3,973.126 | 7,850 | | 1,330,044,544 |
| India | 883.5065 | 2,940 | | 1,147,995,904 |

Use the chart to answer questions 11, 12, and 17 below.

11. From where do you think India imported the additional oil it needed for consumption?

12. Where do you think Norway exported the oil it produced that was not consumed?

13. How was the oil transported to those countries?

14. What relationship exists between oil consumption and population change in a country?

Helpful hint: Look at your answers to questions 6 and 10.

15. What do you think causes this relationship?

16. How can a country decrease its oil consumption?

17. What patterns do you see in the data between per capita consumption and population?
