

Name: \_\_\_\_\_

## Investigating Natural Gas Production and Consumption with Web GIS Investigation Sheet

Natural gas is made up of remains of dead plants and animals that lived millions of years ago. In this activity, you will use Web GIS to investigate patterns of natural gas production and consumption. You will

1. Examine countries with natural gas reserves.
2. Compare natural gas production and consumption of countries in 1980 and 2008.
3. Investigate the relationship among countries' natural gas consumption and its population.

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

1. Which 6 countries have the most natural gas reserves in the world? List each country and the amount of natural gas reserves in the **Top 6 Countries with Natural Gas Reserves Data Chart** below.

**Top 6 Countries with Natural Gas Reserves Data Chart**

Country Name	Reserves (Trillions Cubic Feet)

2. Which countries produced a large amount of natural gas in 2008 and in 1980? List each country and the amount of natural gas it produced in the two data charts below.

**2008 Natural Gas Production Data Chart**

Country	Amount of Natural Gas Produced (Billion Cubic Feet)

## 1980 Natural Gas Production Data Chart

Country	Amount of Natural Gas Produced (Billion Cubic Feet)

**Important Note for Questions 3-6:** In 1980, Russia and other countries in Eastern Europe belonged to the Soviet Union. No natural gas production and consumption amounts were reported for Russia in 1980. Therefore you should not include Russia in your responses to Questions 3-6 below.

3. Which 3 countries **increased** their natural gas production the most between 1980 and 2008?  
**Helpful hint:** Click the **Change in Production** column twice to sort it in descending order.

- i. \_\_\_\_\_  
 ii. \_\_\_\_\_  
 iii. \_\_\_\_\_

4. Which 3 countries **decreased** their natural gas production the most between 1980 and 2008?  
**Helpful hint:** Click the **Change in Production** column twice to sort it in ascending order.

- i. \_\_\_\_\_  
 ii. \_\_\_\_\_  
 iii. \_\_\_\_\_

5. Which 3 countries **increased** their natural gas consumption the most between 1980 and 2008?  
**Helpful hint:** Click the **Change in Consumption** column twice to sort it in descending order.

**Important Note:** In 1980, Germany was two separate countries: East Germany and West Germany. No natural gas production and consumption amounts were reported for Germany in 1980. Therefore you should not include Germany in your responses to Questions 5-6 below.

- i. \_\_\_\_\_  
 ii. \_\_\_\_\_  
 iii. \_\_\_\_\_

6. Which 3 countries **decreased** their natural gas consumption the most between 1980 and 2008?  
**Helpful hint:** Click the **Change in Consumption** column twice to sort it in ascending order.

- i. \_\_\_\_\_  
 ii. \_\_\_\_\_  
 iii. \_\_\_\_\_

7. Use the Query Gas Database and the directions on your Student Handout to fill in the information below.

**Natural Gas Data Chart**

<b>Country</b>	<b>Natural Gas Produced in 2008 (Billion Cubic Feet)</b>	<b>Natural Gas Consumed in 2008 (Billion Cubic Feet)</b>
Russia		
Canada		
United States		
Algeria		
United Kingdom		

8. Where do you think Russia exported the natural gas it produced that was not consumed?

9. From where do you think the USA imported the additional natural gas it needed for consumption?

10. How was the natural gas transported to those countries?