

Name: _____

Investigating Coal Production and Consumption with Web GIS Investigation Sheet

Coal comes from the energy stored by land plants from swamps that lived hundreds of millions of years ago. In this activity, you will use Web GIS to investigate patterns of coal production and consumption. You will

1. Examine locations of coal fields in the USA.
2. Examine countries with coal reserves.
3. Explore coal production and consumption of countries in 1980 and 2008.
4. Analyze relationships between country populations and coal consumption.

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

1. What areas of the United States contain coal fields? _____

2. Use the **Map Legend** tool to get the names of 5 different coal fields.

i. _____

ii. _____

iii. _____

iv. _____

v. _____

Top 5 Countries with Coal Reserves Data Chart

Country Name	Total (Billions of Tonnes)

2008 Coal Production Data Chart

Country	Amount of Coal Produced (Thousand Short Tons)
1.	
2.	
3.	
4.	
5.	

1980 Coal Production Data Chart

Country	Amount of Coal Produced (Thousand Short Tons)
1.	
2.	
3.	
4.	
5.	

Important Note for Questions 3-7: In 1980, Russia and other countries in Eastern Europe belonged to the Soviet Union. No coal 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 2 countries were among the top five coal producers in **both** 1980 and 2008?

4. Which 3 countries **increased** their coal consumption the most between 1980 and 2008?

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

5. Which 3 countries **reduced** their coal consumption the most between 1980 and 2008?

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

6. Which 3 countries' populations increased the most between 1980 and 2008?

Helpful hint: Click the **Pop. Change** column twice to sort it in descending order.

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

7. Which are the top 3 countries with the highest population in 2008?

Helpful hint: Click the **Pop. 2008** column twice to sort it in descending order.

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

8. Which countries are both high producers and high consumers of coal?

Helpful hint: Look at your answers in the **2008 Coal Production Data Chart** and your answers to question 4.

9. What pattern exists between coal consumption and population?

Helpful hint: Look at your answers to questions 4 and 7.
