

## **Energy Resources Questions**

### **Coal and the Industrial Revolution**

Briefly explain why humans harness energy from Earth using the steam engine as your example.

Explain the origin of the Industrial Revolution and how natural resources played an important role in where it started.

Explain why/how coal become an important natural resource for society.

Explain the concept of primary and secondary energy.

Explain the relationship between greenhouse gas emissions and energy consumption.

Explain the relationship between greenhouse gas emissions and energy consumption.

Explain the different grades of coal in terms of energy value.

Explain how coal is related to acid rain.

Explain how coal is related to mercury contamination.

### **Oil and Natural Gas**

Describe how oil and natural gas form geologically.

Describe conventional and unconventional reservoirs for oil and natural gas.

Describe hydraulic fracturing.

Describe what "killed" coal in the United States.

### **Uranium**

Describe how uranium is used to generate electricity.

Describe the challenges associated with nuclear energy.

### **Hydroelectric**

How is energy in moving water used to generate electricity?

What are some challenges with hydroelectric power?

### **Wind and Solar Energy**

Describe how wind turbines are used to produce electricity.

## Energy Resources Questions

Describe how solar panels are used to produce electricity.

Describe intermittency with respect to solar and wind as energy resources.

Describe how battery storage is necessary to make solar and wind suitable as a substitute for baseload power.

Describe the relationship between domestic pollution in the United States and legislation.

Describe what needs to be done to provide electricity to the one billion citizens of Earth who do not have access to reliable electricity.