

Name _____

Energy Sources and Use

Use the graphics provided to answer the questions below.

1. Energy use per person, 2023

In general, which regions of the world use the most energy?

The least energy?

2. Global primary energy consumption by source

a. What is shown on the x axis?

On the y axis?

b. Describe how overall amount of global energy consumption has changed since the year 1800.

Which of the energy sources shown are fossil fuels?

c. Explain how the sources of energy changed between 1800 and 2023.

3. Fossil fuel consumption, per capita, 2023

Which two countries consume the most fossil fuel?

Which two consume the least fossil fuel?

4. Renewable electricity generation, World

a. How has the amount of renewable energy generation changed since 1965?

b. Which three sources of energy accounted for the majority of renewable energy generation in the year 2023?

5. Energy use per person vs. GDP per capita, 2022

What is the relationship between energy use per person and per capita GDP?

GDP (Gross Domestic Product) is the most common measure for the size of an economy, and it measures the value of total final output of goods and services produced by that economy in a certain period of time (Source: Eurostat).

6. Access to Energy

Compare these two maps:

- **Share of the population with access to electricity, 2022**
- **Share of the population with access to clean fuels for cooking, 2023**

What do you notice?

What do you wonder?

5. How clean is the energy you use?

Go to the Environmental Protection Agency's [Power Profiler Site](#) and type in your zip code.

- a. Describe fuel mix (%) of sources used to generate electricity in the area where you live.

- b. How does this compare with the average fuel mix for the United States?

- c. Compare the average emission rate in pounds of CO₂ per [MWh](#) for your area to the national average rate.