

# Graphing Energy Resources

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

## Worksheet A – Renewable Energy Basics

\*\*\* Complete the chart below about the basic types of renewable energy resources.

TYPE	EXAMPLES	ADVANTAGES	DISADVANTAGES
<i>Solar</i>			
<i>Hydroelectric</i>			
<i>Wind Energy</i>			
<i>Geothermal</i>			
<i>Biomass</i>			

1. **EXPLAIN** why fossil fuels are so important to allow aspects of everyday life to continue.
  - a. **EXPLAIN** why there is such a high demand for fossil fuels, yet they are in such a short supply.
2. Renewable resources and fossil fuels are both great examples of energy resources. **IDENTIFY three (3)** examples of the main **advantages** that *renewable energy* resources have over *fossil fuels*. Why do you think this is so?
3. **IDENTIFY three (3)** examples of the main **advantages** that *fossil fuels* have over *renewable energy* resources. Why do you think this is so?

## Worksheet B – Graphing Energy Facts

\*\*\* Part A: The data below identifies the U.S.'s primary energy consumption by source in 1973 and 1991.

U.S. Primary Energy Consumption ( Values expressed as % )

ENERGY SOURCE TYPE	1973	1991
<i>Petroleum</i>	<b>46.9 %</b>	<b>40.4 %</b>
<i>Nuclear Power</i>	<b>1.2 %</b>	<b>8 %</b>
<i>Hydroelectric/Solar/Wind Energy</i>	<b>4.1 %</b>	<b>4 %</b>
<i>Natural Gas</i>	<b>30.3 %</b>	<b>24.4 %</b>
<i>Coal</i>	<b>17.5 %</b>	<b>23.2 %</b>

1. Draw **TWO (2) PIE GRAPHS** for the data above. **LABEL** each energy source in both graphs with its *name* and *percentage*. **COLOR** each compartment with **DIFFERENT COLORS** to identify each energy source.

1973:

1991:

2. What is a **primary** energy source? How does it differ from a **secondary** source?
3. Which source **decreased** the most from 1973 to 1991? Why do you think this happened?
4. Which source **increased** the most from 1973 to 1991? Why do you think this happened?
5. Sunlight, wind, and running water are essentially "free". Yet these renewable energy sources make up a very small part of our energy consumption. **EXPLAIN** why you think this is true.