

ENERGY BROCHURE

Comparison of Energy Sources:

Select one of the following types of Energy Sources:

- Describe the type of energy source
- How this energy source can be utilized for energy
- Example of where this energy source is already in use
- Benefits to using this energy source
- Drawbacks to using this energy source
- Colored, labeled illustration for each type of energy source.
- Define what energy quality is and why it is important.
- Energy quality for each source.

Nonrenewable Energy Sources:

Nuclear	Fossil Fuels
Geothermal	

Renewable Energy Sources:

Solar	Water
Wind	Fuel Cells
Biomass	Tidal
Hybrid technology (plug in hybrid)	

- Which source of energy do you believe the U.S. and the world should focus their efforts on? Why?
- Do you believe that different countries should focus on different forms of energy production in the future? If so, why?
- What must be in place in order for this to occur? What are the major drawbacks preventing this from happening?
- Give an approximate timeframe for the implementation the U.S. or world's energy plan for the future. This is just an approximation...a guess.



ENERGY BROCHURE

1. Comparison of Energy Sources: (20pts)

For each of the type of Energy Sources:

- i) Describe the type of energy source
- j) How this energy source can be utilized for energy
- k) Example of where this energy source is already in use
- l) Benefits to using this energy source
- m) Drawbacks to using this energy source
- n) Colored, labeled illustration for each type of energy source.

Nonrenewable Energy Sources:

Nuclear	Fossil Fuels
Geothermal	

Renewable Energy Sources:

Solar	Water
Wind	Fuel Cells

2. Making an Energy Efficient House (20pts)

Location of windows	Type of plants
Type of windows	Type of water heater
Type of insulation, amount of insulation	Type of space heaters/coolers
Type of appliances	etc.

*Draw a blueprint for an energy efficient house. A few parameters:

- a) 1 cm \approx 1 foot. Remember, the larger the house, the more difficult it is to heat during the winter. Average house (not including the property) is 3 Bedroom, 2 Bathroom of about 1700 square feet.
- b) Legend to illustrate windows, doors, type of insulation, etc...
- c) Direction to orient house... N \longleftrightarrow S, E \longleftrightarrow W
- d) A written description on your house: what modifications have been done to the house and how does this make your house more energy efficient?
- e) You will be graded on energy efficiency, creativity, and detail in the explanation of your modifications.

