

EXAM EIGHT EXPECTATIONS

ENVIRONMENTAL SCIENCE EXAM EIGHT “Renewable Energy and Conservation”

STATE the regional area of the U.S. that has the greatest potential for solar power
STATE the largest energy consumers in an average U.S. home
DEFINE biogas
DEFINE biomass
DEFINE energy efficiency
DEFINE net energy yield
LIST energy sources that originated from the solar energy
LIST factors that effect that amount of solar radiation reaching the earth's surface
LIST potential fuels that can be used in fuel cell technologies
LIST environmental downsides associated with hydropower
LIST strategies employed by utility companies to save energy or reduce energy consumption
DISTINGUISH renewable and nonrenewable energy sources
IDENTIFY a fuel that is not converted from biomass
IDENTIFY examples and non-examples of biomass
IDENTIFY pros/cons to each alternative energy source discussed in your text
IDENTIFY the source of the most energy waste in North America
OUTLINE hydropower
OUTLINE tidal energy
OUTLINE geothermal energy
OUTLINE wind energy
OUTLINE ocean temperature gradients
OUTLINE cogeneration
OUTLINE solar power towers
OUTLINE solar ovens
OUTLINE geothermal heat pumps
OUTLINE plants use and storage of solar radiation
DESCRIBE the generation of electricity at night using photovoltaic cells
DESCRIBE photovoltaic cells
COMPARE alternative energies and conventional energies
COMPARE passive and active solar heating
COMPARE the competitive costs of various alternative energy sources
COMPARE flexible fuel vehicles (FFV's) and Plug-in hybrid electric vehicles (PHEV's)
EXPLAIN how homes incorporate solar passive heating
EXPLAIN what you & the author of your text believe is the most promising solution to our energy needs
EXPLAIN suitable locations fro wind farms
EVALUATE the agricultural production of growing one crop
EVALUATE the biomass as an energy source
EVALUATE the use of dung as fuel source
PREDICT the effects of monocultures
DISCUSS the use (potential or present) of photovoltaic cells in developing countries and or rural areas
DISCUSS wind as an energy source
DISCUSS geothermal energy
DISCUSS solar power
SUGGEST how eating habits could save energy
SUGGEST ways to save money on energy bills in your home (include easiest, cheapest, fastest etc)
DETERMINE energy saving behaviors or applications from a list of choices
ANALYZE a graph