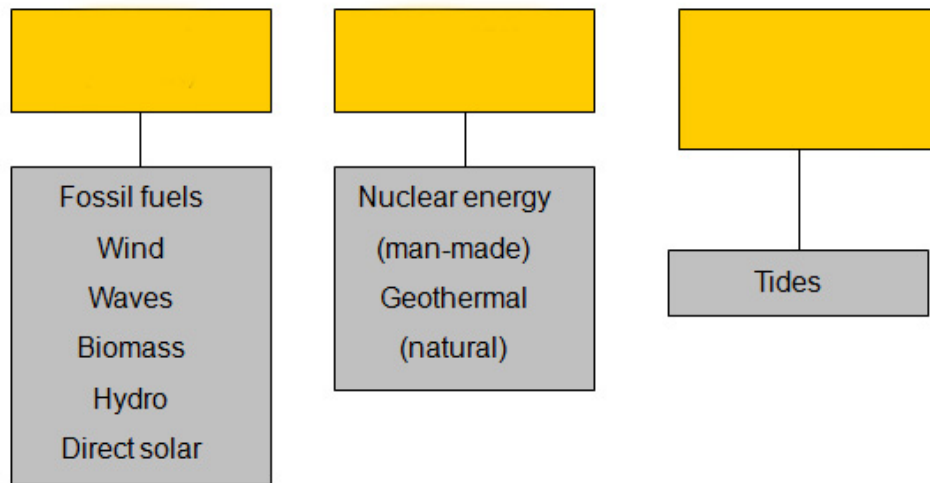


Energy

1. What do we need energy for?
2. Give 3 examples of fossil fuels. Why are they considered non-renewable energy sources?
3. Fill in the boxes with the words GRAVITATIONAL, FISSION and FUSION



4. It takes 8 units of energy to extract and refine uranium ore for use by the nuclear power industry. If the resulting energy released is 10 units what is the net energy ratio for nuclear power?
5. Explain how carbon dioxide and sulfur dioxide gases are produced from fossil fuel use. Which gas is linked to global warming, which is linked to surface water acidification?

Carbon dioxide:

Sulfur dioxide:

6. Where did the most serious accident experienced by the US nuclear industry occur? Was the accident more or less disastrous than the 1986 Chernobyl accident?

7. What is the name of the drug given to people in an effort to block the effects of radioactive iodine released after the explosion at Chernobyl in 1986?

8. Complete the table below:

Nonrenewable	%	Renewable	%
Oil	38	Biomass	3
Coal	24	Hydropower	5
Natural Gas	23	Geothermal	
_____	7	Solar	
Total	92	_____	

7. Rank the following forms of energy by electricity generating costs from most expensive to cheapest (per kilowatt hour):

- solar (photovoltaic)
- wind
- fossil fuel derived

8. If fossil fuels and nuclear power are so bad for the environment why aren't more people switching to renewable energy sources?

9. Using compact fluorescent lightbulbs, improving insulation, and using waste heat are all examples of increasing energy _____.

10. What is the connection between the increasing use of biofuels (biodiesel and ethanol) and the current world food shortage crisis?

BONUS: State two different units used for the measurement of energy.