**Unit 9 Notes: Energy Sources**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type** | **Description** | **Pros** | **Cons** | **Outlook** |
| Oil |  |  |  |  |
| Coal |  |  |  |  |
| Natural Gas |  |  |  |  |
| Biofuels |  |  |  |  |
| Nuclear |  |  |  |  |

<http://www.switchenergyproject.com/education/energy-101>

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type** | **Description** | **Pros** | **Cons** | **Outlook** |
| Geothermal |  |  |  |  |
| Hydroelectric |  |  |  |  |
| Solar |  |  |  |  |
| Tidal\* |  |  |  |  |
| Wind |  |  |  |  |

<http://www.switchenergyproject.com/education/energy-101>

\*Retrieve from class website

**Energy Sources Follow Up**

1. Of the 10 sources of energy you’ve studied, which appears to be the most promising for transportation uses 100 years from now? Explain your choice using the pros and cons you noted from the videos.
2. Of the 10 sources of energy, which appears to be the most promising for providing residential electricity (i.e. what you use in your home) 100 years from now? Explain your choice using the pros and cons you noted from the videos.
3. Divide the 10 energy sources into renewable and non-renewable.
4. Which energy sources produce NO emissions?
5. Other than air pollution, what are other types of pollution of concern with each of the energy sources? If none, indicate such.
6. People have burned trees as a source of energy. List several pros and cons of this energy source.

**1990 United States Renewable Electric Generating Capacity (Gigawatts)**

|  |  |  |
| --- | --- | --- |
|  | **Gigawatts** | **Percent of Total** |
| ***Hydropower*** | **75.1 Gigawatts** |  |
| ***Geothermal*** | **2.6 Gigawatts** |  |
| ***Biomass (Municipal Waste)*** | **2.0 Gigawatts** |  |
| ***Biomass (other)*** | **6.0 Gigawatts** |  |
| ***Solar Thermal*** | **0.40 Gigawatts** |  |
| ***Wind*** | **1.4 Gigawatts** |  |
| ***TOTAL RENEWABLE ENERGY USED*** | **87.5 Gigawatts** | **100%** |

1. Draw a BAR GRAPH below showing the generating capacity from the data table provided. On the vertical axis (y-axis), label Electrical Generating Capacity/Gigawatts, along with its values. On the horizontal axis (x-axis), label each of the energy sources. Use different colors and neatly label your graph with a legend (key).
2. Compute the PERCENT OF THE TOTAL that each resource provides and put the percent in the spaces provided in the data table. Then make a PIE GRAPGH below of the percent data that was calculated. Use different colors and neatly label the graph showing the percent of each.