**ENERGY FLOW CARD DECK**

**TEACHER NOTES:**

Primary and secondary energies are paired together. Final and useful energies can be mixed and matched with each other and with any primary/secondary energy. Students should be able to identify which type of energy (primary, secondary, final, useful) that each card is.

Print on card stock and cut apart – each group of students will get a “deck.”

|  |  |  |  |
| --- | --- | --- | --- |
| **PRIMARY** | **SECONDARY** | **FINAL** | **USEFUL** |
| Flowing river water | Electricity at hydropower plant | Electricity at power outlet | Power for your TV |
| Wind | Electricity at a windmill or wind turbine | Electricity at your stove | Heat to cook your food |
| Heated water from the Earth | Electricity at a geothermal power plant | Electricity to your house | Power for your lights |
| Wood | Electricity at a biomass power plant | Electricity to your refrigerator | Cool air for your food |
| Solar radiation | Electricity at a solar panel installation | Electricity to your furnace | Heat for your home |
| Ocean waves | Electricity at a tidal power plant | Electricity at power outlet | Power to charge your cell phone |

**Name**

**Student Note Taking sheet-**

Define and cut and paste two examples into the box.

|  |  |
| --- | --- |
| **Primary Energy-** | **Secondary Energy-** |
| **Final Energy-** | **Useful Energy-** |







**Answer Key**

**Name**

**Student Note Taking sheet-**

Define and provide an example of each type of energy.

|  |  |
| --- | --- |
| **Primary Energy- *the source of energy as it exists in the natural environment.***  **Examples-**  Free photo Crude Oil Oil Pump Oil Production Heating Oil Oil - Max ...  Free photo Gigantic Proportions Coal Coal Mining Dumper Belaz ... | **Secondary Energy-  *the form in which energy ready to be transported.***  **Examples-**  File:New Zealand Trucks - Flickr - 111 Emergency (79).jpg ...  File:Electricity Station, Prenton - geograph.org.uk - 198118.jpg ... |
| **Final Energy- *the energy you receive or buy as a consumer.***  **Examples-**  File:A gas pump, Jacksonville, FL.jpg - Wikimedia Commons  electrical outlet | This one was just too, too obvious once … | Flickr | **Useful Energy- *The energy that is used in your final application***  **Examples-**  Free photo: Bmw, Car, Front, Sports Car, Tuned - Free Image on ...  Free photo: Lamp, Old Fashion, Old, Retro - Free Image on Pixabay ... |