Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 

Sources of Energy

Remember that energy is the ability to cause a change in an object.

That change can be:

* moving it
* crushing it
* burning it
* changing its state like melting an ice cube.

We use many different sources of energy to do work

Energy sources can be grouped into two kinds:

|  |  |
| --- | --- |
| **RENEWABLE** | **NONRENEWALBE** |
| This type of energy does not run out. You can get more. It can be replaced in your lifetime. | This type of energy has a limited supply. It takes hundreds of millions of years to form.  |
| Examples: Solar Wind Hydropower Biomass Geothermal | Examples: Coal Natural Gas Petroleum or Oil Propane Nuclear or Uranium |

Each of these sources are obtained or collected in different ways.

Many are found in different places in the country and world.

Many are used to make electricity.

All of them have advantages and disadvantages.

Resource suggestions:

<https://www.need.org/need-students/energy-information-resources/>

Need Primary or Elementary Energy Infobook

My Energy Source is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The definition is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Renewable or Nonrenewable – circle one

Can it be used to make electricity? Yes or No

If renewable, how is it renewed \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

If it is nonrenewable, how do we get it?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

If it is a fossil fuel, how was it formed?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Where can it be found? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Does it need special machines or changes in the environment to use it? Yes No

Describe the machines \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Can using this energy source cause any damage to the environment? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Do we use this energy source in Ohio? Yes No

All energy sources have advantages and disadvantages.

Complete the chart below with three of each.

Use the book, The Shocking Truth about Energy as your first advantage and disadvantage.

|  |  |
| --- | --- |
| **Advantage** | **Disadvantage** |
|  |  |
|  |  |
|  |  |

If you were going to interview, Loreen Leedy, the author of *The Shocking Truth about Energy,* what question would you ask her?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Ten Sources of Energy Summary Notes

|  |  |  |  |
| --- | --- | --- | --- |
| **Source** | **Renewable or Nonrenewable** | **Advantage** | **Disadvantage** |
| **Coal** |  |  |  |
| **Petroleum** |  |  |  |
| **Natural Gas** |  |  |  |
| **Propane** |  |  |  |
| **Nuclear** **Uranium** |  |  |  |
| **Solar** |  |  |  |
| **Wind** |  |  |  |
| **Hydropower** |  |  |  |
| **Biomass** |  |  |  |
| **Geothermal** |  |  |  |