

Name _____

Date _____

One of the units that we cover this year is energy resources. This unit is related to the forms of energy discussed in chapter 4 and will be strongly linked to the information we learn later this year when we explore electricity in chapter 6.

Renewable and Non-Renewable Energy Assignment

Although most of the energy consumed in the United States comes from fossil fuel sources, there are many other potential sources of energy available. In all cases, there are pros and cons to our use of these sources. Some of the energy sources are limited by their availability or environmental impact; others need technological improvements before they can become widely used. For scientists and engineers, research is the best way to learn about unknown topics. In this activity, we will examine information about energy sources and how those sources are used to produce electrical energy.

Assignment: Research Non-Renewable and Renewable Resources and create a powerpoint presentation or Google Slides that describe each resource. The energy sources are listed below.

- Solar (Light from the Sun)
- Geothermal (Heat from the Earth)
- Wind
- Nuclear
- Hydropower (Water)
- Fossil Fuel Coal
- Fossil Fuel Natural Gas
- Fossil Fuel Oil

Be sure to include:

Slide 1: Title of Presentation with your full name, class period, and a picture

Slide 2: Define Renewable Resources and Non-Renewable Resources. Be sure to include a picture that represents Renewable Resources and a picture that represents Non-Renewable Resources

Slide 3-10: In this order (Slide 3- Solar, Slide 4-Geothermal, Slide 5- Wind, Slide 6-Nuclear, Slide 7- Hydropower, Slide 8- Fossil Fuel Coal, Slide 9- Fossil Fuel Natural Gas and Slide 10- Fossil Fuel Oil)

On each slide, be sure to include:

- The type of energy
- Describe in 1-2 sentences how this form of energy creates electricity.
- Is this energy renewable or nonrenewable? (1 Sentence)
- List 2 Advantages to using this form of energy
- List 2 Disadvantage to using this form of energy
- At least one picture of the form of energy

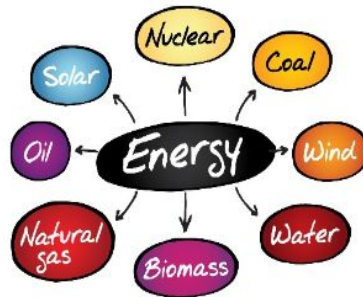
Due Date: must be e-mailed directly or shared (Google) by Tuesday March 24, 2020 by 11:45 pm.

Mrs. Sparaco/ Ms. Guthrie's students can email asparaco@roslynschools.org or sguthrie@roslynschools.org

Mrs. Ruber's students can email: jruber@roslynschools.org

Slide Examples:

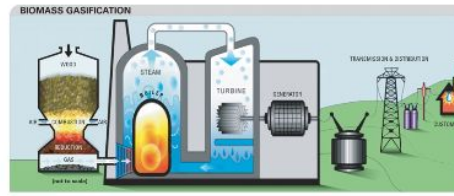
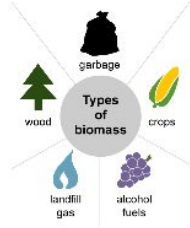
ENERGY RESOURCES



By Mrs. Ruber, Mrs. Sparaco and Ms. Guthrie
Period X

Slide 2: Define Renewable Resources and Non-Renewable Resources. Be sure to include a picture that represents Renewable Resources and a picture that represents Non-Renewable Resources

BIOMASS



- Organic material (wood, crops, waste materials) store energy from the sun. When they are burned, they release steam which causes a turbine to move to power a generator which creates electricity.
- Biomass is a renewable energy source.
- Advantages: widely available, reduces waste
- Disadvantages: Air pollution, a lot of space needed

Slides 3-10 should look like the “biomass” slide above. This is just an example! Each slide should be about a different type of energy source as per your rubric.

Rubric:

Slide Show	Wow: includes all requirements	Great Job: missing 1 requirement	Good missing 2-3 requirements	Needs Improvement missing more than 3 requirements	Not Present
Slide 1	5	4	3	2	0
Slide 2	5	4	3	2	0
Slide 3	5	4	3	2	0
Slide 4	5	4	3	2	0
Slide 5	5	4	3	2	0
Slide 6	5	4	3	2	0
Slide 7	5	4	3	2	0
Slide 8	5	4	3	2	0
Slide 9	5	4	3	2	0
Slide 10	5	4	3	2	0

Total: _____/50

Helpful Resources:

<http://www.columbia.k12.oh.us/RenewablevsNonrenewableSources.aspx>

https://www.ducksters.com/science/environment/renewable_energy.php

<https://www.eia.gov/kids/energy-sources/>

<https://www.solarschools.net/knowledge-bank/renewable-energy>

<https://www.solarschools.net/knowledge-bank/non-renewable-energy>