Resources that are capable of being Renewable resources.



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replenished

| Nonrenewable resources: | Resources that cannot | be replenished (made | again) in a short period | of time. | © 2017 Wyoming Agriculture in the Classroom Materials | |
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Stewardship Scenarios

Scenario One:

A third grader and her family live in Wyoming and have chickens. She noticed that the machine feeder that scatters the chickens' corn in the morning and afternoon has to be plugged in because it requires electricity. For a science fair project, she designs a wind turbine that will power a machine to feed the chickens twice a day. Her parents help her build it, and it works, allowing them to successfully feed the chickens without using additional electricity. The girl receives an A for her project.

Scenario Two:

A third-grade student comes home from school. As he walks through the house, he turns on a light in every room that he walks through. He ends up in the kitchen and stands in front of the refrigerator with the door open deciding on a snack.

Scenario Three:

A third-grade girl is doing her homework in her living room at 3:30. She is listening to music on her phone while watching her favorite cartoon. She also has the family's computer on, so she can research a topic. Two lamps and an overhead light are turned on, as well.

Scenario Four:

A third-grade boy's family is staying at a hotel while on vacation. He notices a card on the nightstand that talks about not receiving fresh towels and sheets everyday. He knows that hotels have to use a lot of water and electricity in order to wash and dry all of the towels and sheets. He and his family agree to not ask for new linens while they stay.



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|---|--|---|--|
|)irections: | Energy Resources Answer Key | - | |
| Match the word from the word | bank with the image of the ene | ergy source it describes. | |
| | Word Bank: | | |
| Wind | Oil | Coal | |
| Hydro | Natural Gas | Solar | |
| ptoto by Weston County Conservation District Solar | wind | photo by Stephanie Russell Hydro | |
| photo by Wyoming Petroleum Association Natural Gas | photo by Wyoming Mining Association Coal | photo by Wyorang Petraleum Association Oil | |



Name:

- Energy Resources -

Directions:

Match the word from the word bank with the image of the energy source it describes.





- Energy Resource Production -

Name:

| Wind power is collected using wind turbines. As the wind moves the blades of the wind turbine, it creates electricity. When the wind stops, the blades come to a rest waiting for the wind to return. | | N |
|--|---|---|
| Oil formed millions of years ago is pumped from underground and then re- fined to make fuel for electrical power plants. The oil is then burned to create steam, which turns a turbine that creates electricity. Once the oil from one area is gone, companies must find a new area with oil. | | N |
| Coal formed millions of years ago is mined out of the ground and taken to electrical power plants. There it is burned to create steam, which turns a turbine that creates electricity. Once the coal from one area is gone, companies must find a new area with coal. | | N |
| Solar power, or power from the sun, is collected using photovoltaic panels. The sunlight hits the solar panels and causes electrons to flow, producing electricity. Sometimes mirrors focus the sunlight to create steam, which turns a turbine that creates electricity. As long as the sun shines, power is created. | | N |
| Hydro, or water, power is formed when water turns a turbine creating elec- tricity. Often, these turbines are found near dams and reservoirs where there is enough water to turn the turbines. The water cycle keeps refilling the reser- voirs powering the turbines. | | N |
| Natural gas formed millions of years ago is pumped from underground and then piped as fuel for electrical power plants. The natural gas is then burned to create steam, which turns a turbine that creates electricity. Once the natural gas from one area is gone, companies must find a new area with natural gas. | R | N |

What are all of these energy resources producing?



| Lesson 1 - Exit Ticket | (Name/Date) |
|--|-------------|
| What makes a resource renewable? | |
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| What makes a resource nonrenewable? | |
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| What can you do to be a good steward of electricity? | |
| what can you do to be a good steward of electricity: | |
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| Lesson 1 - Exit Ticket | (Name/Date) |
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