

Name: _____

What is Renewable Energy?

An environmentalist is a scientist who finds ways to protect the environment. Some environmentalists protect the environment by finding new types of renewable energy. Renewable energy is a type of energy that comes from a source that doesn't run out.

Today, you will be an environmentalist who is designing a text message campaign to raise awareness about new forms of renewable energy. Before you create your campaign, you will read information about renewable and non-renewable energy and answer questions. Follow the steps below.

Step 1: Read about Renewable and Non-Renewable Energy

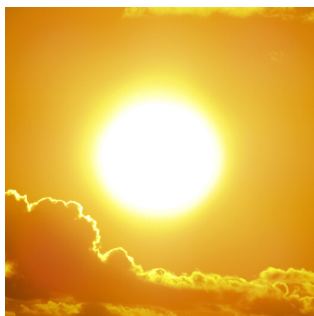
Energy is very important! Energy is used to create electricity. Humans use electricity to turn on light switches or charge their devices.



There are different types of energy. One type of energy is called non-renewable energy. Non-renewable energy comes from a source that can be used up over time. Once it is used up, there isn't any more left. For example, coal is a non-renewable energy source. Once we use up all of the coal on Earth, there won't be any more left!



Another type of energy is called renewable energy. Renewable energy comes from a source that cannot be used up over time. For example, sun and wind are renewable energy sources. We won't ever run out of sun or wind!



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Environmentalists want to find more types of renewable energy. One idea is to use algae as renewable energy source. Algae are organisms that live in water. Algae grows very quickly. This means that we won't run out of algae on Earth! When algae are used to create energy, pollution is not released into the air.



Environmentalists are concerned about using non-renewable energy sources, like coal. One reason is because many sources of non-renewable energy create pollution. For example, when coal is used, a lot of pollution is created! This pollution is bad for the environment. It also is bad for humans and animals to breathe. Another reason is because we might run out of non-renewable energy sources! When we run out, there won't be anymore to use to make electricity.



Step 2: Answer Questions

Answer the questions below about what you read.

1. Why is algae an example of a renewable energy source? Explain your reasoning.

2. Is coal a renewable or non-renewable energy source? Explain your reasoning.

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3. Why is coal bad for the environment?

4. Why do environmentalists want to find new types of renewable energy sources?

Step 3: Design a Text Message Campaign:

You will design a text message campaign to raise awareness about new forms of renewable energy. A text message campaign is a series of text messages sent to people about a certain topic. You will design four text messages for a campaign about a new renewable energy source.

Choose at least one type of renewable energy to feature in your campaign

Human poop

A single person creates over 300 pounds of human waste each year! Scientists are figuring out how to use human poop to create energy!

Sugar

Scientists are researching ways to use sugar to make energy!

Bacteria

Bacteria are tiny, simple creatures. Some bacteria are harmful to humans and can cause sickness. For example, E. coli are bacteria that can make humans sick. Other bacteria are helpful to humans. For example, some bacteria help our stomachs process food and keep us healthy. Scientists are researching ways to turn bacteria into energy!

Wind

Scientists are researching ways to convert wind into energy

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Brainstorm ideas for your 4 text messages. Use the space below to write out your ideas. Your text messages must meet the following requirements:

- One text message should explain the difference between renewable and non-renewable energy.
- At least two text messages should include emojis.
- One text message should explain why scientists are researching new types of renewable energy sources.
- One text message should describe the renewable energy source you chose.
- Text messages should not be more than 3 sentences.

Brainstorm your text messages below:

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Write out your text messages below:

