

Energy Science

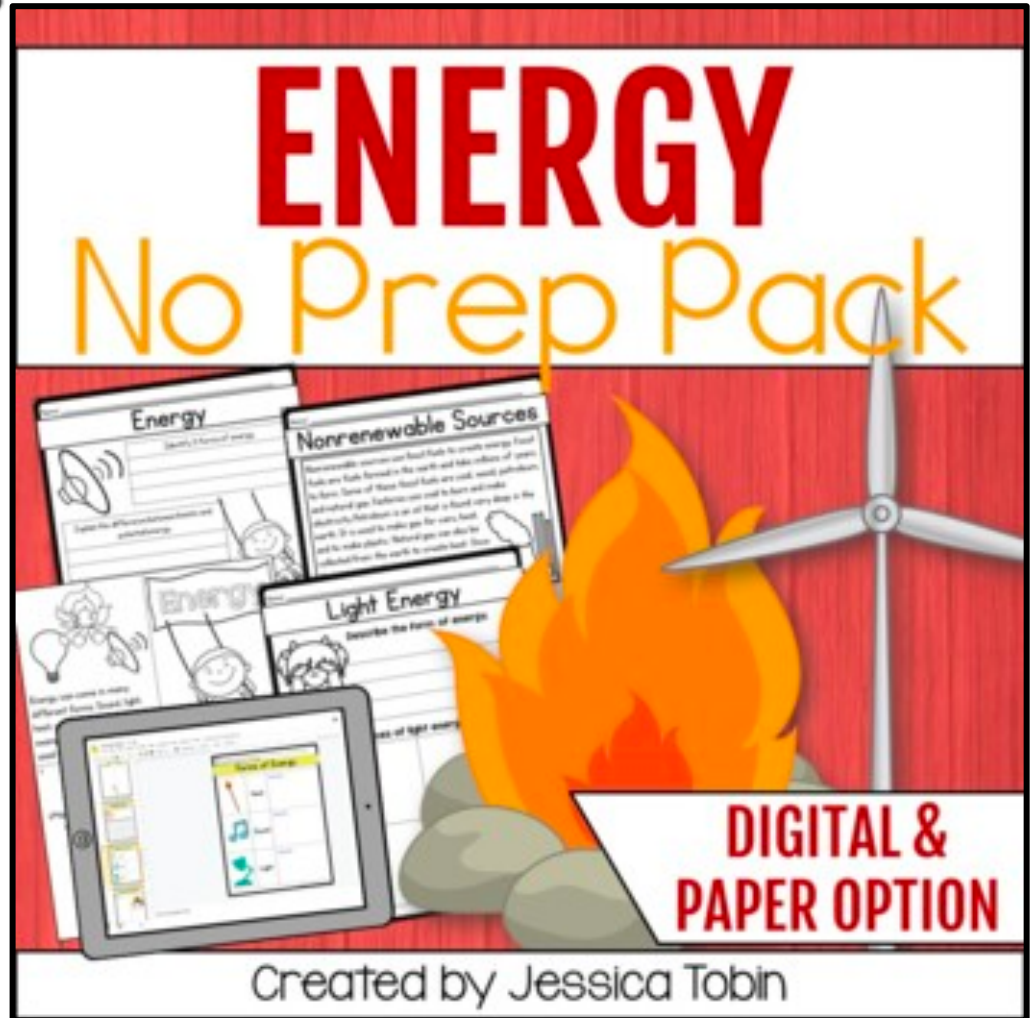
This energy science set is intended to be used as supplemental resources for your science unit.

Topics Covered:

- Potential & Kinetic Energy
- Forms of Energy:
(Heat, Light, Sound)
- Renewable & Non-Renewable
Resources

Resources Included:

- 6 Potential & Kinetic printables
- 2 Potential & Kinetic passages
- 9 Forms of Energy printables
- 3 Forms of Energy passages
- 6 Renewable & Non printables
- 4 Renewable & Non passages
- Fold and go mini readers



Digital Additions

The practice sheets and passages are now available in Google Slides format. I have not included the fold-and-go books since the setup of those will not work for Slides.

To open each set of science practice pages, click on the link below after reading these instructions. These links will open Google Slides.

What you need:

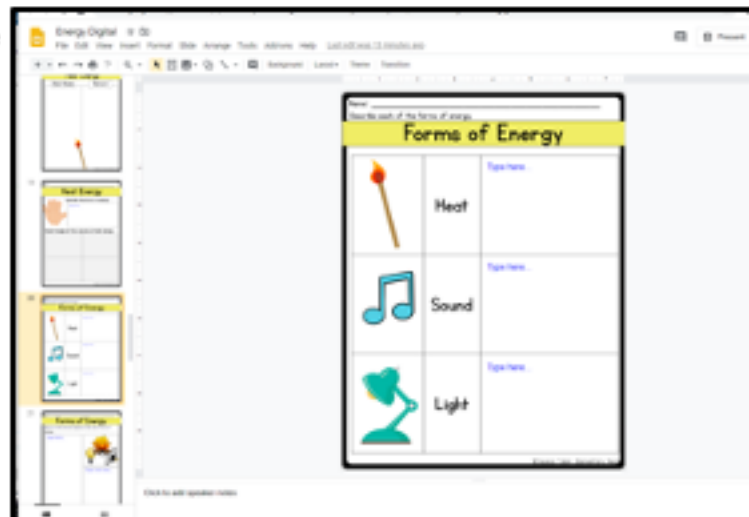
- A Google Classroom account

What to do:

- Open document using links on next page.
- Click "make a copy". This will be your master copy. Name it whatever you'd like.
- Make another copy to share with your students. Get the shareable link using the 'Share' button in the top right corner.

Options for sharing:

- Copy the *specific slide* you need and share it with your students.
- Share the *entire presentation* for them to fill out by a certain date or for use when they are reading independently.
- Create a graphic organizer folder for your students to access whichever ones they want/need.



Energy Science


Forms of Energy

3 Types of Energy

HEAT	LIGHT	SOUND
Explain it...	Explain it...	Explain it...


Heat

Heat is a form of energy. Heat cannot always be seen, but it can always be felt. The sun is the earth's main source of heat. It gives the earth its light and heat, and plants rely on warmer temperatures to grow. Fire is another main source of heat. When wood is burned, the energy is released as flames. An example of a man-made source of heat is a stove. Stoves can use gas, which transfers energy to the flames on top of the stove. Friction causes heat, too. If you rub your hands together very rapidly, it will warm them.




Heat Energy

Man-Made Natural



Light Energy


Describe the form of energy.



Draw four sources of light energy.


Forms of Energy

Write an informational magazine article about forms of energy.



Heat Energy


Describe the form of energy.



Draw four sources of heat energy.

Light


Light is a form of energy. It travels in waves very quickly. Light is what makes some things grow or change. Think of a plant. Without light, it will not grow. Sunlight is the most common natural form of light. It provides light so that we can see properly. The sun is not the only source that can help people see. There are many man-made sources of light. These can use electricity to work, such as light bulbs, TV screens, and lights on a car. Other sources are natural, such as the sun and stars.






How does light travel?

Light Energy

Man-Made Natural



Forms of Energy

	Heat	
	Sound	
	Light	

Sound


Sound is a type of energy. It travels in waves through objects, even if it cannot be seen. When a force makes something vibrate, the energy is released. This creates sound. Sound can only be made when something happens to an object. If a human hits a drum or the wind blows into the leaves, the sound is made.

Sound Energy

Man-Made Natural

Sound

Describe the form of energy.



Types of Energy Printables & Passages

Energy Science

Sources of Energy

There are different sources of energy. They can be categorized into non-renewable and renewable resources. Non-renewable resources are fossil fuels formed in the earth. These are made very slowly and take millions of years to create. Examples are coal, petroleum, and gas. These are used to make electricity and gas. Renewable resources are better for the environment because they can be replaced easily. Examples are wind, water, and sunlight. Solar power panels and wind turbines that create electricity capture some of these renewable resources.

1. What are non-renewable resources?

2. What are renewable resources?

3. How are they different?



Sources of Energy

Earth's Resources

RENEWABLE	NON-RENEWABLE
Explain them.	Explain them.

Sources of Energy

Compare and contrast renewable and non-renewable resources.

Renewable	Non-Renewable
	

Renewable Resources

There are sources of energy that happen naturally on earth. Renewable resources are easily replaced, such as wind, sunlight, and water. These are better for the earth than non-renewable resources. They are used to create energy. Wind can be used to generate electricity to power communities. The electricity can be created by the use of windmills and wind turbines. Water can also be used to make electricity. Dams use the movement of water to make electricity. Heat from the sun can be used by a solar panel to generate electricity.




1. What is a renewable resource?

2. Why do you think they are better for the earth than non-renewable resources?

3. Describe three renewable resources.

Renewable Resources

Describe each of the renewable resources.

Renewable Resource	Description
	Sunlight
	Water
	Wind

Non-Renewable Resources

Pros	Cons




Non-Renewable

Non-renewable resources use fossil fuels to create energy. Fossil fuels are fuels formed in the earth that can take millions of years to form. Some examples of fossil fuels are coal, wood, petroleum, and natural gas. Factories use coal to burn and make electricity. Petroleum is an oil that is found very deep in the earth. It can be used to make gas for cars, to produce heat, and to make plastics. Natural gas can also be collected from the earth. To create heat. Once these resources are used, they cannot be replaced. People are using them faster than they can be replaced naturally.

1. What is a fossil fuel?

Non-Renewable Resources

Describe each of the non-renewable resources.

Non-Renewable Resource	Description
	Coal
	Petroleum
	Natural Gas

Conserving Energy

List ways to conserve energy.

Conserving Energy

Some sources of energy will never run out, such as wind and sunlight. Others may eventually run out, such as coal and petroleum. These fossil fuels are being used at a rapid rate. The people on earth can help slow down the rate at which they are being used. Simple ways to conserve energy can help. When leaving a room, always turn off the lights. Use special bulbs that conserve energy. Turn down the heat and cover up with blankets. Carpool, ride a bus, or ride your bike to get places. There are many other ways to help conserve energy.

1. List all sources of energy you can. Explain.

2. Identify two ways to conserve energy.

3. What is a conservatively fossil fuel?

Renewable & Non-Renewable Resources Printables & Passages

Energy Science

Energy

What I Know What I Want to Know What I Learned

Kinetic Energy

All objects have energy. When objects are in motion, this is called kinetic energy. When objects are still, they have potential energy, but once force is applied to it, it has kinetic energy. It is energy in motion. A ball that was hit and is flying through the air is an example of kinetic energy. The heavier an object is and the faster it moves,

Potential Energy

Objects that are still in motion may not appear to have energy. However, they are full of energy. The energy that is in these still objects is just sitting there. This is called potential energy. Objects need something to happen in order to use the energy, such as force or heat. A swing-set has potential energy. It does not move unless wind or human force pushes the swings.

Energy

Compare and contrast kinetic and potential energy.

Kinetic Energy

Both

Potential Energy

Energy

Identify three forms of energy.

Explain the difference between kinetic and potential energy.

Energy

Complete the scheme and macroconcept chart for energy.

My Scheme

Energy

Write an informational magazine article about energy.

Energy is everywhere. It is all around us, in school, your car, and even in the breeze. The ability to do work. Energy makes things move. Energy is stored inside of something when it is not in motion, it becomes kinetic. Sun, light, sound, and heat. These can occur naturally or through electricity. Energy sources can be renewable, which is a form of energy that can be replaced. For the earth, non-renewable energy sources are fuels that come from the earth. These resources cannot be replaced, but they can be used.


1. What are three forms of energy?

2. What is energy?

3. Explain the difference between kinetic and potential energy.


Potential & Kinetic Energy Printables & Passages

Energy Science



Energy can come in many different forms. Sound, light, heat, and electricity are a few examples. They are created and used in different ways.

Energy



Energy is everywhere. It is the ability to do work. It makes things happen. The sun gives us light and heat. It is a form of energy. Energy is everywhere. It is the ability to do work. It makes things happen. The sun gives us light and heat. It is a form of energy.

Types of Energy


Name: _____

Write the question and answer in a complete sentence.

Describe heat energy.


Describe light energy.

Describe sound energy.



Since fossil fuels are being used quicker than they are produced, people need to conserve energy. Turning off lights, turning down the heat, carpooling, and riding bikes around town are a few ways to conserve energy.

Sources of Energy



Electricity is generated by power plants. Some power plants use coal, some use natural gas, and some use nuclear. Wind turbines, solar panels, and hydroelectric dams are examples of renewable energy sources. Renewable energy sources are those that can be replaced naturally. Fossil fuels are non-renewable energy sources. Non-renewable energy sources are those that cannot be replaced naturally.

Energy

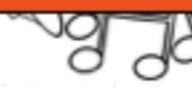
Name: _____

Write the question and answer in a complete sentence.


What is energy?

What is potential energy?

What are some forms of energy?



Sound is another form of energy. It travels in waves just like light. It can be heard. Sound occurs when something happens to an object, such as wind or human forces.



Heat is one of the forms of energy. It travels in waves very quickly. Heat and light are forms of energy. Heat and light are forms of energy. Heat and light are forms of energy.

Name: _____

Write the question and answer in a complete sentence.

What are three renewable sources of energy?

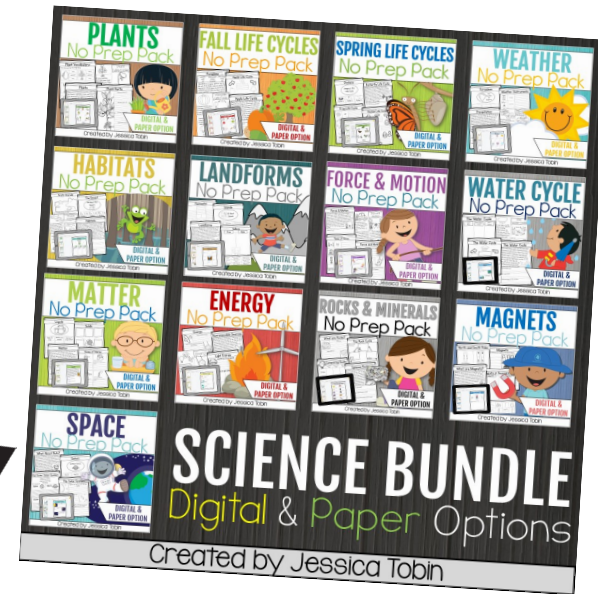
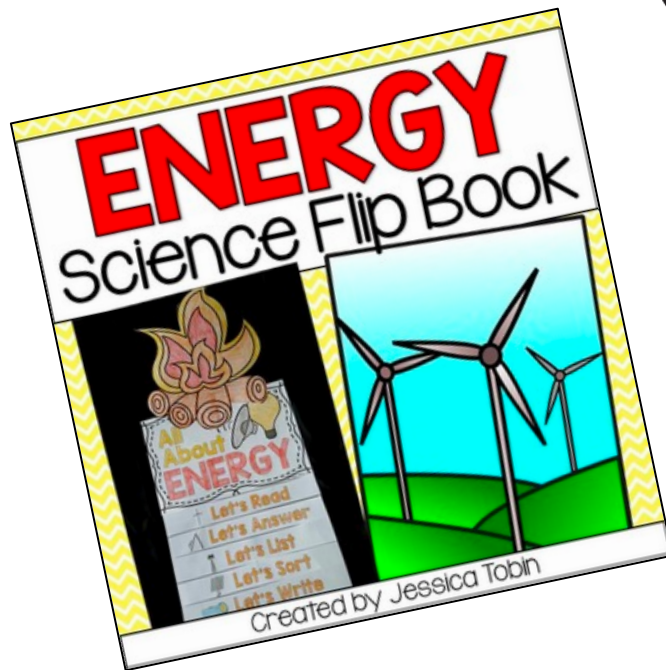
What is a negative result of using non-renewable resources?

How can people conserve energy?

Mini Books

You May Also Like...

If this no-prep layout looks ideal for your classroom, and you know you'll be needing resources like this for other topics, check out the [bundle](#) of 12 other science sets!



I also have science flip books in my store that match the no-prep resources I've made, too. If you're interested in extra resources for this topic, check out the [associated flip book!](#)