

## Part I. Types of energy

1. How would you define "energy"?

My definition of energy is the power for doing work and moving.

2. What is the difference between kinetic and potential energy?

The difference between kinetic and potential energy is that potential is stored energy and kinetic is just moving energy. Like a rollercoaster, it uses both energies. It just starts out up the hill while collecting energy (potential), then when it goes down, all that collected energy will let out, that's what makes a rollercoaster so fast. The taller the hill, the faster the rollercoaster is/will be. And I already know that's an obvious example for kinetic and potential energy.

3. List and define the 5 types of energy that you read about.

1. Mechanical Energy- is the energy of motion that does the work.
2. Heat Energy- is energy that is put into motion by using heat.
3. Chemical Energy- is energy provoked by chemical reactions.
4. Electrical Energy- is when electricity creates motion, light or heat.
5. Gravitational Energy- is energy that is caused by gravity.

4. Is there information on this site that you didn't notice on the first site you went to? What is it?

There is. I read that potential energy is also nuclear. It also gives me a more brief explanation of energy. Not that I changed my answer or anything. I'm serious. I didn't change my original answer. It also gave me a definition of potential and kinetic energy. It also gives the definition and an example with it.

5. Now classify the types of energy as potential or kinetic below:

**Potential:**

**Chemical Energy,**

"Is electromagnetic energy that travels in transverse waves."

**Mechanical Energy,**

"Is the energy of motion used to perform work."

**Nuclear Energy,**

“Is energy stored in the nucleus of an atom—the energy that holds the nucleus together.”

**and Gravitational Energy**

“Is motion that is caused by gravity.”

**Kinetic:**

**Radiant,**

“I electromagnetic energy that travels in transverse waves.”

**Thermal,**

“Or Heat Energy, is the energy that comes from the movement of atoms and molecules in a substance.”

“Of, using, producing, or caused by heat.”

**Motion,**

“Is energy stored in the movement of objects.”

**Sound,**

“ Is the movement of energy through substances in longitudinal (compression/rarefaction) waves. Sound is produced when a force causes an object or substance to vibrate.”

**, and Electrical**

“is delivered by tiny charged particles called electrons, typically moving through a wire.”

6. Revisit your definitions in number 3 above. Take a moment to rewrite that answer below, using more sophisticated information.

Mechanical energy “is energy stored in objects by tension. Compressed springs and stretched rubber bands are examples of stored mechanical energy.”

Heat energy is “thermal energy refers to the internal energy present in a system due to its temperature.”

Chemical energy is “is energy stored in the bonds of atoms and molecules. Batteries, biomass, petroleum, natural gas, and coal are examples of chemical energy. Chemical energy is converted to thermal energy when people burn wood in a fireplace or burn gasoline in a car's engine.

Electrical energy is "delivered by tiny charged particles called electrons, typically moving through a wire. Lightning is an example of electrical energy in nature."

Gravitational energy is "is energy stored in an object's height. The higher and heavier the object, the more gravitational energy is stored. When a person rides a bicycle down a steep hill and picks up speed, the gravitational energy is converting to motion energy. Hydropower is another example of gravitational energy, where gravity forces water down through a hydroelectric turbine to produce electricity."

## **Part II. Sources of energy**

7. What does it mean that energy can be renewable or nonrenewable?

What it means is that if an energy is renewable, that it can be reused or used again. You can use that energy again, or use that renewable energy with other renewable ones to make a new energy. When it's not renewable, you can't use it again. If you used it, it's gone, you can't use it again.

8. What percentage of the energy we use is nonrenewable?

The percentage of the energy we use that is nonrenewable is 89.3%. The other 10.4% is renewable.

9. Why is the answer to #8 important?

The answer to #8 is so important because we humans use too much nonrenewable energy which impacts the environment, its animals and us (humans) too. I think that's why we have pollution. We use too much nonrenewable energy. We need to lessen that amount of nonrenewable energy that we consume down like A LOT.