Energy

1. Definition

Energy is a property of matter that characterizes the net amount of heat plus work that we can get from this matter.

The SI units of energy are the joule.

- **property** A property is a characteristic of matter that describes its current state or condition. Examples: weight, speed, color, temperature, and so on.
- matter Matter is a generic term for anything made of atoms. Examples of matter: a bolt, a desk, a liter of air, a chunk of material inside a concrete pillar. Synonym: body.
- heat Heat is the transfer of energy from a hotter body to a cooler body. Examples: transfer of energy from a fire to a roasting marshmallow, transfer of energy from the sun to one's skin on a warm day, transfer of energy from a stove to a pan of water.
- work In thermo, work is an interaction that can change the energy of matter. In many practical situations, work involves getting a machine—chain saw, car, motor, and so on—to do something so we don't have to.

2. Examples of Energy

1. A liter of gasoline has about 32 million joules of energy. This means that we can use it do work or to provide heat or b

#Thermodynamics