

# Energy Starts with the Sun

Most of Earth's energy comes from the Sun. That giant ball of gas in the sky gives off a lot of heat and light, warming our planet, helping plants grow, and making the wind blow. Even fossil fuels are the Sun's energy stored in ancient plants from millions of years ago.

## Many Forms of Energy

Energy comes in many forms. You've heard of electrical energy, thermal energy (heat), and radiant energy (light). Nuclear energy can be released by splitting or combining atomic nuclei. Energy can also be converted from one form to another. For example: Digestion converts stored energy in food to other forms of energy that your body can use, such as mechanical energy to walk and run.

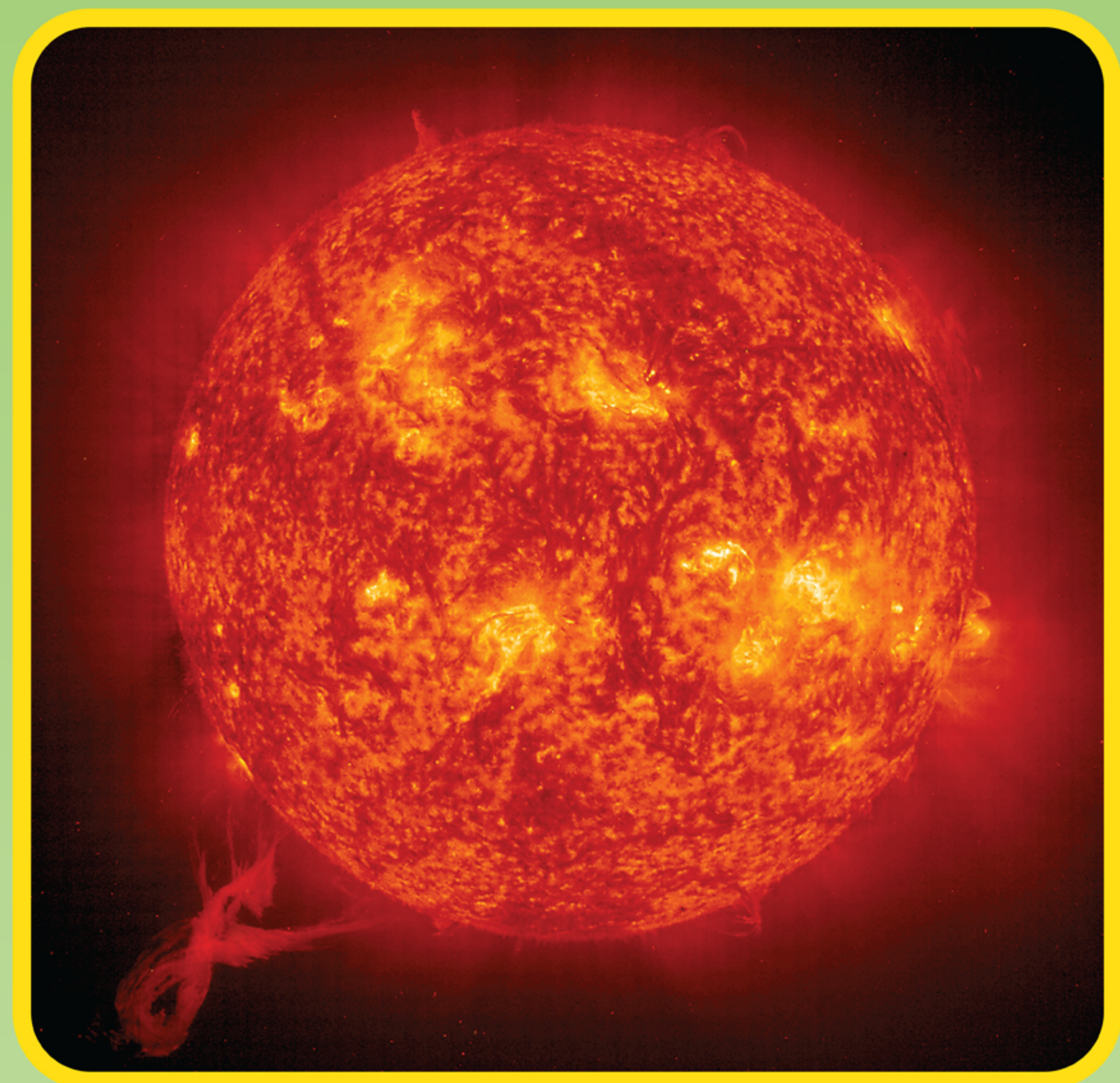


Photo Credit: SOHO

The Sun is the source for almost all energy on Earth. Solar energy absorbed by our planet in one hour is greater than that used by the world in one year.

**Energy** conversion is everywhere around us. An athlete converts energy from plants and animals to fuel his run. The plants and animals converted energy from the Sun to grow.



Photo Credit: Griszka Niewiadomski



Credit: NASA

## Power is Energy Over Time

Time is important where energy is concerned. An explosion that releases lots of energy over a short period of time is far more powerful than a light bulb that uses a little bit of energy over an extended period of time.

*The Orion spacecraft converts lots of chemical energy quickly to lift it into space.*