

Building Blocks of Science: Energy

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- 1. Where does almost all of the energy on Earth come from?**
- 2. Name the different forms that energy comes in.**
- 3. What is potential energy?**
- 4. When do humans use potential energy?**
- 5. What is kinetic energy?**
- 6. Give examples of when energy changes form?**
- 7. Can energy be destroyed?**
- 8. Where do fossil fuels come from?**
- 9. Why are fossil fuels called non-renewable resources?**
- 10. What are forms of renewable energy?**
- 11. What do most scientists believe is happening to the Earth and environment because of burning fossil fuels for energy?**

ANSWERS: Building Blocks of Science: Energy – Secondary

1. The sun.
2. Heat energy, Light energy, Sound energy, Motion energy, Electric energy, Chemical energy
3. Potential energy is energy that is stored for later use.
4. Humans use potential energy all the time. For example, batteries is stored energy that is used to power mobile phones, laptops, iPods and many other electronics.
5. Kinetic energy is energy in use. Humans use kinetic energy to move and function.
6. Coal turns from chemical energy into heat energy when it burns.
Batteries turn from stored chemical energy into electric energy.
Humans turn food (chemical energy) into kinetic energy.
7. No, it simply moves around and changes form.
8. Fossil fuels were formed from the remains of living things that died millions of years ago e.g. coal, oil and natural gas. They all have a lot of energy.
9. Once fossil fuels are used up, they cannot be replaced.
10. The sun provides renewable energy as does the wind, water and the heat in the core of the Earth.
11. Most scientists believe that the Earth is becoming warmer because the gases that are omitted when fossil fuels are burned are building up in the Earth's atmosphere, trapping in the heat from the sun.