

# Energy transfer: bounce quiz

*This quiz tests knowledge about the different forms of energy and how they are converted from one form to another.*

1. Energy is measured in ...

Are the following statements **true** or **false**:

2. Energy cannot be created or destroyed
3. Energy cannot be converted from one form to another
4. The total amount of energy in the universe will always be the same

Answer the following questions using one of these words:

**electrical, kinetic, strain, potential, heat, chemical, nuclear, light**

5. Anything lifted above the ground gains gravitational \_\_\_\_\_ energy.
6. When radioactive atoms decay they release energy. This type of energy is called \_\_\_\_\_ energy
7. Moving objects possess this kind of energy
8. A material which has been stretched (such as a spring) stores this type of energy.
9. Energy stored in the bonds of atoms can be released when they react. This form of energy is called \_\_\_\_\_ energy.
10. Substances which absorb \_\_\_\_\_ energy get hotter (i.e. molecules in the material vibrate or move faster: the molecules gain kinetic energy).
11. The movement of charge in a conductor possesses this form of energy.

Which of these objects produces the energy transfers which are described in the following questions:

**candle, drum, light bulb, green leaf, catapult, solar panel, a human, dynamo, pendulum**

12. Converts chemical energy to heat and light
13. Converts potential energy to kinetic energy which is converted back to potential which is then converted to kinetic and so on...
14. Absorbs the energy of sunlight and converts it to stored chemical energy
15. Converts kinetic energy to sound energy
16. This device can convert stored strain energy (sometimes called elastic energy) to kinetic energy
17. Converts chemical energy into kinetic energy, heat, sound, creativity, ingenuity, love, compassion, expression etc. etc. etc.
18. This device converts the energy in sunlight into either heat energy or electrical energy
19. Converts kinetic energy to electrical energy
20. Converts electrical energy to light energy and heat

Use the "Energy transfer: bounce quiz" at the [eChalk website](http://www.eChalk.co.uk) to help you answer these questions.