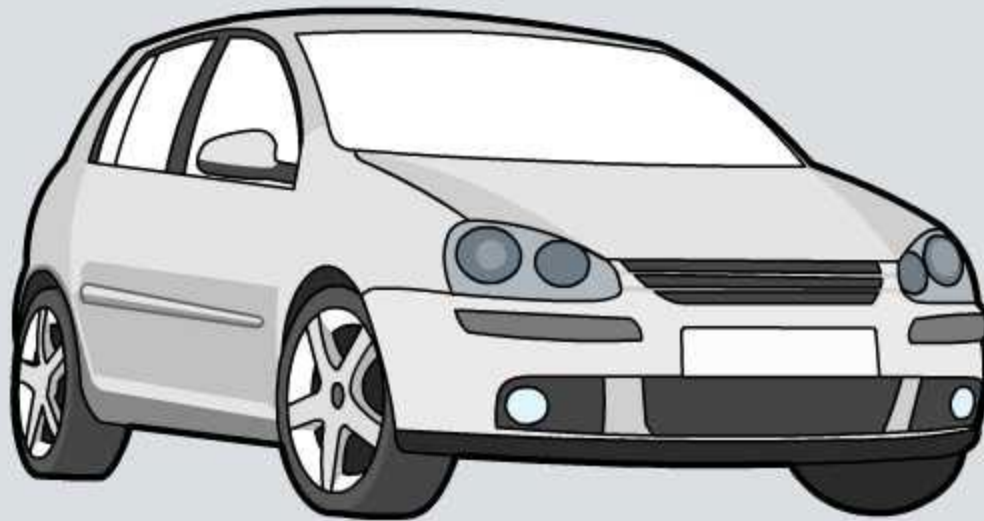


What is Energy?



Do you agree or disagree with these ideas about energy?

"Energy is how much an object is moving."



What is energy?

Energy can be defined as the ability to do work. It exists in many forms and can be changed from one form to another.

For example:

- Chemical energy in food is converted to thermal energy and kinetic energy by our bodies.
- Gravitational potential energy in a ball is converted to kinetic energy when it falls to the ground.



What other energy transfers can you think of?

In all these transfers the energy is not lost, it is conserved. **Energy cannot be destroyed or created.**



There are many different types of energy:

- thermal
- light
- sound
- elastic
- gravitational
- kinetic
- electrical
- chemical
- nuclear



Can you think of examples of each type of energy?



Match the types of energy to the examples

thermal

light

sound

elastic

gravitational

kinetic

electrical

chemical

nuclear

light bulbs, a Bunsen flame

talking, TV, radio

anything that uses electricity

anything that is moving

hot water, a hot radiator

a book on a shelf, a bungee jumper

a wind-up toy, a rubber band

nuclear bombs, power stations

food, batteries, burning things



solve



What are the input and output energies of each object?

1 of 6



fire

input

electrical

elastic

chemical

sound

gravitational

kinetic

output

heat and light

kinetic and heat

sound, kinetic, light and heat

sound, light and heat

electrical

kinetic, sound and heat

