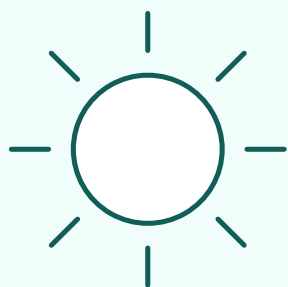


Energy Transfer and Conservation

8th Grade

Energy is never lost — but it does become less useful.



Energy cannot be created or destroyed, only transferred and converted. Some always ends up as waste heat.

- Kinetic energy is energy of movement.
- Potential energy is stored — gravitational, elastic or chemical.
- A falling object converts potential into kinetic.
- Efficiency = useful output ÷ total input.
- No machine is 100% efficient; friction always takes a share as heat.

LOOK FOR IT

A torch: chemical → electrical → light + heat. The heat is real energy, just not what you wanted.

'Energy is lost' means it became a form we cannot use. The total is unchanged.