



THE BIG IDEA

*Nothing goes, works, moves, or changes by itself. It always takes **energy** — and energy comes in just four active forms: **heat**, **light**, **electricity**, and **movement**. Four forms power everything you have ever seen go.*

One form can **change into another**: a lamp turns electricity into light, rubbing your hands turns movement into heat, the sun's light warms the pavement. Energy can also **hide in storage** — in a battery, a wound spring, a candle, your breakfast — and come back out later. But it always **comes from somewhere**: the switch on the wall is only a gate for electricity arriving by wire.

Burning does not destroy the wax — its tiny particles all remain; only the stored energy leaves, as heat and light together.

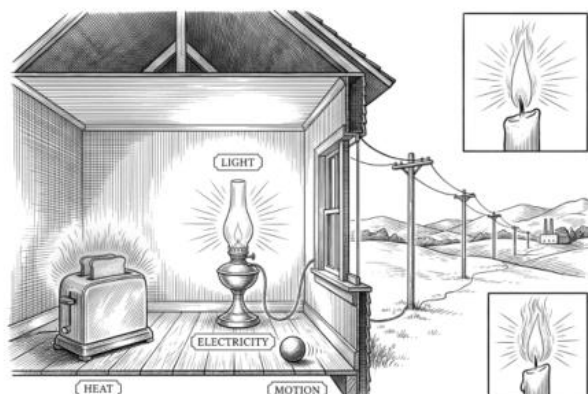


Fig. 1 — energy's four faces in one room: heat, light, electricity, motion — and the wire traced home to the power station

WORDS TO KNOW



energy

what makes things go, work, move, or change



heat

the warm form — it always flows toward cooler places



light

the bright form — it flows straight out from its source



electricity

the form that travels to us through wires



movement

the go itself — a push or a roll carrying energy along



stored energy

energy waiting its turn — in a battery, a spring, a fuel

WATCH FOR THIS IN EVERYDAY LIFE

- Follow any cord in the house to the wall — “*where is this lamp’s energy really coming from?*”
- Rub your hands together fast, then touch your cheek — “*which form just turned into which?*”
- Next machine you see going, name its form — “*heat, light, electricity, or movement?*”