

What energy can do



Lesson at a glance

Open with one clear clap and ask what made the sound possible — do not name energy yet. Then define energy as what makes things move, light up, warm up or make a sound, pointing at live room examples. Pupils whisper predictions, hunt the classroom in threes naming each energy job, and draw one find in the Investigation Journal. Close by sharing drawings by job and landing food energy with the playing and lunch picture cards.

Learning objectives

- Spot things in the room that use energy to move, light up, warm up or make sound
- Link food energy to running, playing and growing

Before the bell – prep

Print one class set of the six picture cards (fan, lamp, radiator, clapping hands, children playing, eating lunch) and hide them until step 6. Clear safe walking paths. Spot three guaranteed room examples in advance: a lit lamp or IWB, a clock or your voice for sound, and the children's own bodies.

Materials

Item	Qty	Per	Source	Low-cost substitute
Investigation Journal page	1	pupil	classroom	plain A4 paper for a quick labelled drawing if the journal page is not printed
energy picture cards (fan, lamp, radiator, clapping hands, children playing, eating lunch)	1	class	provided printable	six simple drawings on sticky notes or scrap card with the same labels
classroom energy examples already in the room (lamp or IWB, clock, radiator; fan if available)	1	class	classroom	teacher-led pointing and acting with the IWB or lamp, a clock or voice for sound, and children's bodies if a fan or separate lamp is not available



Safety watch-point

Walk, do not run. Do not touch hot radiators, hot lamps or plug sockets. Keep fingers away from any spinning fan. Stay inside the classroom.



Teaching moves

- **Getting Started:** Stand where all can see. Clap once, pause, and take a few calls (hands, bang, noise). Do not say the word energy yet — keep the clap as a curiosity hook only.
- **What is energy?:** Bridge from the clap, then name energy once. Keep the board to the short definition only. Point at one live thing for each job (IWB or lamp for light, your voice or a clock for sound, radiator if warm, a child wriggling fingers for move). Leave food energy off the board until step 6.
- **What will we find?:** Ask what the energy hunt might find. Take three or four whispered ideas aloud without judging. Nudge at least one body idea so food energy has somewhere to land later. Note two predictions on the board to revisit after the hunt.
- **Where's the energy?:** Group into threes and name groups before anyone stands. Model one full noticing cycle at the front on the lit IWB or lamp, then add a body model (clap or jog on the spot). Send groups off slowly; lead from the middle. After about six minutes clap once to freeze, invite two or three groups to act out a find, and ask watchers what energy job they see.
- **Draw something using energy:** Every child draws one find on the Investigation Journal page with a short job label if they can. Circulate and ask each child what their drawing is doing with energy. Offer the stem 'This uses energy to...' for children who want words.
- **Energy all around us:** Keep the drawing share snappy — call each job and let a few hold drawings up briefly. Guard the food-energy beat: show Card E (playing) and Card F (eating lunch), take two or three ideas, then say plainly that food gives bodies the power to run, play and grow. If sharing runs long, cut sharing rather than the food talk.

What it should show

Pupils typically spot lights, the IWB, a clock, a heater or radiator, and their own bodies moving or making sound. Successful drawings show a live object or body with a clear job (moves, lights up, warms up, makes a sound). A drawing of a closed book or still toy is a setup miss — ask whether it is doing a job right now and steer to a live example. The food-energy link lands when Cards E and F are held up together.



Misconceptions & interventions

- **Only machines or things plugged in have energy — bodies and food do not count.** — After the hunt, hold up the playing and lunch cards beside a body drawing. Ask what job the running children are doing and where that power came from, then revoice: food gives our bodies energy too.
- **Energy is stuff an object has, like the toy car itself is energy.** — Point at a still toy on a shelf and a lit lamp. Energy is what something needs when it is doing a job — moving, lighting, warming or making sound — not the object sitting still.
- **A child draws something that is not doing a job right now and still calls it energy.** — Ask gently: is it moving, lighting, warming or making a sound right now? Help them swap to a live room or body example before the share.

Differentiation

Emerging	Developing	Proficient
• Less confident children stay with you on the hunt and point while you name the energy job aloud. • Offer the stem 'This uses energy to...' and accept a simple drawing of one clear room object.	• Ask groups to find one room example and one body example, then label the job on their Journal drawing.	• Invite a confident child to revoice the food-energy link in their own words using Cards E and F, or to sort shared drawings into room jobs versus body jobs.

Cross-curricular hook

Link to SPHE healthy-eating talk — breakfast and lunch as the fuel for yard play and growing.