

What energy can do



Lesson at a glance

Open with a single clap and ask what made the sound possible, then name energy as what makes things move, light up, warm up or make a sound. Pupils whisper predictions, then hunt the classroom in threes pointing out energy jobs, including their own bodies. They draw one find in the Investigation Journal, then share by job while Cards E and F land the food-energy link: food powers running, play and growing.

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 keep them hidden until step 6. Spot three guaranteed room examples in advance (lit IWB or lamp, clock or voice, pupils' bodies). Clear walking paths between tables.

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 only — no running. Do not touch hot radiators, hot lamps or 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 called-out ideas without naming energy yet. Keep the picture cards out of sight.
- **What is energy?:** Bridge from the clap, write the short energy definition only, and point at one live room example for each job (IWB or lamp for light, your voice for sound, a wriggling finger for move). Leave food energy off the board until after the hunt.
- **What will we find?:** Whisper-pair, then take three or four ideas without judging. Nudge at least one body idea so food energy has somewhere to land later. Note two predictions on the board to revisit.
- **Where's the energy?:** Name groups of three before anyone stands. Model one full noticing cycle on the lit IWB or lamp, then a body clap or jog. Lead from mid-room; after about six minutes clap to freeze and invite two or three groups to act out a find while watchers name the energy job.
- **Draw something using energy:** Every child draws one find on the Investigation Journal page before the share. Circulate and ask what the drawing is doing with energy; offer the stem 'This uses energy to...' and redirect still objects toward a live example.
- **Energy all around us:** Keep the job-by-job drawing share to 1–2 minutes. Protect about three minutes for Cards E and F: ask where body energy comes from, then land clearly that food gives power to run, play and grow. Revoice any 'only plugs have energy' idea with the playing and lunch cards.

What it should show

Pupils typically spot lights, the IWB, a clock, voices, heaters if present, and their own moving bodies. Drawings show a clear object plus a job (rays, arrows or a short label). Many will not yet link body energy to food until Cards E and F; affirm body finds, then steer to breakfast or lunch as the source.

Misconceptions & interventions

- **Only machines or plug-in things have energy — not people.** — Hold up Card E (playing) and Card F (lunch). Ask what job the running children are doing and where that power came from; revoice that bodies use food energy too.
- **A still toy or closed book 'has energy' just because it is an object.** — Ask gently: is it moving, lighting, warming or making a sound right now? Help them switch to a live example that is doing a job.



Differentiation

Emerging	Developing	Proficient
• Walk with the teacher table and point while you name the energy job; draw the modelled IWB or lamp example with the stem 'This uses energy to... '.	• Find one room example and one body example; add a short job label (moves, lights up, warms up, makes a sound) on the Journal drawing.	• During share, explain in their own words how food links to a body job on their drawing; help revoice a classmate's still-object drawing toward a live energy job.

Cross-curricular hook

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