# Keep the Energy Conversation Going!

Your school is part of **Smart Energy Academy**—an educational initiative empowering students and families to help save **2 million kWh of energy** across Australia.

Here's how to extend the learning:

**In The Classroom:**

- Display your Smart Energy Academy poster to keep energy awareness visible.
- Incorporate the digital lesson plans, games, and resources available at EnergyAcademy.com.au.
- Encourage students to complete the Home Energy Survey with their families and return it to school.

**At Home:**

- Students share what they've learned about saving energy and water with their families at home.
- Families can explore tips at EnergyAcademy.com.au to reduce household energy use.

## Easy things you and your students can do to save energy!

1. Turn off lights and devices when not in use.
2. Switch to LED lightbulbs.
3. Use natural light and airflow before switching on heating or cooling.
4. Take shorter showers.
5. Recycle and reuse wherever possible.


**For questions or support:**

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www.energyacademy.com.au


The National Theatre for Children

**Save Energy. Save Resources. Save the Planet.**

SMART ENERGY ACADEMY

# Extension Activities

**Use these hands-on classroom and take-home activities to deepen your students' understanding of energy efficiency, resources, and everyday actions that make a difference. These activities complement your Smart Energy Academy experience and support Science and Sustainability outcomes across the Australian Curriculum.**

# Class Activity

## Who Turned Out the Lights?

**Learning Goal:**
Students investigate how electrical circuits work, how energy is transferred and transformed, and how electricity affects their daily lives.

**You'll Need:**
- A classroom where lights and non-essential devices can be safely turned off (teacher to manage)
- Circuit building kit: wires, bulb holders, small light bulbs
- AA batteries (one per student group)
- Paper for students to write on

Need help assembling your kit? Visit **EnergyAcademy.com.au/teacher-toolkit** for assistance.

**Procedure:**
1. Start by turning off the classroom lights and unplugging non-essential devices, creating a dark environment to help students experience a power outage.
2. Ask each student to write down their answers to the questions: "Why do we have no power?" and "What would you do if everything stopped working?"
3. Next, separate students into groups and guide each group to use the circuit kit and battery to build a simple circuit that lights a light bulb.
4. As they build, students label the parts of the circuit and note how energy is transferred from the battery, through the wires, to the light bulb.
5. After their circuit works, ask students to reflect: "What does electricity do?" and "What happens when devices are switched off or unplugged?"
6. End with a class discussion on key points:
    - What must happen for the bulb to light? (Wires connected to both ends of the battery, complete circuit)
    - What energy transfer is taking place? (Chemical > electrical > light/heat)
    - How does this relate to devices we use everyday?
    - How can we save energy at home or at school?

**Curriculum Links:**
Science (Years 3-6): Electrical energy, energy transfer, circuits and everyday uses.
General Capabilities: Critical & Creative Thinking, Sustainability, Personal & Social Capability.

# Home Activity

## One Hour Without Power

**Learning Goal:**
Explore how simple behaviour changes at home can reduce energy use and help families become more energy-smart.

**You'll Need:**
- A timer or phone stopwatch.
- A pencil and recording sheet (blank piece of paper).
- Help from a family member.

**Procedure:**
1. Choose a time in the afternoon or evening when your family is home together.
2. Set a timer for one hour. During this time, switch off:
    - Lights you don't need
    - TVs and gaming consoles
    - Computers and tablets
    - Chargers not in use
    - Any other non-essential appliances
3. Spend the hour doing low-energy activities such as reading, drawing, playing board games, or relaxing together.
4. After the hour, walk through your home and note what stayed switched off and what your family turned back on.
5. With your family, talk about which changes were easy, surprising, or challenging — and what lifelong habits you could adopt to save energy every day.

**Extension:**
Estimate how much energy your household might save if you repeated this challenge once a week for a whole year.

**Curriculum Links:**
Science (Years 3–6): Energy use; sustainability
General Capabilities: Critical & Creative Thinking, Personal & Social Capability, Sustainability