

Power Down



Overview

Track how devices use energy at school and at home. Create a plan to cut back for a day, explore simple energy-saving habits, and reflect on how it affects energy use, routines, and wellbeing.

Learning outcomes

- Track and reflect on energy use through everyday devices.
- Identify opportunities to save energy at home and school, including reducing "phantom energy" (devices drawing power while off).
- Reflect on the link between energy use, personal habits, and wellbeing.

Curriculum Connections

- Science: Energy, electricity, conservation, environmental impacts
- Mathematics: Data collection, measurement, comparison
- Health & Physical Education: Technology habits, routines, wellbeing

Materials

- Device tracking sheet (paper or digital)
- Optional: drawing/video tools for reflection

Proof to submit

Samples of student "Power Down" checklists (K-6) or tracking sheets (7-12)

Activity

Grades K to 6

Students work in teams to identify electronic devices around the classroom or school, including those that still use power when not in active use, creating a "Power Down" checklist. The class then brainstorms simple energy-saving habits. Each student chooses one habit to try at home and shares their experience with the class.

Grades 7 to 12

Students track all devices they use in a typical day, including those that draw phantom power when left plugged in, and estimate their total energy consumption. They then challenge themselves to cut that usage in half for one day. Afterwards, they reflect on which habits were easy or difficult to change, how it affected their mood and productivity, and summarize their insights in a short visual (poster, infographic, or video*).

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Resources for teachers

Visit the [Live Net Zero Classroom Challenge website](#) for additional resources and information.

Energy-saving habits

Here are a few ideas to get you started:

Lighting & spaces

- Turn off lights when leaving a room
- Use natural daylight whenever possible
- Close curtains/blinds at night to keep heat in (or during the day to keep heat out)
- Share a light source (e.g., one lamp for a group) instead of each using separate ones

Devices & Phantom Energy

- Turn off classroom projectors, smartboards, or speakers when not in use
- Unplug chargers, laptops, and tablets when not in use
- Use a power bar with an on/off switch to cut phantom power
- Shut down computers fully instead of leaving them in sleep mode
- Disconnect gaming consoles or TVs when not being used
- Choose board games, drawing, or outdoor play instead of screen time

Heating & cooling

- Put on a sweater or layer up instead of turning up the heat
- Use fans or open windows before switching on air conditioning
- Keep doors and windows closed when heating/cooling is on
- Block drafts with a rolled-up towel or draft stopper

What is phantom energy?

Some electronic devices continue to use a small amount of energy even when they are turned off or not actively being used. This is sometimes called phantom energy or standby power.

Power Down - Checklist - Elementary

Use this example to help create your own checklist. Choose the actions that make sense for your classroom or school.

Before leaving the classroom:

- ☐ Turn off the lights
- ☐ Turn off the projector
- ☐ Turn off the smartboard
- ☐ Shut down classroom computers
- ☐ Unplug chargers that aren't being used
- ☐ Turn off speakers or other devices
- ☐ Close windows and doors when heating or cooling is on

Teacher tip: Adapt the checklist to the devices and energy-saving opportunities available in your classroom or school.

Power Down - Tracking Sheet - High School

Name

Date

Device used	Time spent using device (mins/hours)	Does it still draw power when "off" or plugged in? (Yes/No/Unsure)	Estimated energy consumption (e.g., kWh)
Total			