
















Photo	Tool Name	Brief Description	Source
1 Natural Resources for Energy			
	Coal sample	Sample of coal as an energy resource.	Donated to Inside Ed
	Oil sands sample	Sample of oil sands as an energy resource.	Donated to Inside Ed
	Natural gas pipe	Model of a natural gas pipe demonstrating natural gas as an energy resource.	Lowe's and Brady Canada
	Nuclear sample (plastic replica)	Sample of uranium (<i>nuclear energy</i>) as an energy resource.	American Nuclear Society
	Solar sample	Example of a solar panel demonstrating the sun as an energy resource.	Amazon (Uxcell)
	Wind sample	Photo of a wind turbine demonstrating wind as an energy resource.	N/A
	Geothermal sample	Model of the earth demonstrating geothermal as an energy resource.	4Imprint
	Hydro sample	Photo of a hydroelectric dam demonstrating water as an energy resource.	N/A
	Biomass sample	Sample of biomass (<i>wood pellets</i>) as an energy resource.	Canadian Tire
	Magnetic Puzzle (Alberta Natural Resources Map)	Map of Alberta's natural regions and the natural resources found within each.	Made by Inside Ed
	Natural Resource Riddles (cards)	A series of 9 clues that correspond to each of the natural resource samples.	Made by Inside Ed


2 | Canada's Energy Landscape

	Energy Moves Board Game & Cards	Board game with 6 sets of cards - consultation, environmental assessment, resource extraction, transportation, reclamation & monitoring, and processing.	Made by Inside Ed
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3 | Electricity Generation

	Hand Generator	Converts mechanical energy to electrical energy to light a light bulb. Leads can also be attached to a multimeter, LED bulb, etc.	Kidder
	Multimeter	An instrument that measures electric current, voltage and resistance.	Kelvin
	D-Cell battery	A large battery used in the electromagnet building experiment.	Canadian Tire
	Bolt (zinc, 3in)	A zinc bolt used in the electromagnet building experiment.	Canadian Tire

All of the items on this list are available for purchase from various vendors. If you need a hand sourcing tools for your classroom, do not hesitate to reach out — we are happy to help! info@insideeducation.ca

Photo	Tool Name	Brief Description	Source
	Paperclips	Small and large paper clips used to test the strength of an electromagnet.	N/A
	Electrical tape	Electrical tape used to connect copper wire to the battery in the electromagnet building experiment.	Canadian Tire
	Insulated copper wire (20AWG)	Insulated copper wire used in the electromagnet building experiment.	Canadian Tire
	Electricity poster	The Electricity poster includes a number of activities on topics including electricity safety, natural resources for electricity, and generating electricity across Canada.	Made by Inside Ed




4 | Renewable & Alternative Energy

	Wind turbine model	This easy-to-build wind turbine model demonstrates how wind energy is captured. Includes a light and sound board and multimeter to measure output, and materials to experiment with the blade design.	Vernier Canada
	MudWatt Microbial Fuel Cell	This microbial fuel cell only requires an input of soil (<i>or compost</i>) to demonstrate how chemical energy can be turned into electrical energy using the power of microbes.	Forestry Suppliers
	Solar panel (1.5V)	This 1.5V solar panel contains photovoltaic cells that capture solar energy and convert it to electrical energy.	Amazon (Gtiwung)
	Mini light bulb (light output indicator)	A light output indicator can be used in various electricity demonstrations and experiments.	Ajax Scientific


5 | Expeience Fossil Fuels

	Mining posters (4)	The 4 mining posters give an overview of the mining industry in Alberta, including its products, environmental considerations, technology development, and careers.	Made by Inside Ed
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6 | Energy Efficiency & Conservation

	Energy Meter	Measures the amount of electrical energy consumed by an electrical device.	Donated by ENMAX
	LED light bulb	A source of electrical light that uses one or more Light Emitting Diodes (<i>LEDs</i>) to produce light.	Canadian Tire
	Incandescent light bulb	A source of electric light that works by incandescence, which is the emission of light caused by heating a filament.	Canadian Tire
	Lux Meter	A device that measures the brightness of illumination (<i>light</i>) of a surface.	Amazon (Btmeter)

7 | Energy Storage

	Zecar	This model car uses the stored kinetic energy of its flywheel to scoot across the floor.	Arbor Scientific
	Electric car model	This model car uses the stored energy of its battery to scoot across the floor.	Kidder

8 | Stewardship

	Infrared thermometer	An instrument that detects the infrared radiation emitted by an object to determine its temperature.	Walmart
	1,000 mL beaker	A 1,000 mL beaker can be used to measure the flow rate of a tap.	Uline