



Energy Transfers Lessons

Websites

[Yo-Yo Tricks](#)

This site gives instructions for basic yo-yo tricks such as “Loop the Loop” and “Walk the Dog” for use in the Energy Transfers lesson.

(<http://www.yoyoguy.com/info/yoyo/nonspin.html>)

[Rocket \(or 3, 2, 1 POP!\)](#)

This site shows students how to make pop rockets.

(<http://quest.nasa.gov/space/teachers/rockets/act3.html>)

[Toys and Games for Adults and Children](#)

This site features toys of the 19th century.

(<http://www.ushist.com/props/toys-and-games.htm>)

[Pneumatics \(Air-Powered Machines\)](#)

This site shows some pneumatics that students developed including a machine that shoots through the air and a machine that launches an airplane.

(<http://www.smm.org/sln/tf/p/pneumatic/pneumatic.html>)

[From Windmills to Whirlygigs: A Conversation with Vollis Simpson](#)

Come meet Vollis Simpson, mechanic and visual artist, who makes whirligigs, or wind-powered machines, out of the strangest materials!

(<http://www.sci.mus.mn.us/sln/vollis/video.htm>)

[Solar Hot Dog Cooker](#)

This site details how to set up a solar hot dog cooker in your classroom to demonstrate how solar energy can be transferred to do a useful task.

(<http://www.energyquest.ca.gov/projects/solardogs.html>)

[The History of the Refrigerator](#)

This site provides background information on the development of the refrigerator and many other common household appliances, including telephones and televisions.

(<http://www.gizmohighway.com/history/refrigerator.htm>)



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Books

Earth, Water, Fire and Air: Playful Explorations in the Four Elements

By Walter Kraul. (1995, Sagebrush Education Resources)

This gem of a book includes instructions for making a waterwheel, paddle-steamer, propeller plane, windmill, hot-air balloon, and lots more. It may be tough to find, but the search is well worth it!

Energy From the Sun

By Allan Fowler. (1998, Children's Press)

This book for early elementary readers examines how energy from the sun provides us with light, heat, food, and other things necessary for life on Earth.

Energy: Simple Experiments for Young Scientists

By Larry White; illustrated by Laurie Hamilton. (1996, Milbrook Press Trade)

This grade-appropriate book provides students with experiments they can perform using everyday materials.

Exploring Energy With Toys—Complete Lessons for Grades 4–8

By Beverly A.P. Taylor and Terrific Science Press. (1998, McGraw-Hill Trade)

This out-of-print book, funded by the National Science Foundation, uses toys to make learning about energy fun.

Pass the Energy, Please! (Sharing Nature with Children Book)

By Barbara Shaw McKinney; illustrated by Chad Wallace. (2000, Dawn Publications)

Presented in poetic text, this book shows how organisms “pass energy” through an ecosystem.

Classical elements typically refer to the concepts of earth, water, air, fire, and (later) aether, which were proposed to explain the nature and complexity of all matter in terms of simpler substances. Ancient cultures in Greece, Persia, Babylonia, Japan, Tibet, and India had all similar lists, sometimes referring in local languages to "air" as "wind" and the fifth element as "void". The Chinese Wu Xing system lists Wood (木), Fire (火), Earth (土), Metal (金), and Water (水), though item 4 EARTH WATER FIRE & AIR -EARTH WATER FIRE & AIR. £10.42. Free postage. item 5 Earth, Water, Fire and Air: Playful Explorations in the Four Elements (Picture K -Earth, Water, Fire and Air: Playful Explorations in the Four Elements (Picture K. £10.90. Free postage. item 6 Earth, Water, Fire and Air Playful Explorations in the Four Ele 9780863157684 -Earth, Water, Fire and Air Playful Explorations in the Four Ele 9780863157684. £11.25. Free postage. item 7 Earth, Water, Fire, and Air: Playful Explorations in the Four Elements. He has years of experience developing fun and educational toys and experiment sets connected with the four elements, and runs a specialist toy company, Spielzeug Kraul. Country of Publication. United Kingdom.