

## Literature of Electricity and Electrical Safety *March 2008*

As with many science topics, finding 'literature' which will solve all of your needs is rare. I could not find any fiction which incorporated electricity...someone could be the first author to do so! Let me know if you have any ideas – thanks! *Bruce*

### *For Teachers*

Robertson, William C. **Stop Faking It! Electricity and Magnetism.** *NSTA Press, 2005.* ISBN 0873552369. This is a fairly detailed review of electricity from the atom on up. It includes detail which is not necessary for elementary, but might be helpful for middle school and high school teachers who need some brushing up. *Teachers*

Van Valkenburgh and Nooger. **Basic Electricity: Revised Edition.** *Prompt, 1995.* ISBN 978-0790610412. The book if you really want to know more than the kids! This takes time, but will demystify electricity for many people. *Teachers, nerds, technicians*

### *Fiction*

#### *Non-fiction*

Bains, Rae. **Discovering Electricity.** *Troll Associates, 1992.* ISBN 978-0893755652. This book is accurate in describing electricity and the illustrations are beautifully done in water colors, though perhaps dated in style a bit (since 1982). It covers electricity as used in the home, and in the community (traffic light). It briefly explain electrons. The book touches on static electricity, battery power, and lightning. It explains circuits, conductors and insulators. *Upper elem.*

Birch, Beverly. **Benjamin Franklin's Adventures with Electricity.** *Orion Children's Books, 1995.* ISBN 978-0575060067. Without getting too technical, the story explains things that Franklin discovered about which materials conduct electricity and which don't, the connections he made between static electricity and lightning and details of his famous experiment with a kite in a thunderstorm. *Upper elem.*

Bridgman, Roger. **Eyewitness Electronics.** *DK Children, 2000.* ISBN 978-0789467249. A broad coverage of things electronic in the picture intensive style of DK. *Upper elem.* +

Carlson, Laurie. **Thomas Edison for Kids: His Life and Ideas, 21 Activities.** *Chicago Review Press, 2006.* ISBN 978-1556525841. A resource for parents, teachers and children to learn more about Thomas Edison's life, times and inventions in an engaging, hands-on manner. *Upper elem.*

Johnstone, Leslie and Levine, Shar. **Shocking Science: Fun & Fascinating Electrical Experiments.** *Sterling, 2000.* ISBN 978-0806922713. This attractive book covers the basics of electricity. An introduction emphasizes safety first and puts forth a complete list of supplies, most of which are readily available at home or from a hardware store. Levine and Johnstone present the history and theory behind static electricity, and explore electricity step by step through various concepts such as capacity, conductivity, flow of electrons, magnetism, and resistance. *Grades 3-6*

Cole, Joanna. **The Magic School Bus and the Electric Field Trip.** *Scholastic, Inc., 1997.* ISBN 0-590-44682-7. The class, along with Dottie, heads to the Magic School Bus to find out what happened, and goes to the power plant. They learn that electric circuits must be complete to allow an electric current to go through, and how a power plant makes power. They travel through transformers, wires, and vacuum cleaners and learn how different appliances are powered before returning to school. *Upper elem.*

Harlow, Rosie and Morgan, Sally. **Energy and Power (Young Discoverers: Environmental Facts and Experiments).** *Kingfisher, 2002.* ISBN 978-0753455029.

Parker, Steve. **Eyewitness Electricity.** *DK Children, 2005.* ISBN 978-0756613884. Topics include: Electric charge, electricity from chemicals, circuits and conductors, magnetism, electromagnets, magneto-electric machines, manipulating energy, electricity in the home, electrical appliances, communication, heat, pressure and light. *Upper elem. +*

*Also, Eyewitness: Matter by Cooper (1999) for those who need some more information about atoms and electrons.*

Riley, Peter. **Electricity and Power.** *Franklin Watts, 2005.* ISBN 978-0749655310. *Not reviewed.*

Shipton, P. **Science With Batteries.** *EDC Publishing, 1993.* ISBN 978-0746014233. This is a great book on batteries and how they work. *Elem.*

Sneddon, Robert. **Electricity and Magnetism.** *Heinemann, 1999.* ISBN-13: 9781575728681. Snedden has done a great job of giving full explanations throughout the text including warnings about trying any unsafe experiments that are presented within the history of electricity. This is a neat book that my students will love having as part of our science curriculum. Each new chapter comes complete with a "Try This" segment for hands-on learning. Useful diagrams and illustrations accompany each section to allow full understanding. A glossary is also included for easy comprehension. *Upper elem.*

Sneddon, Robert. **The History of Electricity.** *Steck-Vaughn, 1995.* ISBN-13: 9781568472508. *Upper elem.*

Sneddon, Robert. **Energy Alternatives.** *Heinemann, 2006.* ISBN 9781403487360. *Upper elem.*