

FURTHER READING AND WEB SITES

BOOKS

- Bloomfield, Louis A. *How Things Work: The Physics of Everyday Life*, 3rd ed. New York: Wiley, 2005. A college-level text that is easy to understand and covers a wide range of phenomena.
- Bodanis, David. *Electric Universe: How Electricity Switched On the Modern World*. New York: Crown Publishers, 2005. A narrative of the history and development of electricity, highlighting the pioneers who helped establish the principles and applications.
- Calle, Carlos I. *Superstrings and Other Things: A Guide to Physics*. Bristol, United Kingdom: Institute of Physics, 2001. Explains the laws and principles of physics, including electricity and magnetism, in a clear and accessible manner.
- Campbell, Wallace H. *Earth Magnetism: A Guided Tour through Magnetic Fields*. New York: Academic Press, 2001. A thorough discussion of Earth's magnetic field and its many effects.
- Coleman, Mark. *From the Victrola to MP3, 100 Years of Music, Machines, and Money*. Cambridge, Mass.: Da Capo Press, 2003. Music-making machines, from past to present.
- Davis, L. J. *Fleet Fire: Thomas Edison and the Pioneers of the Electric Revolution*. New York: Arcade, 2003. A history of the development of the electrical industry.

- Gibilisco, Stan. *Electronics Demystified*. New York: McGraw-Hill, 2005. A straightforward and accessible explanation of the fundamentals of electronics.
- Kruszelnicki, Karl. *Fidgeting Fat, Exploding Meat and Gobbling Whirly Birds*. New York: Wiley, 1999. Scientific answers to a large number of puzzling and quite often humorous questions of nature and technology.
- Lord, John. *Sizes*. New York: HarperPerennial, 1995. Puts into perspective the vast range of sizes and magnitudes of objects.
- Sekuler, Robert, and Randolph Blake. *Star Trek on the Brain: Alien Minds, Human Minds*. New York: W. H. Freeman, 1998. Electricity is crucial to brain function. This book explores the brain and how it works, with many references to the characters and aliens of the television and movie series *Star Trek*.
- Suplee, Curt. *The New Everyday Science Explained*. Washington, D.C.: National Geographic Society, 2004. Concise scientific answers to some of the most basic questions about people and nature. Richly illustrated.
- Swartz, Clifford. *Back-of-the-Envelope Physics*. Baltimore: Johns Hopkins University Press, 2003. A collection of simple but intriguing calculations covering a variety of phenomena from large to small, showing the usefulness of physics and elementary mathematics in understanding the world.
- White, Ron, and Timothy Edward Downs. *How Computers Work*, 8th ed. Indianapolis: Que, 2005. All about the computer, including the inner workings, with a wealth of illustrations.

WEB SITES

- American Institute of Physics. "Physics Success Stories." Available online. URL: <http://www.aip.org/success/>. Accessed on April 14, 2006. Examples of how the study of physics has impacted society and technology.
- American Physical Society. "Physics Central." Available online. URL: <http://www.physicscentral.com/>. Accessed on April 14, 2006. A collection of articles, illustrations, and photographs

- explaining physics and its applications, and introducing some of the physicists who are advancing the frontiers of physics.
- California Energy Commission. "What Is Electricity?" Available online. URL: <http://www.energyquest.ca.gov/story/chapter02.html>. Accessed on April 14, 2006. Discusses the basics of electricity in easily accessible language.
- Davidson, Michael W., and Florida State University. "Molecular Expressions: Electricity and Magnetism." Available online. URL: <http://micro.magnet.fsu.edu/electromag/index.html>. Accessed on April 14, 2006. Links to tutorials on capacitance, inductance, generators and motors, CDs, and other electrical and magnetic topics.
- Eck, Joe. "Superconductors." Available online. URL: <http://superconductors.org/>. Accessed on April 14, 2006. Great Web site containing articles on the history, uses, and types of superconductors, and news and explanations of ongoing research.
- Electricity Forum home page. Available online. URL: <http://www.electricityforum.com/>. Accessed on April 14, 2006. Contains information on the use and production of electricity, with sections devoted to static electricity, solar electricity, hydroelectricity, electricity generation, and many other topics.
- Epilepsy.com. "Epilepsy and the Brain." Available online. URL: http://www.epilepsy.com/epilepsy/epilepsy_brain.html. Accessed on April 14, 2006. A series of articles on the electrical aspects of normal brain function, and what goes wrong in the set of disorders known as epilepsy.
- Exploratorium: The Museum of Science, Art and Human Perception. Available online. URL: <http://www.exploratorium.edu/>. Accessed on April 14, 2006. An excellent Web resource containing much information on the scientific explanations of everyday things.
- Global Hydrology and Climate Center (GHCC). "Lightning and Atmospheric Electricity at the GHCC." Available online. URL: <http://thunder.msfc.nasa.gov/>. Accessed on April 14, 2006. A Web site devoted to the activities of a group of scientists at the Global Hydrology and Climate Center who study lightning

and atmospheric electricity. An essay on lightning's causes and effects is included.

HowStuffWorks, Inc., home page. Available online. URL: <http://www.howstuffworks.com/>. Accessed on April 14, 2006. Contains a large number of articles, generally written by knowledgeable authors, explaining the science behind everything from computers to electromagnetism.

Jenkins, John D. "Development of the Electromagnet." Available online. URL: <http://www.sparkmuseum.com/MAGNET.HTM>. Accessed on April 14, 2006. The history of electromagnets, including illustrations of some of the many devices that have been made with electromagnets over the years.

National Aeronautics and Space Administration (NASA) home page. Available online. URL: <http://www.nasa.gov/>. Accessed on April 14, 2006. News and information from the United States agency devoted to the exploration of space and the development of aerospace technologies. A Web site that contains a huge number of resources, including photographs, movies, and clear and accurate explanations of the science of space exploration.

Stern, David P. "Magnetism." Available online. URL: <http://www-spof.gsfc.nasa.gov/Education/Imagnet.html>. Accessed on April 14, 2006. Discusses the fundamentals of magnetism and provides links for further information.

University of New South Wales, School of Physics. "Electric Motors and Generators." Available online. URL: <http://www.phys.unsw.edu.au/~jw/HSCmotors.html>. Accessed on April 14, 2006. An excellent Web page that contains information on all types of electric motors, generators, and transformers, with plenty of animated illustrations.