Further Reading and Web Sites

BOOKS

Atkins, P. W. *The Second Law.* New York: W. H. Freeman & Company, 1984. Written by a scientist, this book examines the second law of thermodynamics from a conceptual, nonmathematical perspective.

Bloomfield, Louis A. *How Things Work: The Physics of Everyday Life.* 3rd ed. New York: Wiley, 2005. This is a college-level text but is easy to understand and covers a wide range of phenomena.

Calle, Carlos I. *Superstrings and Other Things: A Guide to Physics.* Bristol: Institute of Physics, 2001. Calle explains the laws and principles of physics in a clear and accessible manner.

Davies, Paul. *How to Build a Time Machine.* New York: Penguin, 2003. Focusing on black holes and wormholes, this book describes what a scientifically plausible time machine could look like and how it might work.

Hawking, Stephen. *The Universe in a Nutshell.* New York: Bantam, 2001. Hawking, a physicist well known for his work involving gravitation and cosmology, presents a fascinating tour of the universe in this richly illustrated volume.

Goldstein, Martin, and Inge F. Goldstein. *The Refrigerator and the Universe: Understanding the Laws of Energy.* Cambridge, Mass.: Harvard University Press, 1995. Accessible reading material

on thermodynamics is rare, but this book explains the laws and concepts of thermodynamics on a basic and enjoyable level.

Kras, Sara Louise. *The Steam Engine.* Philadelphia: Chelsea House Publishers, 2004. Not only does this book describe the development of this revolutionary device, but it also discusses how and why the steam machine changed society, industry, and economy.

Pickover, Clifford A. *Time: A Traveler's Guide.* Oxford: Oxford University Press, 1999. A noted science writer, Pickover offers a lighthearted but scientifically accurate look at time and time travel.

Smil, Vaclav. *Energies.* Cambridge, Mass.: MIT Press, 1999. A look at energy and how its many forms shape and contribute to civilization and the environment.

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.

Von Baeyer, Hans Christian. *Warmth Disperses and Time Passes: The History of Heat.* New York: Modern Library, 1999. This volume explores the evolution of the science of thermodynamics, providing insight into how the laws of thermodynamics were discovered and what they mean.

WEB SITES

American Institute of Physics. "Physics Success Stories." Available online. URL: http://www.aip.org/success. Accessed on May 9, 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 May 9, 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 even further.

American Society for Microbiology. "How Thermophiles Survive Extreme Heat." Available online. URL: http://www.microbe.

org/microbes/thermophiles.asp. Accessed on May 9, 2006. Explains how the molecules of heat-loving microorganisms have adapted to extreme temperatures.

Equine Center, The. "Thermography." Available online. URL: http://www.theequinecenter.com/thermography.htm. Accessed on May 9, 2006. Explains the use of thermography in veterinary medicine.

Environmental Protection Agency (EPA). "Global Warming." Available online. URL: http://www.epa.gov/globalwarming/kids. Accessed on May 9, 2006. The EPA is a United States government agency devoted to studying and protecting the environment. This Web site is intended for young students and explores the topic of global warming.

Environmental Protection Agency (EPA). "Heat Island Site." Available online. URL: http://www.epa.gov/hiri/index.html. Accessed on May 9, 2006. A collection of web pages that explains the phenomenon of higher temperatures in cities and discusses potential solutions to reduce or curb the problem.

Exploratorium: The Museum of Science, Art and Human Perception. Available online. URL: http://www.exploratorium.edu. Accessed on May 9, 2006. An excellent Web resource containing much information on the scientific explanations of everyday things.

Haynes, Leland R. "SR-71 Blackbirds." Available online. URL: http://www.wvi.com/~sr71webmaster/sr-71~1.htm. Accessed on May 9, 2006. A huge quantity of information on one of the fastest vehicles in the world, collected and maintained by a retired United States Master Sergeant.

HowStuffWorks, Inc., homepage. Available online. URL: http://www.howstuffworks.com. Accessed on May 9, 2006. Contains a large number of articles, generally written by knowledgeable authors, explaining the science behind everything from computers to satellites.

National Aeronautics and Space Administration (NASA) homepage. Available online. URL: http://www.nasa.gov. Accessed on May 9, 2006. News and information from the United States agency devoted to the exploration of space and the develop-

ment of aerospace technologies. This Web site contains a huge number of resources, including photographs, movies, and clear and accurate explanations of the science of space exploration.

National Institute of Standards and Technology (NIST). "NIST-F1 Cesium Fountain Atomic Clock." Available online. URL: http://tf.nist.gov/timefreq/cesium/fountain.htm. Accessed on May 9, 2006. NIST is a government agency whose mission is to develop and apply accurate methods of measurement, including the measurement of time. This Web page explains an atomic clock, the NIST-F1, which is the most accurate clock in the world.

Nave, Carl R. "HyperPhysics Concepts." Available online. URL: http://hyperphysics.phy-astr.gsu.edu/hbase/hph.html. Accessed on May 9, 2006. This comprehensive resource for students offers illustrated explanations and examples of the basic concepts of all the branches of physics, including heat and thermodynamics.

NOVA Online. "Time Travel." Available online. URL: http://www.pbs.org/wgbh/nova/time. Accessed on May 9, 2006. This Web site is a companion to an episode of *NOVA* that explores the possibility of time travel. *NOVA* is a popular PBS television series consisting of documentaries on a variety of science and technology topics.

Stern, David P. "Seasons of the Year." Available online. URL: http://www-spof.gsfc.nasa.gov/stargaze/Sseason.htm. Accessed on May 9, 2006. Illustrated account of the seasons, with links to related topics including latitude and longitude, sundials, and navigation.