# 6. INSTRUMENTS AND OTHER EQUIPMENT

Since meteorology is an observational science, instruments play an important role in gathering information about the atmosphere. Weather stations can be built and outfitted with weather instruments, but they typically are expensive, so price comparisons should be made prior to purchase. Catalogues and price lists may be obtained from reputable scientific supply houses. Selected updated address lists of suppliers of scientific and instructional equipment can be found in the annual issue of the *Science Education Suppliers Supplement* and other publications from the National Science Teachers Association (NSTA):

1742 Connecticut Avenue, N.W., Washington, DC 20009-1171.

Phone: (202) 328-5800

Before purchasing weather instruments, the following references should be read:

Snow, J.T., and S.B. Harley, 1987: Basic meteorological observations for schools: Temperature. *Bulletin of the American Meteorological Society*, **68**, 486-496.

Snow, J.T., and S.B. Harley, 1988: Basic meteorological observations for schools: Rainfall. *Bulletin of the American Meteorological Society*, **69**, 497-507.

Snow, J.T., M.E. Akridge, and S.B. Harley, 1989: Basic meteorological observations for schools: Surface winds. *Bulletin of the American Meteorological Society*, **70**, 493-508.

Snow, J.T., M.E. Akridge, and S.B. Harley, 1992: Basic meteorological observations for schools: Atmospheric pressure. *Bulletin of the American Meteorological Society*, **73**, 781-794.

Virgo, S.E., 1976: Some simply made and inexpensive meteorological instruments. *Weather*, **31**, 404-411.

### 6.1. WEATHER KITS

To aid teachers with limited experience in weather instrumentation, several supply companies package sets of instruments and other instruction materials which can be used as a self-contained kit for weather study. Some teachers create their own weather kits from an assortment of materials, or augment the kits with additional instruments.

Suggested components for a weather kit are a thermometer, maximum/minimum thermometer, soil thermometer, anemometer, rain gauge, sling psychrometer, radio-meter, sundial, barometer, barographs, and thermograph. Other desirable features include an atmosphere chart, a good book, weather log, and five-day weather watch.

#### •Beginner's Pack

Barometer, maximum/minimum thermometer, radio-meter, rain gauge, wind meter, cloud chart, weather guide, and weather log. \$88.00 plus \$5.50 shipping.

•BoxTopics: Storms and Weather Forecasting

Pullouts, flip cards, stickers, and activity book. \$34.95.

1997, Briarpatch, P.O. Box 604, Short Hills, NJ 07079.

### •Children's Pack

Five-day weather watcher, radiometer, sundial, cloud chart, tornado tube, weather information cloud chart, and weather activity book. \$25.00 plus \$5.00 shipping.

Wind and Weather, The Albion Street Water Tower, P.O. Box 2320, Mendocino, CA 95460.

Phone: (800) 922-9463

Storm Watch

Book and air balance forecasting station. \$14.95.

•Water Watch Kit

Book, rain gauge, and acid rain test kit. \$14.95.

•Weather Guide Photo Anthology I & II

Postcard collection of photos from Weather Guide Calendars. \$6.95 for both volumes.

Accord Publishing Ltd., 1407 Larimer Square, Suite 206, Denver, CO 80202-1723

Phone: (303) 595-3839

•Weather Watcher Kit

Maximum/minimum thermometer, 2-inch rain gauge, and handbooks. \$16.90.

Fisher Scientific

Phone: (800) 621-4769

## 6.2. WEATHER INSTRUMENT & SCIENCE EQUIPMENT SUPPLIERS

Several companies only supply weather instruments for professional purposes or the serious amateur. Usually, instruments obtained from these supply houses are of high quality and may be expensive. Other companies have instruments for a range of disciplines and educational institutions. They stock some instruments for the home and

school. These instruments usually suffice for beginners and the more casual weather observer. In addition, some suppliers have instructional materials, as in other sections of this publication. Companies usually will furnish catalogs on request. Some models and teaching aids are also offered.

American Weather Enterprises

P.O. Box 1383 Media, PA 19063

Beckley-Cardy 917 Hickory Lane

Mansfield, OH 44901-8105

Carolina Biological Supply Co.

2700 York Road

Burlington, NC 27215-5551

Central Scientific (CENCO) 11222 Melrose Avenue Franklin Park, IL 60131 Phone: (800) 262-3626 Fax: (708) 451-0231

Clearvue

6465 North Avondale Avenue Chicago, IL 60631-1996 Phone: (800) 253-2788 Fax: (800) 444-9855 Web: www.clearvue.com

Cloud Chart, Inc. P.O. Box 21298 Charleston, SC 29413 Phone: (843) 577-5268

Davis Instruments 3465 Diablo Avenue Hayward, CA 94545-2778

Phone: (800) 678-3669
Fax: (510) 670--0589
Email: info@davisnet.com

Delta Education P.O. Box 3000

Nashua, NH 03061-3000 Phone: (800) 442-5444 Fax: (800) 282-9560 Web: www.delta-ed.com

Edmund Scientific

101 East Gloucester Pike Barrington, NJ 0800 Product information:

(609) 573-6879

Orders: Phone: (609) 547-8800 Fax: (609) 573-6295

**ETA** 

620 Lakeview Parkway Vernon Hills, IL 60061-1838 Phone: (800) 445-5985 Fax: (800) ETA--9326 Web: www.etauniverse.com

Fisher Scientific Co. 4901 West LeMoyne Street

Chicago, IL 60651 Phone: (800) 621-4769 Forestry Suppliers, Inc.

P.O. Box 8397

205 West Rankin Street Jackson, MS 39284-8397 Phone: (800) 647-5368 Fax: (800) 543-4203

Web: www.forestry-suppliers.com

Frey Scientific Co. 905 Hickory Lane Mansfield Lane Mansfield, OH 44905 Phone: (800) 225-FREY

H & R Corporation 401 East Erie Avenue Philadelphia, PA 19134

Hubbard Scientific P.O. Box 104 Northbrook, IL 60065 Phone: (800) 221-9884 (312) 272-7810

Nasco Science 901 Janesville Avenue Fort Atkinson, WI 53538-0901 Phone: (800) 558-9595 Fax: (414) 563-8296

Nasco West

1524 Princeton Avenue Modesto, CA 95352-3837 Phone: (209) 529-6957 Fax: (209) 529-2239

Northeast Discount Weather Catalog

Viking Instruments, Inc.

524 Main Street

South Weymouth, MA 02190 Fax: (781)331-9040 Orders: (800) 325-0360

NovaLynx Corp. (Division of Qualimetrics, Inc.)

WeatherMeasure and Weathertronics

P.O. Box 240

Fax:

Grass Valley, CA 95945-0240 Phone: (916) 477-5226 Fax: (916) 477-8339

PGC Scientifics 9161 Industrial Court Gaithersburg, MD 20877 Phone: (800) 424-3300

(301) 840-1111 (301) 9990-0740

Radio Shack One Tandy Center

Fort Worth, TX 76102 Robert E. White Instruments, Inc.

34 Commercial Wharf Boston, MA 02110 Phone: (800) 992-3045 Schoolmasters Science 745 State Circle Box 1941 Ann Arbor, MI 48106 Phone: (800) 521-2832 Fax: (800) 654-4321

Email: schscience@aol.com
Web: www.schoolmasters.com

Science Associates 31 Airpark Road Box 320

Princeton, NJ 08542

Science Kit and Boreal Laboratories 777 East Park Drive Tonawanda, NY 14150 Phone: (800) 828-7777

Simerl Instruments 238 West Street Annapolis, MD 21401 Phone: (301) 849-8667

Teacher's Video Company P.O. Box SCE-4455 Scottsdale, AZ 85261 Phone: (800) 262-8837 Fax: (602) 860-8560 Web: www.teachtsp.com

Tom Snyder Productions 80 Coolidge Hill Road Watertown, MA 02172-2817 Phone: (800) 342-0236 Fax: (617) 926-6222 Web: www.teachtsp.com

Storm Tech P.O. Box 474 Hales Corners, WI 53130

Taylor Scientific Instrument 95 Glenn Bridge Road Arden, NC 28704 Viking Instruments

The Northeast Discount Weather Catalog

532 Pond Street

South Weymouth, MA 02190 Phone: (800) 325-0360

**VWR Scientific Products** 

P.O. Box 5229

Buffalo Grove, IL 60089 Phone: (800) 727-4368 Fax: (800) 676-2540

Email: sarwel@sargentwelch.com Web: www.sargentwelch.com

Ward's Natural Science Establishments, Inc.

5199 West Henrietta Road

P.O. Box 92912

Rochester, NY 14692-9012 Phone: (716) 359-2502 (800) 962-2660

Weatherwise Affects
440 Middlesex Road
Tyngsboro, MA 01879
Phone: (978) 649-8387
Email: wxaffects@aol.com
Web: www.weatheraffects.com

Weatherwise Books and Instruments

Main Street

New London, NH 03527

How the WeatherWorks 301 Creek Valley Lane Rockville, MD 20850 Phone: (301) 762-7669

Phone: (orders only) 1-800-8CLOUD9

Wind and Weather P.O. Box 2320 Mendocino. CA 95460

Phone: (707) 937-0323