

## GENERAL SCIENCE

# Science for Santa's Sack

The vast array of scientific gifts available this year is more varied, more intriguing than ever. We list only a few of the possible solutions to the riddle "What to give . . ."

By FORREST SNAKENBERG

➤ GONE ARE THE DAYS of French hens, turtledoves, and partridges in pear trees. This Christmas more than ever the accent is on science. The shops are stocked with all of our old favorite standbys, but many innovations have appeared, too.

One new selection is a probability demonstrator that illustrates mathematical principles for only \$1.50. (1) Then we find something old—very old. Small terracotta oil lamps excavated in Syria date from the 4th to 7th centuries A.D. Complete with parchment certificate of authenticity, these lamps retail at \$10.00 each. (2)

A good gift for the entire family is an insect-trapping plant. Six bulbs of Venus's flytraps will produce interesting plants with bristly leaf traps for \$2.95. (3)

Another family-centered item is a home weather station consisting of thermometer, barometer and humidity meter. This unit, excellent for teaching weather phenomena, comes with full instructions for \$9.95. (4)

You can paper your walls with a scientific motif, if your family is really enthusiastic about its science. Space-age wallpaper designs were drawn from material supplied by the U.S. Air Force. Double rolls cost \$5.00. Also available is cloth for draperies or slip covers for your home with a Galilean motif complete with telescopes, globe,



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**LEARN BY DOING "THINGS"**—  
Experimental kits teach science by the "do-it-yourself" method, often encouraging science potential.

quadrant, armillary sphere, books, charts, etc., all on sailcloth for \$2.50 per yard. (4)

If you are a family of rockhounds, you might like some books on the subject. Two new titles are *Mineralogy for Amateurs* and *Gemstones and Minerals* at \$12.50 and \$8.95 respectively. Both books are by John Sinkankas. (5)

Stargazing is another good family activity. One possible gift is a luminous star finder for \$1.50 that can be set for hour and date and can be referred to while out in the dark. (6) Another company has a color map of the northern heavens for \$1.00 and color charts of the moon for \$2.00. (7)

## As the Twig Is Bent

Many of those students winning national honors in science fairs and scholarship competitions indicate their first science interests were evidenced before they ever started school. By giving a science-oriented toy to a youngster, you may be giving the nation a scientist during some future critical period.

For a future mathematician, you might give some building blocks in a variety of geometric figures. A set of 65 blocks is \$3.00, while a set of 110 blocks retails at \$5.00. (8) Civil engineers of 1980 would enjoy a girder and panel building set at \$19.95, or a molding road building set for \$13.95. (9)

Budding geographers would like a hydrographic relief globe showing both ocean and land areas in three dimensions. The 12- x 12- x 13-inch size sells for \$39.50. (6) A small, standard, eight-inch student globe is available for \$4.95 and would grace any bookcase or desk. (10)

What is a young biologist without a microscope? A great variety of microscopes are available ranging in price from about \$15 to almost the-sky's-the-limit, depending on quality, accessories, etc. (11)

A new botany kit will enable the growing of many generations of plants, show models of flower and leaf anatomy, and guide the experimenter with many facts, charts, and diagrams for \$9.95. (12)

Visible man has been joined this year by two additional kits showing the interior of the trout and cow. Visible Trout is \$4.98, while Visible Cow is \$5.98. (12) Farm children would also enjoy a soil testing kit for \$3.98. (10)

All youngsters will enjoy a series of 17 four-page bulletins, each describing 25 experiments which have been featured on the "Mr. Wizard" television show, using materials found in the home, for \$2.00 per set. (1)

A set of 14 different experimental THINGS of science kits, each complete with materials and instructions for performing experiments, is available for \$7.49, or



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**LOOK-SEE-LEARN**—Youngsters interested in science will find a good but economical microscope an indispensable aid to biological studies.

a \$5.00 gift subscription will bring a new unit each month for a year. (13)

Gadgets and home lab enthusiasts are easily satisfied. Numerous kits provide hours of entertainment. You might give a miniature digital computer kit costing \$4.98, (14) or a miniature water pump which can provide realistic waterfalls and fountains for those model railroad layouts for only \$2.25. (4)

Your home will run more efficiently if the family gadgeteer received a Christmas gift kit for the installation of a two-station intercommunications system, available for \$14.95. (15) Additional stations and added features are available for a slight extra charge.

And if you have a chemist in the family, two handy items would be a periodic table of the elements at only 25¢ (13) or a slide rule showing 800 facts concerning the elements for a dollar. (16)

Another item of interest to physical science students or to artists, too, is a color experiment set using diffraction gratings, and plastic filters to demonstrate analysis of colors and principles involved, for \$3.95. (1)

Your family birdwatcher, sports enthusiast, explorer, or admirer of scenic vistas will enjoy his own personal 7 x 50 mm. binocular for \$29.95. If you prefer to be a bit more exclusive, the same-powered model with wide-angle viewing is \$49.95. (17)

Everyone, regardless of age or science interest, will enjoy watching a mated pair of live seahorses, available and guaranteed for \$2.25. Three pairs are only \$4.48. (18)

Perhaps you have an avid reader on your list. In this case, you will want to encourage worthwhile reading and you will find many recent titles worthy of selection. Your

librarian can help you make selections in special fields, or a title which will be helpful to you in selecting books now and in the future is A Guide to Science Reading for 60¢ prepared by the American Association for the Advancement of Science, under the direction of Hilary J. Deason. (19) The Association also has compiled the AAAS Science Book List for Children at \$1.50. (20)

A few good hard cover editions for youngsters are Marvelous Mammals: Monotremes and Marsupials at \$2.95, by Bernice Kohn; Spiders and How They Live at \$2.95, by Eugene David; Jules Verne: The Man Who Invented the Future, \$3.25, by Franz Born; More New Ways in Math, Arthur Jonas, also \$3.25; and The Curious World of Crystals, \$3.25, by Lenore Sander. (21)

The Courtship of Animals explains animal behavior in connection with mating, from fish to spiders, for intermediate grade levels. By Millicent Selsam, the book retails at \$2.95. (22)

A good book containing easy experiments for young readers, The Second Book of Experiments by Leonard de Vries, explains some of the laws and properties of liquids, sound, heat, force and light. This hard cover edition is \$3.95. (23) A good paperback book of experiments is 150 Science Experiments Step-by-Step, edited by Judith Viorst, selling for 65¢. (13)

The same publisher has a number of other good paperbacks in the field of science, including Projects: Space for 45¢, containing suggestions for student science projects in space ranging from computer simulation of life forms to rocket propulsion systems. Another title your favorite child scientist will refer to over and over is Wonderful World of Science at 50¢. This book is a compilation of free and low cost materials from industry and organizations which will help in the study of science. (13)

**To Obtain Articles**

Most of the articles listed here can be obtained locally. While this article is not advertising, we list the suppliers as a service to our readers:

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2. Aladdin House, Ltd., 520 Fifth Ave., New York, N.Y. 10036.
3. Armstrong Associates, Inc., Box 127, Basking Ridge, N.J.
4. Edmund Scientific Company, Barrington, N.J.
5. Van Nostrand, Dept. T-SN-10, Princeton, N.J.
6. T. N. Hubbard Scientific Company, Box 105, Dept. SN, Northbrook, Ill.
7. Sky and Telescope, Dept. SNP, Cambridge 38, Mass.
8. My Lucky Star Corporation, Box 322, Salt Lake City, Utah.
9. Kenner Products Company, 912 Sycamore St., Cincinnati, Ohio 45202.
10. Central Scientific Company, 1700 Irving Park Rd., Chicago 13, Ill.
11. Bausch & Lomb, Inc., Rochester, N.Y.
12. Renwal Products, Inc., Mineola, N.Y.
13. Science Service, Inc., 1719 N St., N.W., Washington, D.C. 20036.

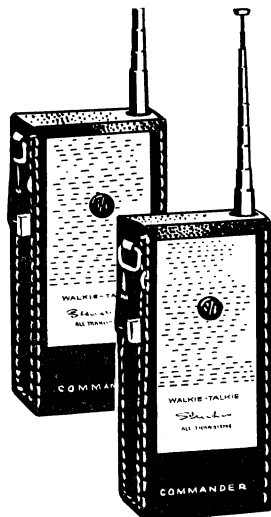
(Continued on p. 318)

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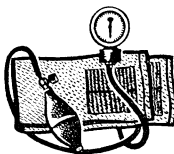
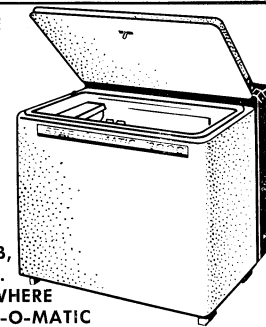
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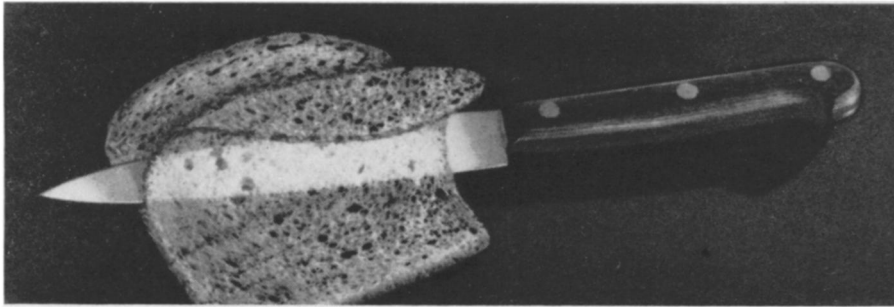
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(Continued from p. 315)

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15. Lafayette Radio Electronics Corporation, 111 Jericho Turnpike, Syosset, L.I., N.Y. 11791.
16. The Slyd-Rul Company, 1040 West Broadway, Woodmere, N.Y.
17. Allied Radio, 100 N. Western Ave., Chicago, Ill. 60680.
18. F. F. Marine Life, P.O. Box 626-SL-65, Dania, Fla.
19. New American Library of World Literature, Inc., P.O. Box 2310, Grand Central Station, New York, N.Y. 10017.
20. American Association for the Advancement of Science, 1515 Mass. Ave., N.W., Washington, D.C. 20005.
21. Prentice-Hall, Inc., Englewood Cliffs, N.J.
22. William Morrow and Company, 425 Park Ave. S., New York, N.Y. 10016.
23. The Macmillan Company, 60 Fifth Ave., New York, N.Y. 10011.

• Science News Letter, 86:314 November 14, 1964

## Nature Note

### Venus's Flytrap

► THE VENUS'S FLYTRAP, *Dionaea muscipula*, is a small, curious plant with clusters of delicate white flowers and leaves like fast steel traps.

These bright green leaves, about the size of a nickel, are composed of two semicircular flat lobes, hinged in the middle and fringed along the edges with stiff bristles. On the inner surfaces of each of these highly specialized leaves are three long slender trigger hairs which are very sensitive to the touch.

When a fly, gnat or some other insect alights on the leaf and comes in contact with these sensitive hairs, a special area extending the full length of the midrib between the two leaf halves suddenly loses its turgor and the two parts of the leaves snap shut. The fringe bristles interlace like fingers of two folding hands, and the insect is trapped between prison bars.


If the insect is small and fast enough, it can sometimes escape through the emeshing bristles, but usually it is trapped and squeezed firmly against the digestive glands located on the inner leaf sides. Slowly the insect body is digested as the plant assimilates the protein for its own nourishment.

After a few hours, the leaf spreads open again, exposing the indigestible remains of the insect which blow or fall away, leaving the trap ready for the next victim.

This strange insectivorous plant grows close to the ground where it is relatively inconspicuous. The leaves are usually in a rosette formation, spreading outward from the central stalk which bears clusters of small white flowers at its top. The plant is found only along the coastal bogs of North and South Carolina.

• Science News Letter, 86:318 November 14, 1964

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