

GENERAL SCIENCE

Scientific Gifts for Christmas

These unusual gift suggestions, at a wide variety of prices, are based on recent studies of the hobbies and "Wish Lists" of nearly 450 young scientists.

By SHIRLEY MOORE

► IF YOU have a junior scientist in your house, or among your young relatives or friends, you may have wondered what sort of Christmas gift really would please this kind of youngster.

Some helpful information and unusual gift ideas have been discovered in a recent study of the hobbies and "Wish Lists" of nearly 450 science-minded teen-agers. Finalists in the Seventh and Eighth National Science Fairs, whose ages range from 14 to 19, were asked to name their hobbies and to list gifts they would choose for their awards if they should be judged winners at the Fair.

The amazingly varied interests and wishes revealed in this SCIENCE SERVICE study suggests that the efficient way of gifting a high school-aged science enthusiast is to find out what field you are encouraging and what particular gaps in equipment you might be able to fill, or to decide what new interest you would like to spark.

With a little imagination and resourcefulness, you can then find a gift exactly tailored to the youngster you want to please, and for almost any amount of money you plan to spend.

Chemistry Gifts

For example, if the field is chemistry, there are such stocking stuffers as test tubes (50 cents a dozen and up), a test tube brush (35 cents) or rack (60 cents), a lab apron (\$1.45 up), small amounts of chemicals (15 cents up), rubber and glass tubing (40 cents up) and similar inexpensive equipment. Sometimes these items are available at large drug stores, surgical supply shops or student supply stores near colleges. Better still, if there is a scientific supply company in your vicinity, you can usually order by phone or visit the office to make your purchase. All the major companies issue complete catalogues for mail order service, and many high schools have copies you might use.

SCIENCE NEWS LETTER is a welcome gift to most young chemists (\$5.50 a year) and they would almost surely enjoy CHEMISTRY magazine, now especially edited for students and their teachers (\$4 a year).

If you are in no position to buy the telescope, microscope or binoculars on the Wish Lists of many teen-agers, look into the small accessories such as polishing agents, lens cleaning papers (25 cents to 50 cents), star charts (50 cents and up), leaflets, books and periodicals in these fields (10 cents to several dollars).

If you would particularly like to give a

book, but are uncertain about which book, or the price is beyond your Christmas budget, how about a gift certificate that will pay for at least part of the book? Do not overlook the excellent paperback reprints of science classics and paper editions of new and exciting writing in nearly every field of science.

If you live in a city where there is a fine museum, investigate their unusual and expert publications, color slides, models and other authentic but relatively inexpensive materials.

Few of us can give our favorite young scientists the high-fidelity components, radio kits or tape recorders they may have been longing for, but how about tape, or tape recordings, records, protective plastic envelopes for records, radio log books?

Equipment Accessories

Think, too, about film for the camera, a lens brush, a slide file, the many kinds and sizes of indispensable files and cabinets, notebooks, bookends, a pocket hand lens (\$1.50 up), a pocket slide rule (75 cents up), stamp hinges (25 cents to 50 cents), coin albums (35 cents) and other small accessories or pocket versions of major equipment.

If you live in a different part of the country from your rock and mineral collector, a small box of specimens from your area may please him inordinately. This would be true for collectors of many kinds, and you may be able to fill empty places with very little trouble or expense once you have found out approximately what it is you are looking for.

The junior high school years, from 12 to 14 or 15, are sometimes the most important in determining whether or not a youngster is going to become a scientist. SCIENCE SERVICE studies show that this is most often the period when a latent spark of ability and interest becomes a flame of enthusiasm and talent. So from this point on, it is doubly important to be sure that young people are given every opportunity to become acquainted with the fascinating adventure of science hobbies, and be given full encouragement to explore whatever catches their interest.

With this in mind, one of the most stimulating and original Christmas gifts you could possibly give an embryo scientist is a catalogue or two from scientific supply companies and a check to spend on his own choice of the highly intriguing materials available.

In these catalogues and specialized bulletins there are photographs of and information about such captivating subjects as micropaleontology and mineral fluorescence. Basic materials for fluorescent experiments may cost from \$2 to \$6. (Seven fluorescent specimens, a label list and an



SCIENCE TREE—A typical young family looks over a wide assortment of scientific equipment this junior scientist has received for Christmas. Scientific gifts, such as these supplied by the Fisher Scientific Co., have been credited with sparking many a youngster's first interest in science.

argon lamp for a little more than \$2; or a two-watt Strobilite ultraviolet lamp and six Strobilite ultraviolet liquids for about \$6.) An introductory micropaleontology set of six slides costs about \$6.50; additional slides are about \$1 each.

A subscription to THINGS of Science or a selection of one or more of the kits (75 cents each, three for \$1.50, a year's subscription to the monthly kits for \$5, from SCIENCE SERVICE) would be another good "science sampler" gift. Each unit contains unusual materials of scientific interest, information about them, suggestions for experiments and exhibit cards so that the units may be collected and displayed as a miniature museum. A great variety of subjects is covered, from gibberellic acid to plastics, from straight-line geometry to copper, from mollusks to carbon.

These are a few of the scientific supply companies with catalogues available: Ward's Natural Science Establishment, Inc., 3000 Ridge Road East, Rochester, N.Y.; Edmund Scientific Company, Barrington, N.J.; Fisher Scientific Company, 7722 Woodbury Drive, Silver Spring, Md.; or General Biological Supply House, Inc., 8200 South Hoyne Ave., Chicago 20, Ill.

Now that children's magazines, comics and TV programs include basic science and new developments as a matter of course, even science-minded kindergartners demand more from us than "cute" fantasy. They are insulted by grossly inaccurate toy rockets and satellites, and they are baffled by books that misrepresent or overpopularize scientific facts.

Wish List Contents

Nearly 59% of the teen-agers questioned list sports hobbies which range from swimming, skin diving and boating through all the usual competitive sports, camping and hiking activities to spelunking and flying.

About a third of these teen-agers are musicians or much interested in music. The arts in one form or another are leisure time pursuits of 20%, closely followed by photography and reading.

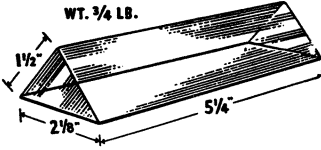
Optical equipment leads the field of Wish Lists with nearly half of the students wanting such items as microscopes (\$15 to \$200), binoculars (\$10 to \$50) and telescope parts (\$2.50 up).

Books, including highly technical works in nearly every field, are listed by nearly 40%. Almost as many mention photographic equipment and supplies. Precision slide rules (\$3 to \$25), radio kits and equipment and electric and electronic kits, motors and accessories are listed by a fourth of the young winners.

Influences that stir productive interest in science are varied, but many successful scientists clearly remember having been introduced to the wonder of the sky or the earth's rocks and creatures by a member of the family or an interested relative or friend.

If this year's thoughtfully chosen Christmas gifts inspire even a few girls and boys to become science adventurers, what invaluable gifts Santa Claus will have left under the world's Christmas tree!

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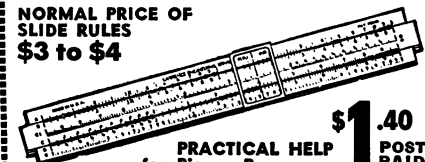
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