

PUBLIC HEALTH

Wool Radioactivity Very Slight and Not Alarming

► WOOL FROM U.S. lambs is slightly radioactive but the fallout from atomic bombs seemingly plays a very minor role. Although wool gives off gamma radiation when sheared, most of the activity is contained in the lanolin that is removed when the fiber is processed.

Two teams of scientists, one from Argonne National Laboratory, Argonne, Ill., and the other from the University of Illinois, traced an unidentified radiation from U.S. wool. In the British science journal, Nature (Dec. 16), they report that it is quite natural and due to the potassium contained in the sweat of the lambs. In the tests of 1960 wool, there was little evidence of any effect from Soviet atomic bombs.

The Argonne scientists were S. S. Brar, P. F. Gustafson and M. A. Kerrigan. The Illinois College of Agriculture team consisted of B. C. Breidenstein, U. S. Garrigus and W. R. Osborne.

• Science News Letter, 81:15 January 6, 1962

TECHNOLOGY

Atomic-Powered Buoy Now Sending Signals

► THE WORLD'S first atomic-powered buoy is now sending out signals from Curtis Bay, Md., southeast of Baltimore, Md. Power for the test buoy is generated by a thermoelectric system developed for the Atomic Energy Commission by Martin Marietta Corp., Baltimore.

The buoy is powered by a SNAP-7A generator, which is the seventh in a series of Systems for Nuclear Auxiliary Power under development for land, sea and space. The SNAP generator is fueled with strontium-90, converting the isotope's heat energy directly into electrical energy, which is then used to recharge the battery. Estimated life of the ten-watt SNAP system is ten years.

• Science News Letter, 81:15 January 6, 1962

MEDICINE

Research Offers Hope For Heart, Cancer Ills

► AN EARLY breakthrough toward control of heart disease and cancer is seen in research that will be supported by the National Institutes of Health, Bethesda, Md.

The past ten years' accomplishments through NIH-sponsored research in the cause and cure of these and numerous other diseases are reviewed in Science, 134: 2017, 1961, by Drs. Dale R. Lindsay, chief of NIH's division of research grants, and Ernest M. Allen, associate director for research grants.

The past ten years' research supported by this and other granting agencies has played an important role in the fall in death rate and rise in life expectancy that have occurred in the same decade.

The NIH budget has now been increased to more than half a billion dollars annually.

The NIH supported 10,700 projects in universities and other research institutions in 1960, out of a national total estimated at 38,500 projects. From NIH-supported research has come such discoveries as a treatment for rheumatoid arthritis, and the synthesis of ACTH, a protein hormone containing 23 amino acids. The cure of a rare form of uterine cancer occurring during pregnancy was also announced by NIH researchers as a result of treatment with the drug methotrexate.

Other research has strengthened the view that viruses may be one of the causes of human cancer.

A molded plastic replica of a normal heart valve has been constructed and used successfully to replace a diseased valve in man, and genetic information and valuable basic research have been among recent accomplishments.

• Science News Letter, 81:15 January 6, 1962

SEISMOLOGY

Most Destructive Quake In More Than a Year

► THE MOST destructive earthquake in more than a year and a half hit Colombia Dec. 20.

The last quakes that seriously endangered human lives and property also occurred in South America, namely the series of quakes that devastated Chile in May, 1960.

The Colombian quake registered at Pasadena Seismology Laboratory a magnitude of 6.7, the U.S. Coast and Geodetic Survey seismologists in Washington, D. C., reported. During the Chile catastrophe the largest earthquake recorded was of magnitude 8.5, which was greater than that recorded during the San Francisco earthquake (8.3) in 1906.

The Survey said the epicenter of the Colombian quake was located about five degrees north and 76 degrees west, near the coast close to the small town Riosucio (Dirty River), located in an agricultural region having about 50,000 population.

About a dozen cities and towns were reported affected by the quake. The quake shocks damaged homes and buildings in Bogota, the Colombian capital, more than 300 miles from Riosucio.

• Science News Letter, 81:15 January 6, 1962

Questions

PUBLIC HEALTH—How many live births were registered in the U.S. during 1960? p. 7.

SPACE—How far above the earth will two electrical ion engines be tested in 1962? p. 5.

TECHNOLOGY—How many words does the memory of the IBM 7090 computer have? p. 5.

Photographs: Cover and p. 10, Fremont Davis; p. 3, Industrial Acoustics Company, Inc.; p. 5, National Aeronautics and Space Administration; p. 7, Sperry Rand Corp.; p. 16, Consolidated Molded Products Corp.

SCIENCE BARGAINS

Order by Stock No.—Send Check or M.O.—Satisfaction or Money Back!

NEW! SCIENCE FAIR PROJECT KITS



What better way to say "Merry Christmas" to any science minded youngster than to give him one of these new Edmund Kits? They are carefully planned to give any boy or girl the fun and excitement of discovering science facts. Such carefully planned projects can lead the student to awards or scholarships. Adults too will find them an excellent introduction to the various fields of science.

Write for Free Bulletin 47-Q "Your Science Project" covering all phases of Science Fair projects.



MOLECULE KIT—This low-priced kit can be used to make many molecular and crystal models. Consists of 50 sponge-rubber balls—1 inch in diameter and 50 wooden sticks 6" x 1/4" that can be cut to any desired length. Balls may be painted, after assembly, to standard molecular colors. With this one kit, molecules with up to 50 atoms can be made. Several kits can be used to make up more complex models.

Stock No. 30,413-Q.....\$2.50 Postpaid

CRYSTAL GROWING KIT



Do a crystallography project illustrated with large beautiful crystals you grow yourself. Kit includes the book "Crystals and Crystal Growing" and a generous supply of the chemicals you need to grow large display crystals of potassium aluminum sulfate (purple), potassium sodium tartrate (clear), potassium nickel sulfate hexahydrate (blue green) or heptahydrate (green), potassium ferricyanide (red), and copper acetate (blue green).

Stock No. 70,336-Q.....\$9.50 Postpaid

SCIENCE TREASURE CHESTS

For Boys—Girls—Adults!



Science Treasure Chest—Extra-powerful magnets, polarizing filters, compass, one-way-mirror film, prism, diffraction grating, and lots of other items for hundreds of thrilling experiments, plus a Ten-Lens Kit for making telescopes, microscopes, etc. Full instructions included.

Stock No. 70,342-Q.....\$5.00 Postpaid

DeLuxe Chest—Stock No. 70,343-Q..\$10 Postpaid

NEW LOW PRICE FLASHLIGHT POINTER

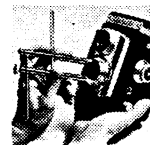
... Point It Out With Projected Arrow



Ideal for pointing out interesting features on movie and slide projection screens. Excellent lecture tool. For teacher use on map, etc. Flashlight focuses an arrow where you point it.

Stock No. 60,117-Q.....\$5.95 Postpaid

NEW—LOW PRICED ADJUSTABLE SPANNER WRENCH



Exceptional value for hobbyists, photographers, anyone who works with lenses. Precise quality, chrome plated steel, handles retaining rings 1/4" to 4 7/16" dia. Points held in place by spring-held ball bearings—easily, quickly changed. Hand set screw controls adjusting bars. Vertical bar size 3-15/16" dia. 1/4". Includes as additional points, Offset Flat Blade—1/4", Straight Pencil Point and Straight Flat Blade.

Stock No. 50,356-Q.....\$4.50 Postpaid

Extra additional points available for.....\$1.00 ea.

WOODEN SOLID PUZZLES



12 different puzzles that will stimulate your ability to think and reason. Here is a fascinating assortment of wood puzzles that will provide hours of pleasure. Twelve different puzzles—animals and geometric forms to take apart and reassemble, give chance for all the family, young or old, to test skill, patience, and, best of all, to stimulate ability to think and reason while having lots of fun. Order yours now.

Stock No. 70,205-Q.....\$3.00 Postpaid

FREE CATALOG-Q

160 Pages! Over 1000 Bargains!

America's No. 1 source of supply for Science experimenters, hobbyists. Complete line of Astronomical Telescope parts and assembled Telescopes. Also huge selection of lenses, prisms, war surplus optical instruments, parts and accessories—Telescopes, microscopes, binoculars, infrared sniperscopes, items for making "Science Fair" projects, math learning and teaching aids. Request Catalog Q.



TEACHERS! Write for Educational Catalog Q-2

