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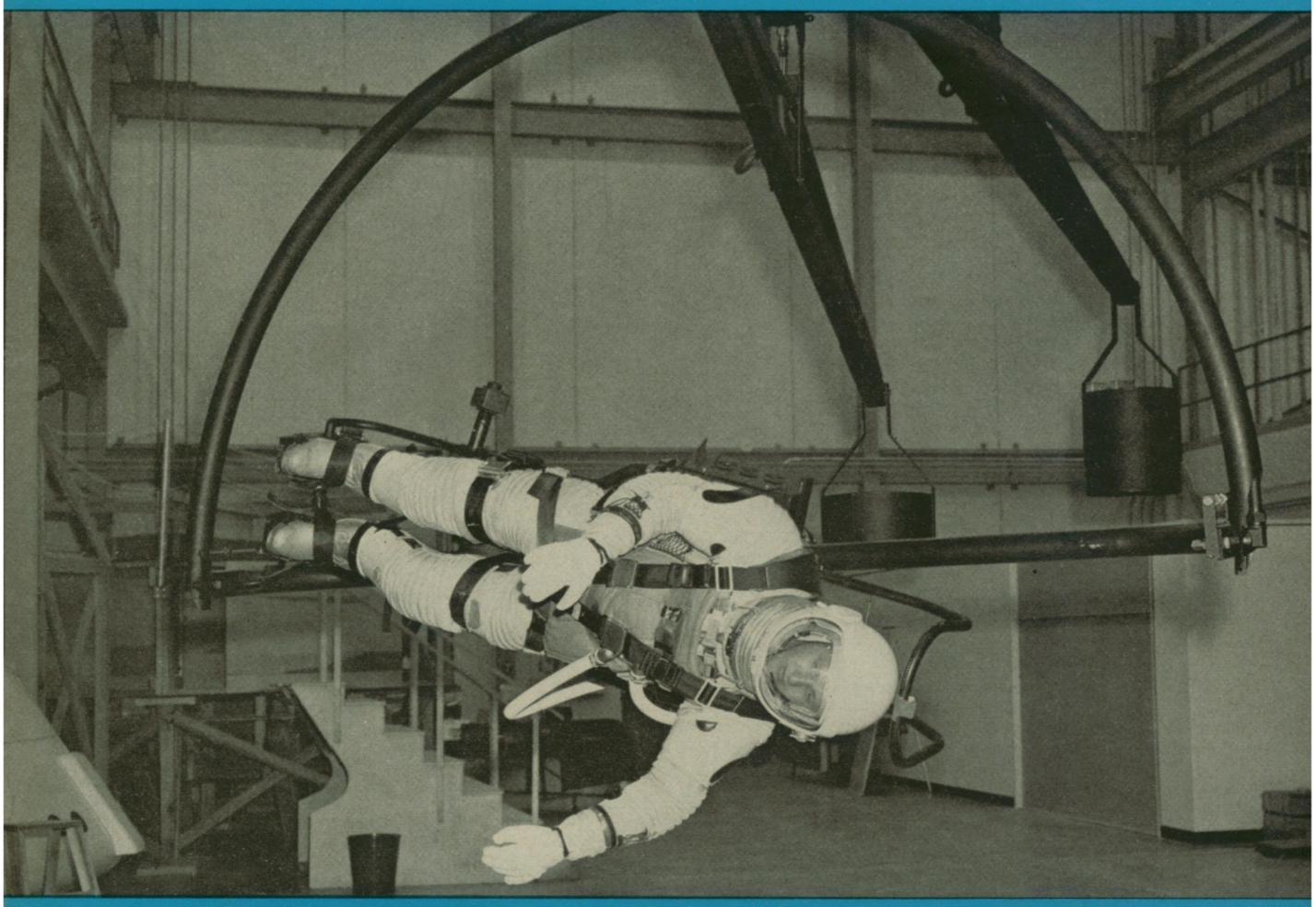
SCIENCE NEWS LETTER

®

THE WEEKLY SUMMARY OF CURRENT SCIENCE



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A SCIENCE SERVICE PUBLICATION

BUILD A SEXTANT—Shoot the sun, determine angles, get acquainted with principles of navigation. All materials furnished. 11 experiments. #234

SEASHELLS—Six specimens and 21 experiments with data on how shells grow, collecting and naming shells, reference books for the identification and habits of mollusks; information on national and local shell clubs. #255

POLYSTYRENE PLASTIC—To acquaint you with an important plastic and how it may be varied to give special purpose materials. Twenty-five experiments demonstrate basic properties. #245

SURVIVAL FOOD—See and learn about the type of foods that would be used in case of a national emergency. Five specimens. 18 experiments. #250

INCENSE—Has excited man's sense of smell as long as civilization has existed. Nine different scents are included plus materials to make your own incense. #254

ANCIENT GEMS—Eight semiprecious stones with 21 experiments to acquaint you with these gems. Materials and instruction in the lapidary art. #246

SPECIALIZED PAPERS—Stretchable paper is one of the eleven specimens included which illustrate the wide applications of paper in home and industry. #217

PAPERMAKING—Make your own paper from the materials included and learn about the commercial production of paper. 10 experiments. #282

PROBABILITY—Materials to introduce you to this fascinating branch of mathematics and demonstrate some of its applications. #262

MARBLE—Eight specimens from various localities the world over to study in 25 different experiments. #261

SILICONES—Seven specimens and 25 experiments illustrate the most important properties of this unusual group of man-made chemicals. #263

TASTE—Twenty-two experiments to test your sense of taste and to demonstrate its importance in our lives. #265

SPACE-AGE MINERALS—From rocks and minerals of the earth are coming many of the new materials used in space exploration. Six specimens. 13 experiments. #266

ENZYMES—Experiment and learn the properties of the four different enzymes included and determine the ingredients of the unknown specimen. #269

SILK—This interesting fiber is traced from the silk cocoon to finished fabric. Five specimens. 27 experiments. #264

MAPS & CHARTS—Look at the world from above the north pole as projected on a flat surface. The story of map making as demonstrated by seven specimens. #268

MATHEMATICAL PAPER FOLDING—Mathematics becomes shapes by constructing models using plane and solid geometery and even algebra. #267

TRIBOLUMINESCENCE — Strike two pieces of quartzite together and see the spark of light and note its color. The light is produced by mechanically deforming crystal structures. 24 experiments to perform dealing with this fascinating phenomenon. #281

IT'S ALL DONE WITH MIRRORS—Make a heliograph and send code messages to a friend. Construct a periscope, a stereoscope and a simple kaleidoscope. The science of plane mirrors made simple and fun in 15 experiments. #239

MINUTE SEEDS — 350,000 of them weigh one ounce. The plant from one of these tiny seeds is 20 million times the weight of the seed. Tobacco culture demonstrated by 21 experiments. #258

COMPUTATION—Learn to use the slide rule, Napier's rods and various other computation devices to aid you in mathematical calculations. #273

CURVES—Using straight lines construct curves by curve stitching and paper folding. Diagrams will help you make conic sections and relate them to each other. #284

HEXAFLEXAGON—Nine experiments with paper-folding. Six equilateral triangles form a hexagon, the structures have the ability to flex, hence the models are called hexaflexagons. #236

SURFACE TENSION—The cohesive forces of the molecules of a liquid are demonstrated through 28 fascinating experiments. #260

SPECTRAL COLOR—Historical data concerning Sir Isaac Newton's relevant early discoveries are interspersed with 20 experiments concerning the spectrum, spectroscopy and diffraction grating. #283

PINHOLE PHOTOGRAPHY—Hobbyists, scientists, tourists and artists have a common interest in photography. The type and quality of their cameras may differ greatly, yet all have their origin in the pinhole camera. Construct a camera and gain an insight into photography from 14 experiments. #285

COAL—Samples of peat, lignite, bituminous coal, cannel coal, anthracite and graphite provide the basis for 21 experiments which teach many interesting facts about this valued natural resource. A map shows distribution of coal deposits in the U.S. #286

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