

PHYSIOLOGY

How Much Is Enough Related to Pain Intensity

► HOW MUCH pain you can take may be indicated by your ability to judge the size of a wooden block after you have held a large block in your hand for some time.

There appears to be a definite relationship between the two, three Boston researchers report.

"Satiability," the fact that after prolonged stimulation with a strong stimulus (large block), the size of another stimulus (second block) will appear smaller, may prove to be the body's mechanism for tolerating pain. Drs. Asenath Petrie, Walter Collins and Philip Solomon of the Harvard Medical School, Boston City Hospital and the Boston Sanatorium, respectively, described tests which support this theory in *Science* (Dec. 5).

Tests with some 28 adult males indicate that the individual who tolerates pain best is also the one most susceptible to satiation. An intermittent bigger wave of pain causes subsequent pain to be perceived as less intense, the scientists say.

In addition, they report, "Our findings provide some support for the hypothesis that he who tolerates sensory deprivation least is most susceptible to satiation."

Pain-tolerance was measured with an instrument that concentrates radiant heat on the skin. Tolerance of sensory deprivation was measured by nine volunteers who remained in a tank-type respirator.

Science News Letter, December 27, 1958

● RADIO

Saturday, January 3, 1959, 1:35-1:50 P.M. EST "Adventures in Science" with Watson Davis, director of Science Service, over the CBS Radio network. Check your local CBS station.

Dr. Fred Singer, professor of physics, University of Maryland, College Park, Md., will discuss "Radiation Menace in Space."

AERONAUTICS

New York to Miami Run Opens Domestic Jet Age

► THE FIRST domestic jet passenger service began on Dec. 10 when a four-engined Boeing 707 loaded to its capacity of 109 passengers and took off for Miami.

National Airlines said New York to Miami flight runs should take two hours and 15 minutes, with the northward flight being a bit shorter sometimes because of jet-stream assistance.

National borrowed from Pan American enough 707's to establish two flights a day each way in December. Three flights a day are scheduled for January. Planes will climb to about 32,000 feet for the trip, travel at 600 miles an hour, and carry 44 "super deluxe" seats at a \$10 surcharge. Fares otherwise remain the same.

The 707's are replacing National's piston-engined DC-7's and Super Constellations, which made the run in three hours 50 minutes. Its own jets—Douglas DC-8's now on order—are expected to be delivered in January, 1960.

Science News Letter, December 27, 1958

MICRO-ADS

Equipment, supplies and services of special interest to scientists, science teachers and students, science-minded laymen and hobbyists. 25¢ per word, payable in advance. Closing date 3 weeks prior to publication (Saturday).
SNL, 1719 N St., N.W., Washington 6, D. C.

MICROSCOPIC SLIDES

MICROSCOPIC SLIDES ILLUSTRATING TISSUES of brain, bone, cartilage, liver, kidney, muscle. \$7.50 per set, prepaid in U.S. Mimeographed descriptions, most important histological characteristics, six tissues, 50c ppd. Peters Laboratory, 302 6th Ave., San Francisco 18, California.

KINDERGARTEN **Calvert School** **THRU 8TH GRADE**
THE SCHOOL THAT COMES TO YOU
Accredited home-study courses for your child. Teaching manual guides mothers. Courses kept up to date by pretesting in Calvert's laboratory-school. Also used to enrich schooling of above-average child. Non-profit. 53rd year. Write for catalog. 920 Tuscany Rd., Baltimore 10, Md.

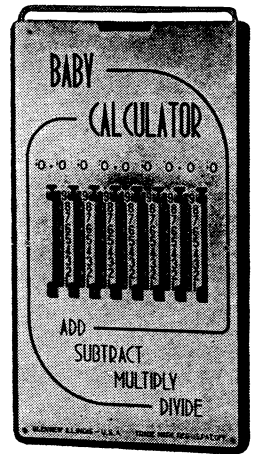
Best Book Contest for 1959

\$1600 Cash Awards plus 40% royalty. All types of manuscripts invited. For Contest rules and details of famous publishing plan, write for free Brochure SN. Pageant Press, 101 Fifth Ave., N. Y. 3

FOR PERSONAL AND BUSINESS USE
WORLD'S SMALLEST ADDING MACHINE!
Also Multiplies : NOW \$2.95
and Divides! : ONLY

So simple and easy to use that even a ten-year-old child can add up to 99 million in just seconds! Subtracts, and even multiplies and divides without ever making a mistake! Yes, whether you're a Businessman, Salesman, Student, Office Worker, etc. . . now you'll never make a mistake when you total sales . . . check bills . . . figure orders . . . give estimates . . . take inventory . . . checking household bills . . . keeping score . . . and thousands of other uses!
Here's news about an amazing mathematical invention that can make even adding up the longest string of figures a pleasure. A compact arithmetical wonder that fits right into your pocket and can actually add up to 99 million in just seconds! An attractive, precision built machine that can do even the most complicated addition without any effort or figuring on your part. Send me the Calculator Junior. If I am not completely satisfied I can return for full money back! Send cash, check or Money Order.

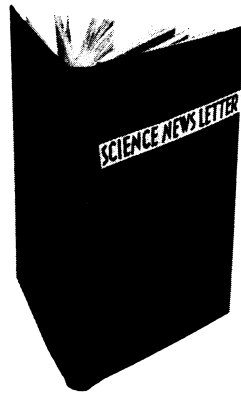
John Surrey, Ltd., Dept. SN-87
11 West 32 St., New York 1, N. Y.



ARE YOU INTERESTED

in Bound Volumes of SCIENCE NEWS LETTER?

For library and reference use in convenient space-saving form, Bound Volumes of SCIENCE NEWS LETTER will be available beginning with 1959 issues.



Two "Volumes" of 26 issues are published each year; January-June, July-December. But all 52 copies for January-December inclusive will be included in the Annual Bound Volumes. Probable price will be \$8.50 per year, delivered. Sturdy black buckram, 11"x8"x1 1/2", properly inscribed in gold lettering.

Un-cut copies of individual issues are the best for sturdy, permanent bindings, and to provide ample trim margins. To assure our setting aside enough un-cut copies of each issues of SCIENCE NEWS LETTER for 1959, it is important we know immediately how many SNL subscribers and readers would be interested in purchasing Annual Bound Volumes.

Prompt return of the coupon below will be deeply appreciated—with the clear understanding that it is only a "statement of interest" in the purchase of 1959 Bound Volumes. Formal order will be solicited toward the end of the year.

SCIENCE NEWS LETTER, 1719 N Street, N. W., Washington 6, D. C.

We are interested in the purchase of Annual Bound Volumes of SCIENCE NEWS LETTER, beginning with 1959 issues, at an anticipated cost of \$8.50, delivered. We understand this does not obligate us in any way.

Name

Street

City Zone State