

### OF THE WEEK

Particle detection by sound	388
Figures released on hazardous waste dumps	388
Estrogen, cancer link still debated	389
Clues to viral self-assembly	390
One number indivisible	390
Disaster unit: One out of many	390
Reactor ratings	391
Antipsychotic drug withdrawal problems	391
.,	

### **RESEARCH NOTES**

Biology	392
Science & Society	392
Agriculture	393
Physical Sciences	393
•	
ARTICLES	

Computer learning for slow learners 394

## **DEPARTMENTS**

387 Letters

COVER: Former grade-school and high-school dropouts are dropping in on computer learning. Many adults are so turned on by the material that they ultimately go on to try for that diploma. Seen here are students at the Baltimore Learning Center. See p. 394.

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# An old familiar tale

Your recent report "Doctors' strike lowered death rate" (SN: 10/28/78, p. 293) stirred some memories. Without comment I call to your attention the earlier report of a similar incident that occurred some years ago.

"On the 30th of September, when the College of Physicians chose their annual officers, and dined sumptuously together, I filled my balloon, brought it over the dome of their building, clapped the sling around the golden ball at the top, fastened the other end of it to the balloon and immediately ascended with the whole college to an immense height, where I kept them upwards of three months. You will naturally inquire what they did for food for such a length of time? To this I answer, had I kept them suspended twice the time, they would have experienced no inconvenience on that account, so amply, or rather extravagantly, had they spread their table for that day's feasting.

"Though this was meant as an innocent frolic, it was productive of much mischief to several respectable characters amongst the clergy, undertakers, sextons, and grave-diggers; they were, it must be acknowledged, sufferers; for it is a well-known fact that, during the three months the college was suspended in the air, and therefore incapable of attending their patients, no deaths happened, except for a few who fell before the scythe of Father Time, and some melancholy objects, who, perhaps to avoid some trifling inconvenience here, laid the hands of violence upon themselves, and plunged into misery infinitely greater than that which they hoped by such a rash step to avoid, without a moment's consideration.

"If the apothecaries had not been very active during the above time, half the undertakers in all probability would have been bankrupt."

The reporter was A. Raspe, the time was the end of the 18th century, and the perpetrator was a certain Baron Münchhausen.

Francis P. Chinard, M.D. Newark, N.J.

# Revealing omissions

In the article entitled "Sound Reveals a Hidden Microscopic World" (SN: 9/23/78, p. 219) John H. Douglas was careful to identify the agencies supporting this work. There are two important omissions. The National Bureau of Standards under a program funded by ARPA sponsored the initial work on semiconductor technology and the John A. Hartford Foundation. Inc., funded the initial work on biomedical investigations.

C. F. Quate Stanford, Calif.

# Twenty years of calculatoritis

I enjoyed Ms. Bartusiak's "Off the Beat" column (SN: 11/18/78, p. 347) on our increasing dependence on the calculator and the decline of mental arithmetic. As a physics teaching assistant at Ohio State, I, too, have seen the problem. Even I show some symptoms of calculatoritis, and I don't yet own my own calculator. Interestingly enough, the decline of mental math was predicted by Isaac Asimov in a story called "The Feeling of Power," written in 1958. In the excerpt which follows, Technician Aub is demonstrating the rediscovered rules of arithmetic to skeptical members of the government and military. He has just been asked to multiply 5,738 by 7,239.

Aub set to work, bending low. He took another sheet of paper and another. The general took out his watch finally and stared at it. "Are you through with your magic-making, Technician?"

"I'm almost done, sir — Here it is, sir. Forty-one million, five hundred and thirtyseven thousand, three hundred and eighty-two." He showed the scrawled figures of the result.

General Weider smiled bitterly. He pushed the multiplication contact on his computer and let the numbers whirl to a halt. And then he stared and said in a surprised squeak, "Great Galaxy, the fella's

Dr. Asimov once commented that, having noticed the trend towards smaller computers, he had felt safe in using pocket calculators for a story set a few thousand years in the future!

Brent A. Warner Columbus, Ohio

## Tactile vision

The article "Blind drawings: A new perspective" (SN: 11/11/78, p. 332) provides an excellent argument for an underused educational technique developed by Maria Montessori in 1907. When she showed that children appeared to read more readily when they could feel letters as well as merely observe them, many ignored her because they believed that visual and tactile learning were "obviously" distinct. Even today many introductory psychology texts label and discuss the nerve reception areas of the brain such as visual, auditory, tactile, olfactory in a manner that accidentally implies that the brain rigidly compartmentalizes its information. Thus, tactile learning is "logically" incapable of paving the way for visual. (Strangely, I've never encountered anyone who questions auditory influences on any of the other perceptual systems.) If even congenitally blind children can feel "visualizations," then perhaps the transfer from feeling a pattern to recognizing its visual image is the natural process. If so, then children still being taught to read by recognizing only visual patterns are probably being unnecessarily handicapped.

Fran Tabor Kalispell, Mont.

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