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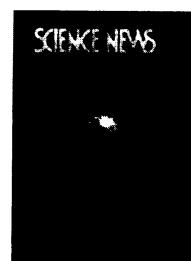
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Cover: Current ideas on the formation of the solar system focus on the runaway growth of solid material into planetesimals and then planets. Dating of mineral grains in meteorites suggests that the first solid particles condensed out of the solar nebula between 4.56 billion and 4.57 billion years ago. (Illustration: G. Dana Berry, Space Telescope Science Institute.)



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**Science Service**, which publishes SCIENCE NEWS, is a nonprofit corporation founded in 1921. It gratefully accepts tax-deductible contributions and bequests to assist its efforts to increase the public understanding of science, with special emphasis on young people. More recently, it has included in its mission increasing scientific literacy among members of underrepresented groups. Through its Youth Programs it administers the International Science and Engineering Fair, the Science Talent Search for the Westinghouse Science Scholarships, and publishes and distributes the *Directory of Student Science Training Programs for Precollege Students*.

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## Letters

### Other reasons for math woes?

The math study described in "U.S. complacency adds to math woes" (SN: 1/9/93, p.28) would have been more interesting if teachers' attitudes had been addressed as well as those of students and parents. How do U.S. elementary and secondary school teachers compare with their counterparts in Japan and Taiwan?

Moreover, the net benefit to the individual (and to society) of math for the masses versus math classes taught by mathematicians to adept pupils has not been settled, to say the least.

B. M. Ackles  
Groesbeck, Texas

Another, more insidious and malignant interpretation of the study results can be made.

The Asian students indicated personal responsibility through hard work and commitment as the prime factor in success, whereas the U.S. students and parents blamed the school, the teacher, and lack of innate ability for lack of success. It appears from the results that the U.S. students and parents believe they are not at all responsible for their own personal success.

This malaise seems to permeate many areas of U.S. culture, and the solution has nothing to do with better schools or teachers or increased government spending.

Jay Shuman  
Redding, Calif

### Geminga's geologic fingerprint?

If astronomers can tell us the elemental signature of the possible Geminga supernova ("Did Geminga Create Our Hole in Space?" SN:

1/2/93, p.4), geologists might use it to answer some exciting questions. Wouldn't sweeping "most of the gas away from our tiny corner of the universe" have caused problems for life on Earth? Perhaps one of the many mass extinctions? Could we possibly find dust from the Geminga event at one of the boundaries? If we could do that, we could calibrate our radioactive clock, learning if radioactivity has continued at the same rate throughout Earth's history.

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