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Cover: This ingenious mechanical device represents the first known, successful attempt to automate the factoring of whole numbers. Built 75 years ago in France, this unique factoring machine has only recently come to the attention of the mathematical community. (Photo: Jeffrey Shallit)

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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

Weighing in with different views

In response to "U.S. adults: A weighty lot" (SN: 7/23/94, p.53), I would point out the body mass index of my weight-lifting, bodybuilding brother, who at 195 pounds and 5 feet 9 inches has a BMI of about 29, above what is described in the new script as overweight. A more accurate definition should encompass percent body fat or something such as cardiovascular endurance or capability rather than a number with as little current meaning as BMI.

Bill Glassco Richmond, Va.

Bodybuilders will indeed have high BMIs, but the index is still a useful measure for population-based surveys, researchers say. —T. Adler

It seems to me that if a person were to take advantage of the "high-tech" gym, she would gain muscle mass. This mass would weigh more than a like unit of fat. The person's height would not change. Therefore, losing fat and replacing it with muscle without changing height would instantly make a person "unhealthy."

> Madge Haven Alexandria, Va.

Few people in the study exercise enough to add muscle, the researchers say. Their excess weight is from fat. -T. Adler

Escape as an evolutionary force?

Regarding the fascinating report "Simulated creatures evolve and learn" (SN: 7/23/94, p.63), my wife pointed out an unconscious male bias in the research design.

The article identifies the driving forces in evolution as "competition, natural selection, and sexual reproduction," but the research design focuses on competition and reproduction alone. Escaping may be as important to survival as acquiring, as "Walking away from a fish-eat-fish world" (SN: 7/30/94, p.70) illus-

> Edward Snyder Cookeville, Tenn.

Feathers of a bird

In "The Ruckus Over Ratites" (SN: 7/30/94, p. 72), the order of ratites was misspelled. It is correctly spelled Struthioniformes, meaning "birds formed like the ostrich", genus Struthio.

The ostrich (or ratite) industry was well developed in the Little Karroo (Cape) region of South Africa from 1853 on, with economic booms centered around Oudtshoorn from 1880 to 1885 and 1910 to 1913. The profits came from the sale of the male ostrich's feathers. In the latter period, the feathers from 750,000 birds fetched \$3 million! Over \$1,000 was sometimes paid for a pair of breeding birds at this

The onset of World War I dramatically damaged this booming industry.

Victoria Meltz Valdosta, Ga.

CORRECTION

The study described in "Tuning up young brains" (SN: 8/27/94, p.143) is directed by Gordon Shaw of the University of California, Irvine.

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