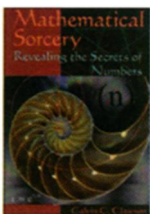
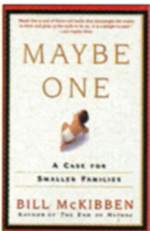


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Mathematical Sorcery: Revealing the Secrets of Numbers—Calvin C. Clawson. Society continues to perpetuate the myth that many people are incapable of doing math. In an effort to shatter this misperception, Clawson presents a history of mathematics to reveal what its founders achieved with very little background information. From the basic arithmetic of the Sumerians to the ancient problems that led to the inception of calculus, Clawson works through a host of problems that perplexed the likes of Isaac Newton, Gottfried Leibniz, and Pierre de Fermat. His stories include insights into the constellations, the enigma of the golden mean, and the tangent of a curve. Plenum, 1999, 294 p., b&w photos/illus., hardcover, \$26.95.



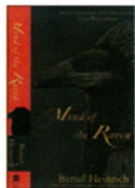
Maybe One: A Case for Smaller Families—Bill McKibben. The author of *The End of Nature* and other books on environmental issues tackles the touchy subject of population control from a personal viewpoint, the planning of his own family. The one-child family is a keystone of sustainability during the next 50 years, which McKibben and many ecologists believe to be a watershed period for Earth. While establishing these concerns, McKibben relays data that show tendencies of only children to be smarter, just as successful, and more mature than their peers with siblings. On the other hand, the author does not ignore the problems that a generation of only children could have when they need to support an aging population. Originally published in hardcover in 1998. Plume, 1999, 254 p., paperback, \$12.95



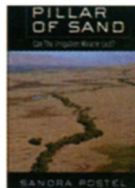
Measuring the Universe: Our Historic Quest to Chart the Horizons of Space and Time—Kitty Ferguson. Known as the father of geodesy, Eratosthenes earned his reputation 2,000 years ago with merely a stick, a hole in the ground, the sunlight of a summer solstice, and elementary geometry. With these simple tools, he produced a surprisingly accurate measurement of Earth's circumference without the benefit of circumnavigation. Astronomers and physicists continue to build on the work of their ancient predecessors in a quest to calculate the sizes and distances of the various elements of the universe. Ferguson's engaging and accessible history of these endeavors marches up to the present day, placing each discovery and advance into the context of the time. She easily connects, for instance, the methodology of Isaac Newton in measuring distance to the nearest stars with modern concepts of deceleration parameters and parallax shift. Walker, 1999, 342 p., b&w photos/illus., hardcover, \$27.00.

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Mind of the Raven: Investigations and Adventures with Wolf-Birds—Bernd Heinrich. Edgar Allan Poe immortalized the raven, but Heinrich lives with them. In fact, he has "lived and breathed ravens" since 1984. Known for his extended periods of observation from treetops, Heinrich also takes these creatures into his home. His tactics afford him keen insight into the birds' behavior, extending from scavenging to social interactions and, quite possibly, consciousness. The author's lyrical prose allows readers to feel the majesty this biologist perceives in ravens' communicating, bonding, caching, recruiting, mating, and hunting. Cliff St Bks, 1999, 380 p., illus., hardcover, \$25.00.



Pillar of Sand: Can the Irrigation Miracle Last?—Sandra Postel. On behalf of the Worldwatch Institute, Postel addresses the issue of mounting water scarcity due to poor irrigation tactics. Her report indicates several alarming trends. For instance, the world's farmers create a water deficit at an annual rate of 160 billion cubic meters. One in 5 hectares of irrigated land suffers the scourge of salt, which decimated Mesopotamian societies. Postel offers solutions based on technology and better management, such as drip irrigation systems that direct water straight to plant roots and increase yields yet reduce water use by 30 to 70 percent. She also examines how the majority of domestic wastewater in Israel is reused for crop production. Norton, 1999, 313 p., paperback, \$13.95.



The Rose's Kiss: A Natural History of Flowers—Peter Bernhardt. The evolutionary history of flowers extends across some 125 million years. During this time, an intricate assortment of more than 125,000 species has developed. *The Rose's Kiss* defines this extensive history with details ranging from the flower's architecture and life cycle to the multitude of pollinators that allow these plants to reproduce. A special tribute to bees and other aspects of reproductive strategies, such as scent and color, explain how plants make flowers. Of particular interest is the relationship of the flower to its environment, which regulates its life span and blooming time. Island Pr, 1999, 267 p., b&w photos, hardcover, \$24.95.



Voyage to the Milky Way: The Future of Space Exploration—Donald Goldsmith. Unmanned space probes have traversed the furthest reaches of the Milky Way. With the facts from these missions in hand, we can begin to refocus on human space excursions. In 2008, the first human outpost—the Space Station—is expected to be operational. Goldsmith provides a plan for ventures beyond. He tackles not only the logistics but also the associated financial and social implications. For instance, he advocates private financing over government sponsorship of future missions, and he questions who owns galactic minerals and how they will be mined. By exploring issues ranging from the lack of liquid water to what laws would govern the colony, he also ponders the potential for putting people on Mars. TV Bks, 1999, 254 p., color plates, hardcover, \$27.50.

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