# A Brief History of Time:

## From The Big Bang to Black Holes

### By Stephen M. Hawking

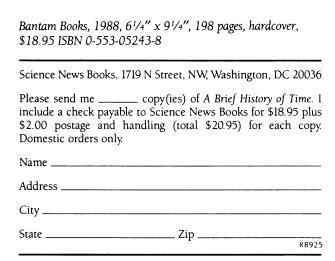
#### Introduction by Carl Sagan

Hawking gives an historical overview of cosmology from the early Greeks to modern times and makes accessible the two great theories of twentieth-century physics: Einstein's General Theory of Relativity, which encompasses the vast scale of galaxies, and quantum mechanics, which operates on the tiny scale of subatomic particles.

When these two theories, currently at odds, are successfully combined, the resulting theory will resolve all the yet-unsolved mysteries of the universe. Hawking maintains that the time is near when science succeeds in this. "If we do discover a complete theory, it should in time be understandable in broad principle by everyone, not just a few scientists. Then we shall all, philosophers, scientists, and just ordinary people, be able to take part in the discussion of why it is that we and the universe exist. If we find the answer to that, it would be the ultimate triumph of human reason — for then we would know the mind of God," he writes.

Among the questions he contemplates are: What is the nature of time? When an expanding universe collapses, will time run backward? Will we "remember" the future? Are we actually part of a universe with at least eleven dimensions? Will holes in the fabric of spacetime permit astronauts to visit other galaxies or move through time? Will the "big bang" theory be replaced by the notion of the universe as a continuum with no boundaries?

- from the publisher





"With the chapter called 'Black Holes Ain't So Black,' things begin rapidly to pick up: 'One evening . . . I started to think about black holes as I was getting into bed. My disability makes this rather a slow process, so I had plenty of time . . .' Hawking goes on to tell us about his discovery that small black holes should actually be powerful energy sources. His explanation for this represents the first successful attempt to combine theories of gravity and quantum mechanics."

> - Rudy Rucker, for the Washington Post

### **How-To Books**-For Summer Fun

from the editors of Klutz Press

> THE KLUTZ YO-YO BOOK is a complete description of vo-vo tricks from Rock the Cradle to Shoot the Moon, as well as a fully illustrated compendium of the yo-yo's history, from the an-cient Greeks to Donald F. Duncan, the man who started the

country yo-yoing in 1927 Comes with its own maple yo-yo. By John Cassidy. 7" x 9", 82 pages, paperback,

The world's record for the longest throw of any object is

1,257 feet. The record was set on July 8, 1986 and it was done with the most amazing piece of hand-launched aerodynamics ever devised, the Aerobie flying ring. THE AEROBIE BOOK is the definitive word on its spirit, science and practice. Comes with an aerobie. By John Cassidy.

7" x 13", 64 pages, paperback, \$12.95.



THE UNBELIEVA-BLE BUBBLE BOOK is a celebration of the science, spirit and art of the gentle soap bubble. It comes with an apparatus that is capable of making soap bubbles bigger than anything you've ever heard of: 6-foot-diameter, shimmering rainbow bubbles that can float up 4 or 5 stories. By John Cassidy & David Stein. 6" x 9", 112 pages, paperback, \$9.95.

BOOK

Filled with boomerang lore and technique, and profusely illustrated with line art and photographs, THE BOOMERANG BOOK is an oversized treatment of the sport that refuses to go away. Boomerang included. By John Cassidy. 15" x 10", 64 pages, paperback, \$12.95.

Science News Books, 1719 N Street, NW Washington, DC 20036 Please send me the book(s) marked below. I enclose the price of the book(s) plus \$2.00 postage and handling per book (maximum \$6.00 charge). Domestic orders only. ☐ Yo-Yo Book \$9.95 ☐ Aerobie Book \$12.95 ☐ Bubble Book \$9.95 ☐ Boomerang Book \$12.95 Name\_ Address\_\_\_ City\_\_\_\_ Zip\_\_\_ State