



The Universe at Your Fingertips

An Astronomy Activity and Resource Notebook



IN A NUTSHELL

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SUBJECTS

Science
Social Studies

The contents of this book are designed to provide the teacher with a collection of astronomy lessons and activities, rather than a complete or sequenced curriculum. The first four sections provide introductions to the materials, information about astronomy in general, and suggestions for teaching astronomy effectively. Each of the thirteen activity sections that follow contains activities about a particular area of astronomy, such as planets, space exploration, star systems, astronomy in different cultures, and astronomers' tools. The types of activities include making astronomical observations, constructing models to demonstrate sizes and distances in the solar system, a bingo game, and experiments with light and spectra. Each activity section includes an introduction to teaching the activities, a grade level chart, and a background article on the highlighted topic. A cover sheet explains what each activity is about, what the students will do, and what concepts, skills and ideas the students will learn. The activities are drawn from numerous sources and vary in structure.

Grade Level
3-12

Length
800 pages

Date Published
1995

THE BOTTOM
LINE

"*Debunking Pseudoscience* section contains activities to help students test and think through claims of astrology, UFOs, etc."

What the REVIEWERS Said !	Key Characteristics	Strengths Noted	Other Considerations
	Fairness and Accuracy	Materials encourage inquiry. Clearly states sources of information. Diversity is shown by inclusion of women and information from other cultures.	Avoids issues such as the Big Bang theory and the age of the universe.
	Depth	Facts are presented or discovered to support concepts. Attention is given to global and astronomical scales.	Material is not built around a strong conceptual framework.
	Emphasis on Skills Building	Clearly lists skills for each activity. Encourages critical thinking, and use of scientific method, analogies and models.	
	Action Orientation	N o t A p p l i c a b l e.	
	Instructional Soundness	Materials are learner-centered, interdisciplinary, and stress education beyond the classroom. Clearly states goals, objectives, and appropriate grade levels. Makes connections to learners' everyday lives.	
	Usability	Lessons are long-lived and can be adapted for new information. Instructional materials are accessible and inexpensive.	

"The explanations are clear, written at an adult level but without much technical jargon."

"There is a tremendous amount of information here."