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ABSTRACT

The annotated bibliography lists approximately 270 instructional materials in science for use with handicapped or normal children from kindergarten through grade 12. Listings are alphabetical by publisher and usually include item title, order number, item price, a brief description, and abbreviations which refer to type of scientific content, media format, and grade level. Charts list materials developed especially for special education by scientific content area and materials for each grade level. Materials are concerned with the following content areas: physical science, earth science, ecology, life science, general science, scientific method, and experimental science. Media format includes films, filmstrips, filmloops, overhead transparencies, cassettes, records, instructional tapes, programmed materials, and texts. (DB)



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INSTRUCTIONAL MATERIALS FOR SCIENCE

by

Dick Shea

April 1974

EC062049



This project was supported in part by a grant from the Bureau of Education for the Handicapped, U.S. Office of Education which is gratefully acknowledged.

In this annotated bibliography we sought to develop a source of information that would present a range of material varying in media format for creating or supplementing a course in science. Because of the enormous amount of material available, we employed a selective as opposed to an exhaustive approach.

The remainder of this section describes how to use the bibliography and presents a bibliographic index.

A numerical notation has been employed with the whole numbers (e.g. 1, 47) designating source, and fractional numbers (e.g. 1.4 or 47.3) designating items supplied by that source. Additionally, the sources occur alphabetically. An entry follows the format seen below:

A.	B.	C.	D.	E.	F.	G.	H.
10.4	Experiments in Physical Sciences	59271	\$59.50	These FS visually present a variety of physical experiments illustrating diverse scientific principles.	PX	FS	4-5

"A" refers to the fourth item supplied by source 10. "B" indicates the item title followed by "C" its order number (if available) and "D" the item price. A brief description ("E") follows this. To provide a means of "rapidly evaluating", we presented the information "F" through "H" on the right; the first row ("F") indicates content (physical science, experimental in emphasis (see Table 1 for listing of abbreviations and their meaning). The second row ("G") indicates grade level (junior and senior high school). Asterisks by the item number and grade level denote materials developed especially for "special education".

As indicated above, Table 1 lists the abbreviations used throughout the bibliography. These fall into three classes: scientific content, media format and grade level.

TABLE I -- LIST OF ABBREVIATIONS

GRADE		SCIENTIFIC CONTENT		MEDIA FORMAT	
Abbreviation	Meaning	Abbreviation	Meaning	Abbreviation	Meaning
1	K	P	Physical	F	Film
2	1st - 3rd	E	Earth	FS	Filmstrip
3	4th - 6th	K	Ecology	FL	Filmloop
4	7th - 9th	L	Life	OT	Overhead Transparency
5	10th - 12th	G	General	C	Cassette
		SM	Scientific Method	R	Records
		X	Experimental	IT	Instructional tapes
				PM	Programmed materials

*MATERIALS DEVELOPED ESPECIALLY FOR SPECIAL EDUCATION

G	P	E	K	L	X	SM
20.3		20.2	42.2	9.1		34.3
42.1				42.3		34.4
42.4				42.5		52.1
73.4						

GRADE - K (1)

General (G)	Physical (P)	Earth (E)	Ecology (K)	Life Science (L)	Experimental	Scientific Methods (SM)
2.2	1.1	17.1	20.5	7.2	1.1	21.2
6.1	17.2	17.2	34.6	11.8	2.2	22.2
20.6	64.5	20.4		18.2		37.1
22.1	68.1	35.1		35.2		39.8
22.4		59.2		36.4		64.9
31.1		64.6		36.5		
34.8				39.1		
52.3				64.8		
64.7				68.1		
				72.2		

FIRST, SECOND AND THIRD GRADE (2)

General (G)	Physical (P)	Earth (E)	Ecological (K)	Life Science (L)	Experimental (X)	Scientific Methods (SM)
2.1	1.1	7.1	34.6	2.3	1.1	7.5
2.2	4.2	7.6	36.2	4.1	2.3	13.1
6.1	14.2	10.1	37.3	7.2	2.2	21.2
10.2	15.2	13.7	51.4	10.8	4.1	21.5
20.6	16.1	14.1	64.1	12.1	4.2	21.7
21.7	17.2	17.1	65.1	12.2	39.5	22.2
22.1	21.6	17.2		13.7	40.1	37.1
22.4	25.3	20.1		21.1	40.3	33.8
24.1	36.1	20.4		21.10		40.1
31.1	64.5	23.1		25.1		40.3
33.1	65.6	35.1		32.1		52.2
33.3	68.1	36.3		32.3		64.9
33.4		54.2		34.2		65.2
34.1		59.2		35.2		
34.8		64.6		36.4		
37.8				36.5		
38.1				36.6		
39.5				37.2		
40.3				39.1		
40.4				46.3		
41.1				56.1		
45.7				59.2		
48.1				64.8		
50.5				68.1		
52.3				72.2		
53.1						
55.1						
58.1						
61.1						
64.3						
64.7						

FOURTH, FIFTH AND SIXTH (3)

General (G)	Physical (P)	Earth (E)	Ecological (K)	Life Sciences (L)	Experimental (X)	Scientific Methods (SM)
2.1	3.4	5.1	16.2	2.3	2.1	13.4
10.2	4.2	5.2	34.6	3.4	4.1	13.5
10.3	7.4	7.1	34.7	4.1	4.2	21.7
18.3	10.6	7.6	36.2	7.3	7.3	26.1
21.3	13.3	10.1	39.7	10.8	21.4	31.2
21.7	14.2	13.8	50.4	11.2	21.9	40.1
22.4	14.3	14.1	51.4	15.5	26.1	40.3
24.1	16.1	15.4	56.6	21.4	39.5	52.2
29.2	17.2	17.2	64.1	21.10	40.1	59.1
29.3	21.8	17.3	64.4	27.2	40.3	64.9
29.4	22.3	18.1		27.3	41.3	65.2
33.2	23.2	19.2		32.1	55.2	
33.4	25.2	29.1		32.2	67.1	
34.1	25.3	35.1		32.3	71.1	
34.9	37.4	36.3		35.2		
36.7	49.4	41.2		35.3		
38.1	55.2	49.3		36.5		
39.2	56.2	50.2		36.6		
39.5	57.2	54.2		37.2		
40.3	65.2	56.3		39.1		
41.3	72.3	59.2		44.1		
45.7		64.4		44.3		
48.1		64.6		44.4		
52.3		64.10		45.8		
53.1		70.1		46.1		
55.1		72.3		46.2		
58.1				46.3		
61.1				46.4		
64.3				46.7		
64.7				49.2		
67.1				50.1		
71.1				50.3		
73.1				51.2		
73.2				51.3		
				56.3		
				59.2		
				64.8		
				68.2		
				70.1		

SEVENTH, EIGHTHS AND NINTHS (4)

General (G)	Physical (P)	Earth (E)	Ecology (K)	Life Sciences (L)	Experimental (X)	Scientific Methods (SM)
10.3	3.4	5.1	28.2	3.4	4.1	6.2
29.2	4.2	5.2	34.6	4.1	4.2	13.5
29.3	10.4	13.2	34.7	6.3	7.3	13.6
29.4	10.6	13.8	37.5	7.3	10.4	31.2
33.2	13.3	14.4	39.4	10.5	21.4	43.1
34.1	14.3	15.4	45.9	10.8	21.9	43.2
34.9	16.1	15.6	47.1	11.1	55.2	52.2
39.2	21.9	17.3	50.4	11.2	56.4	59.1
45.1	22.3	18.1	56.6	15.5	67.1	
46.5	23.2	19.2	64.4	21.4	71.1	
46.8	37.6	25.4	70.2	27.1		
52.3	40.2	29.1		27.2		
58.1	44.2	30.2		27.3		
61.2	49.4	37.7		28.1		
63.1	49.5	39.3		28.2		
67.1	55.2	39.6		32.2		
70.4	56.2	40.2		35.2		
71.1	56.4	41.2		35.3		
71.2	56.5	48.2		39.1		
72.1	57.2	49.3		44.1		
73.1	60.2	50.2		44.3		
73.2	68.3	51.1		11.4		
73.3	70.4	54.2		15.1		
		56.3		15.10		
		57.1		46.4		
		59.2		46.7		
		60.1		49.2		
		64.4		50.1		
		64.10		50.3		
		70.1		51.2		
				51.3		
				54.1		
				56.3		
				59.2		
				64.8		
				68.2		
				68.3		
				70.1		
				70.2		

TENTH, ELEVENTH AND TWELFTH (5)

General (G)	Physical (P)	Earth (E)	Ecology (K)	Life Sciences (L)	Experimental (X)	Scientific Methods (SM)
45.7	3.2	3.3	34.5	3.1	10.4	3.1
46.5	3.3	5.1	34.6	3.4		3.3
46.8	3.4	5.2	37.5	6.3		6.2
63.1	8.4	13.2	45.9	8.1		15.3
70.4	10.4	13.8	47.1	8.2		59.1
70.5	10.7	14.4	64.4	8.3		
71.2	14.5	15.1	70.2	10.5		
72.1	16.1	15.6		10.8		
73.3	37.6	17.3		11.1		
	40.2	19.2		11.2		
	44.2	25.4		12.3		
	45.2	30.2		15.5		
	45.3	37.7		15.7		
	45.4	40.2		15.8		
	45.5	48.2		19.1		
	45.6	51.1		27.1		
	49.5	57.1		30.1		
	60.2	60.1		44.1		
	64.2	62.2		44.3		
	69.1	64.4		45.1		
	69.3	64.10		45.10		
	70.4			50.3		
				54.1		
				66.1		
				70.2		
				70.3		

1. American Science and Engineering
20 Overland
Boston, Massachusetts 02215

- 1.1 Explorations in Science \$38.50
Kit uses a Piagetian approach to develop concepts of state (e.g. solid, liquid), density and solubility. Unit also focuses on grouping, ordering and measuring.

P, X, materials,
manual 1-2

2. American Seating
800 N. Sepulveda
El Segundo, California 90245

- 2.1 Elementary Science Kit, S-400 #45.00
Kit provides the means and ideas for conducting 150 experiments in the physical, space, plant and animal sciences

G, X, materials,
charts and manual
2-3

- 2.2 Science Kit, S-402, \$25.00

G, X, materials,
manual 1-2

- 2.3 Five Senses 3100-3500 \$8.75
Five plastic models illustrate man's senses.

L models, 2-3

3. Audiovisual Inc.
5235 Ravenswood Avenue
Chicago, Illinois 60640

- 3.1 The Complete Biology \$1,478.25
Using FS, FL, and OT this instructional material presents a complete course in biology, specifically covering biochemistry physiology, and ecology. Unit also emphasizes methods and techniques of measurement.

L, SM, FS, FL, OT.
5

- 3.2 The Complete Physics \$574.75
Materials include FS and OT; unit covers standard areas of physics (e.g., light, sound, mechanics etc).

P, FS and OT
5

- 3.3 The Complete Earth and Space Science \$352.75
Package includes OT and FS and covers such areas as astronomy, weather, and earth; emphasizes scientific methodology.

P, E, SM, OT, FS
5

Audiovisual Inc.(continued)

- 3.4 The Complete General Science Package \$215.00 P and L
Package consists of OT that illustrates OT 305
various areas of the physical and life sciences.
4. Baker Science Packets
650 Concord Drive
Holland, Michigan 49423
- 4.1 Baker Nature Story Packet \$5.95 L, X Card File
Packet lists experiments that students can 2-4
perform without expensive apparatus. Student
guides are available at cost of \$.50 per guide.
- 4.2 Baker Physical Science Packet \$5.95 P, X Card File
Performs same function as above. 2-4
5. Barr Productions
P. O. Box 7-C
Pasadena, California 91104
- 5.1 Geological History of the Grand Canyon \$125.00 E, F (16mm)
Film illustrates and explains the canyon 3 - 5
history.
- 5.2 Rocky Mountains, \$215.00 E, F (16mm)
Film interprets the history of these mountains
in terms of the forces shaping and modifying
them.
6. Behavioral Research Laboratories
Box 577
Palo Alto, California 94302
- 6.1 Sullivan Adventures in Science, 4175-77, \$66.61 G, Text, Cassetts
per unit, total \$199.83 Audio-visual
This series is designed for the non-reader 1-2
and serves as an introduction to science. Audio-
visual presents adventures in surroundings familiar
to the child. Teacher's guide describes
inexpensive experiments.
- 6.2 Number and Units for Science, 0300, \$7.48 SM, Programmed
Text focuses on measurement and the use Text 4-5
of numbers in science.

6. Behavioral Research Laboratories (continued)

- 6.3 Principles of Modern Biology. 0450, \$95.04 L, Programmed
The text approaches biology in terms of exts. 4-5
levels of organization ranging from the cell to
ecology and populations, unit stresses
concepts of structure and function. The
material is organized into 9 units with each
unit including a student text, teacher guide and
test booklet.

7. BFA

Educational Media
2211 Michigan Avenue
Santa Monica, California

- 7.1 Earth Sciences Series, 408000, \$720.00 E, F (Super 8)
Series consists of 23F that illustrate 2-3
the various ecological formations and
their shaping forces. Also includes
material on paleontology.
- 7.2 Habitat, 3K2000, \$40.00 L, FS (Captioned)
- 7.3 Life Sciences Series. 425000, \$720.00 L, X
Series of 30F illustrate the methods F (Super 8)
and materials necessary to conduct experiments 3-4
in biology and nature. Materials covers a
wide range of topics (e.g., techniques for
capturing and keeping insects, procedures
for building inexpensive instrumentation,
methods of plant experimentation etc.).
- 7.4 Investigations in Science: Properties of Matter, P, FS + C
352000, \$46.00 and Energy and Motion, 349000
\$61.00 3
9 FS and accompanying C illustrate the above
physical topics while emphasizing inductive
reasoning in acquiring such physical concepts
as force, energy and form of matter.
- 7.5 The Process of Science: Classifying, 302000, \$32.00 SM, FS (Captioned)
Series of 4FS is designed to lead the young 2
student through experimentation to grouping of
familiar objects.
- 7.6 Oceanography, \$65.00 E, FS, Charts
This unit includes FS, charts marine specimens and 2-3
a reference book illustrating the variety of
plant and animal life in typical ocean environments.

8. Robert J. Brady
130 One Street, N. E.
Washington, D. C. 20002

- 8.1 Anatomy and Physiology, \$45.00 L
A 15 volume programmed text introducing Programmed Kit
the above content areas. 5
- 8.2 Anatomy and Physiology, \$300.00 L, FS + C
15 programmed full color FS plus sound 5
present information on above topics.
- 8.3 Biology, \$295.00 L, OT, 5
This set of 106 OT covers the following units;
cell, genetics, zoology, botany and ecology.
Includes teacher's manual.
- 8.4 Teaches General Science Units 1 and 2, \$210.00 P, OT with OL,
Units 1 and 2 cover the areas of light and sound. 5

9. BSCS
P. O. Box 930
Boulder, Colorado

- 9.1 Life Science: Me Now L, Charts, FL,
Life science program, BSCS, developed for 35 mm slides.
10-14 year old EMR. Program consists of
four units; body function, perception, and
growth and development. Emphasizes Brunner's
inquiry approach.

10. CENCO
6446 Telegraph Road
Los Angeles, California 90022

- 10.1 Elementary Earth Sciences, 59330-13, \$43.50 E, OT, 203
These visual aids illustrate concepts found in
standard texts. Study guide included.
- 10.2 Basic Science Series, 59315-1, \$249.00 G, OT, 2-3
Similar to above but also covers other physical
sciences as well as the life sciences.
- 10.3 Elementary Science, 59337-900, \$690.00 G, OT, 304
This set of 224 OT and study guides illustrate
standard areas of the physical (e.g. light, mechanics)
and life (e.g. plant and animal life) sciences.
- 10.4 Experiments in Physical Sciences, 59271, \$59.50 P, X, FS, 4-5
These FS visually present a variety of physical
experiments illustrating diverse scientific
principles. FS illustrate the required apparatus.

Cenco (continued)

- 10.5 Modern Biology: Environment and Survival, 59280
\$49.50 L, FS + Records
4-5
Using an audio-visual approach the materials describe the interdependence of plants, animals and their habitat. Includes a teacher guide.
- 10.6 Understanding Electricity, 59241, \$27.00 P, FS + Records,
3-4
Using an audio-visual presentation the materials illustrate and explain basic principles of electricity. Teacher's guide included.
- 10.7 Millers Demonstration in Physics Series, 56699-220 P, FL, 5
\$228.00.
The set of 19 FL covers a wide range of topics and presents many classical experiments.
- 10.8 Natural History Series, 56699-999, \$555.00 L, FL, 1-5
This set of 37 FL covers the range of organizational complexity in the animal kingdom; also focuses on the forms of adaptation to the environment shown by the various members of the animal kingdom.
11. Center for Cassette Studies
8110 Webb Avenue
North Hollywood, California 91605
- 11.1 The Awful Arachnids, 13623, \$14.95 L, C, 405
An audio presentation that defines who and what they are.
- 11.2 Whales and Porpoises, 13433, \$14.95 L, C, 3-5
Material describes their life style, how mammals survive in the water and their place in evolution.
12. Churchill Films
% R. Glore
5512 Cathedral Oaks Road
Santa Barbara, California 93111
- 12.1 Growing, Growing. \$130.00 L, F, 2
- 12.2 Wonders in a Country Stream, \$65.00 L, F, 2
Film reveals the types of life two children find in a pond and a stream.
- 12.3 Exploring the Human Nervous System, \$150.00 L, F, 5
Film compares man's nervous system with those of lower organisms. Illustrates such concepts as the reflex arc.

13. Coronet

65 East South Water Street
Chicago, Illinois 60601

- 13.1 Measuring Things, M113, \$60.00 SM, FS +C, 2
An audio-visual presentation (6 FS+C) depicting realistic examples that explain the fundamental importance of measurement.
- 13.2 Oceanography, M182, \$70.00 E, FS + C, 4-5
This set of 6 FS and accompanying C surveys the fields of marine and physical oceanography.
- 13.3 The Story of Space Flight, M234, \$10.00 P, FS+C, 3-4
Set of 6 FS and C overviews man's conquest of flight. Illustrates the potential exploration of the planets.
- 13.4 How Scientists Think and Work, \$30.00 SM, Text, materials 3
This field tested learning program describes the attributes, methodology and thinking of the scientists.
- 13.5 Grouping Things in Science, \$70.00 SM, F (16mm) 3-4
Film illustrates how familiar objects are grouped to meet scientific objectives..
- 13.6 Nature of Science, \$507.50 SM, F (16mm) 4
Obtaining Facts 140.00
Forming Hypotheses 105.00
Testing Hypotheses 87.50
How Ideas Change 175.00
A set of 4 F that illustrate, in great detail, the process of scientific discovery and methodology.
- 13.7 We Explore Series, \$455.00 E, L, F (16mm)
Mountains, Oceans, Beaches, Deserts, Field and Meadows, Streams, Woodland. Each \$65.00.
This series of F explores various life systems in the above environments.
- 13.8 Understanding Our Earth Series, \$260.00 E, F (16mm) 3-5
Rocks and Miners, Soil, How Earth's Surface Changes, Each \$65.00.
This set of films describes the earth's structural elements and the forces modifying them.

14. DEMCO
Box 7767
Fresno, California 93727

- 14.1 Conservation of Natural Resources, 78-0698; E, OT, 2-3
\$232.50
A series of 48 OT (plus teachers guide) shows how our lives depend upon natural resources
- 14.2 Applied Sciences, 78-0520 P, 2-3
A sec of 12 OT illustrating various physical OT
concepts and their practical applications.
Includes a teacher's guide.
- 14.3 Atomic Energy, 78-0020, 82-0011, \$39.50 P, OT, 304
A lab kit, teachers guide and 6 OT form this unit.
The materials illustrate the development of different atoms and how energy can be obtained through fission and fusion.
- 14.4 Earth Sciences 78-0716. \$252.00 E, OT, 405
Materials illustrate the following areas: meteorology, oceanography and astronomy, also includes a unit on laboratory investigations.
- 14.5 Electronic Physics, 76-7425 \$230.00 P, FS, 5
This unit (20FS + teachers guide) is designed to be incorporated into a physics course and visually provides an introduction to basic principles of physics.

15. Denoyer Geppert
6112 South Condon Avenue
Los Angeles, California 90056

- 15.1 Earth Sciences 910012, \$355.00 E, OT, 5
This integrated program (82 OT) covers meteorology, astronomy, geology and map reading.
- 15.2 Our Physical World I & II, H19 and H28, \$56.25 P, FS, 2
Unit (9 FS) focus on experiences familiar to students.
- 15.3 Measurement, H15, \$43.25 SM, FS, 5
An introduction to measurement of length, volume, and velocity in this unit of 7 FS.
- 15.4 Earth I, II, E3, E16, \$62.50 E, FS, 304
These units (10FS) illustrate the various features of the earth and focus on their shaping forces.

Denoyer Geppert (continued)

- 15.5 Talking Torso, 700302 \$305.00 L, Model, Aids, C,
A multi-media presentation of the human body. 3-5
Model has removable organs.
- 15.6 Ecology, 689581, \$150.00 E, Slides (35mm)
Materials depict populations, food chains, and 4-5
ecological successions.
- 15.7 Biology, 44051-99, \$310.50 L, OT, 5
A set of OT presenting a program in modern
biology including chemistry and human
physiology. Materials include lesson books.
- 15.8 Evolution of Animal Life, 689701, \$200.00 L, Slides (35 mm)
This set of 480 35mm slides provides the
basic data for the theory of animal evolution.
Includes a teacher's manual.
16. Doubleday
Box 11607
1371 Reynolds
Santa Ana, California 92705
- 16.1 Man on Moon, 77002 \$103.00 P, FS+C, 2-5
This set of 5 FS +C examines aspects of
astronauts and indicates benefits derived
from the space age.
- 16.2 Animals Adapt to their Environment, 58325, \$185.00 K, FL (super 8)
This set of FL illustrates how animals adapt to 3
the diverse environments of the earth.
17. Educational Activities
P. O. Box 392
Freeport, New York, 11520
- 17.1 Seasons FSR424 \$38.00 E, FS, C, 1-2
This audio-visual presentation shows children
exploring the seasons in terms of their textures,
sights, sounds and activities.
- 17.2 Elementary School Science Program \$270.00 P, E, FS+C, 1-3
An audio-visual presentation (28 FS+C) of "what
science is". Content areas covered include
earth, astronomical and physical sciences.
The latter is almost solely concerned with energy--
its forms, sources and uses.

17. Educational Activities (continued)

- 17.3 Keys to Basic Ecology \$150.00 E, FS+R, 3-5
This set of 18 color FS and 9 records
(33 1/3rpm) falls into three units:
Diversity in Nature, Interrelationships
of Natural things, and Adaption.

18. Educational Development Corporation
Learning Resources Division
202 Lake Miriam Drive
Lakeland, Florida 33803

- 18.1 Ecology: Water Pollution Lab. 11-02 \$225.00 E, Lab, 3-4
Complete laboratory includes 8 investigations with
21 basic classroom experiments. Special emphasis
is placed on helping students become aware, concerned
and active in regard to water pollution.
- 18.2 Human Growth and Development #20-0122, \$143.00 L, FS+C, I
Program is designed to provide a comfortable
understanding of human growth and development
- 18.3 Science Explore Tapes, 7-20 \$295.00. G, C, 3
This program allows for study of topics not
generally provided in the curriculum and leads to
increased interest in science and science concepts.
Covers such diverse areas as "Social Behavior of
Animals", "Archaeology: Discovery of an Ancient
City", and "The Mind of a Computer". The set consists of
40 audio lessons which may be obtained in individual audio
lessons each including a cassette, 30 copies of
student activity sheets and a Teacher's Guide @ 8.50 each.

19. Educational Filmstrips
1401 19th Street
Huntsville, Texas 77340

- 19.1 Man's Biological Heritage, Fl-68-2003 L, FS+C, 5
-2014-2017 plus 70-736694, \$60.00.
A-V unit with captioned FS (6) that is designed
to illustrate the development of the human
species. Includes teacher's manual.
- 19.2 World Famous Volcanoes. 75-740108, 79-740109, E, FS+C, 3-5
73-740110, 77-740111, 70-740112, \$50.00
Unit depicts the results of volcanic activity.
Includes teacher's manual.

20. Educational Projection Corporation
527 South Commerce Street
Jackson, Mississippi

- 20.1 The Earth, 1138-1140, \$18.00, 1138-1140, \$18.00 E, S, 2
- 20.2 *The Seasons, K-002, \$169.50 E, FS, OT, C, Texts
This A-V unit aims to demonstrate how the seasons affect our daily activity. Unit includes 10 OT, 10C, FS, 16 student manuals and teacher's manual.
- 20.3 *Science K-10-2, \$169.50 F, OT, FS, C, Texts
This A-V unit presents the development of science from ancient to modern times and the application of scientific principles to daily living.
- 20.4 Animals of Long Ago, PG-48, \$41.85 E, FS+C, 1-2
Illustrates and informs about prehistoric animals.
- 20.5 Ecology, PG-53, \$24.00 K, FS, 1
- 20.6 Looking at Nature PG-57, \$47.85 G, FS, PT. C
Shows how instruments aid our senses. 1-2

21. Educational Reading Service
320 Rt. 17
Mahwah, N. J. 07430

- 21.1 Our Wonderful World Nature \$96.27 L, Text, 2
Describes the variety of living things and their environments.
- 21.2 The Path to Discovery, \$145.00 SM, Texts, 1-2
These volumes (41) introduce scientific concepts and activities as well as the physical, earth and life sciences.
- 21.3 Science: Man's Most Important Tool, \$104.96 G, Texts, 3
Texts (24) explore in depth, various scientific principles of the physical and life sciences.
- 21.4 Classroom Nature Activities, \$42.00 L, X, FS, 3-4
These 7 FS illustrate techniques for keeping plants and animals in the classroom or home.

21. Educational Reading Service (continued)

- 21.5 Science Processes \$164.00 SM, FS, 2
This programmed 24 FS illustrates the scientific activities of observing, classifying, measuring and experimenting.
- 21.6 Science Facts \$60.00 P, FS, 2
Materials (12 FS) cover standard areas of physics.
- 21.7 Discovering Why \$341.00 F, SM, FS, 2-3
This series of 53 FS parallels the science curriculum of McGraw-Hill. Unit encourages observation and problem solving.
- 21.8 The Story of the Universe \$184.00 P, FS, 3
Introductory course in astronomy (D4FS)
- 21.9 Experimenting with Science \$174.95 P, X, Kit, 3-4
12 self contained kits of materials cover various topics in physics.
- 21.10 Animal Instinct and Survival Techniques \$129.00 L, FL(super 8)
6 FL reveal survival through behavior and 2-3
protective adornment.

22. Eye Gate House
146-01 Archer Avenue
Jamaica, New York 11435

- 22.1 Basic Concepts in Science, 8234825, \$642.00 F, F (super 8) 1-2
This unit consisting of 26 color super 8 F, was designed to develop skills of observation, measurement, classification and comparison of data, and drawing of inferences. Unit covers physical, earth and life sciences. Includes study guides and teacher's manual.
- 22.2 What is a _____? X229, \$47.50 SM, FS+C, 1-2
Unit (6 color FS+C) introduces classes of natural phenomena.
- 22.3 Elementary Science Series, 847, \$547.00 P, F, Tape, 3-4
A set of 25 Super 8 color F plus tapes A-V presents information on physics and chemistry.
- 22.4 Fundamentals of Sciences, T7303, \$569.50 G, FS+C, 1-3
A complete program (81 FS+C) covering physical/ life sciences with particular emphasis on scientific methodology.

23. Film Associates

11559 Santa Monica Boulevard
Los Angeles, California 90025

23.1 Earth Science Series. ES1-6, \$547.00

E, FL, 2

31 FL illustrate content in geology, paleontology,
oceanography and space sciences.

23.2 Physics \$283.00

P, FL, 3-4

17 FL illustrate standard areas of physics.

24. Follett Instructional Materials

1010 Washington Boulevard
Chicago, Illinois 60607

24.1 Science for Human Values

F, PT, 2-3

Level 1	#4510	#4516	\$6.15
Level 2	4520	4526	6.57
Level 3	4530	4536	7.01
Level 4	4540	4546	7.59
Level 5	4550	4556	7.71
Level 6	4560	4566	8.07
			<u>\$43.10</u>

Integrated series of texts covering science in general.

25. Tom Handy School Service

2781 East Grand Boulevard
Detroit, Michigan 48211

25.1 Insects Around Us. 1120 \$27.35

L, FS (color) 2

Winner of numerous awards. Acquaints children with
various insects, (habits, homes, appearance).
Enables children to identify and make collections
of live insects for study.

25.2 Heat, Light and Sound 1200, 7 FS color \$38.30.

P, FS(color) 3

These FS present basic principles of 3 forms of
energy, heat, light and sound, presenting actual
experiments which can be performed by students.

25.3 Airplanes, Jets and Rockets, 1220, \$35.85.

P, FS, 2-3

Visual explanations of basic principles, construction,
and operation of various methods of flight.

25.4 Understanding the Atmosphere, 1330, \$27.35

E, FS(color) 4-5

Emphasis of these FS is on the importance of air
to man, chemical and physical aspects of the
atmosphere. Numerous experiments are suggested.

26. D. C. Heath
2700 North Richardt Avenue
Indianapolis, Indiana 46219
- 26.1 Pattern and Processes of Science \$89.58 SM, X, Text, Tapes
This material gives the student first hand experience using scientific methodology. Materials include lab text, teacher's manual and tests (duplicating masters).
27. Holt/Ealing
Holt, Rinehart and Winston, Inc.
383 Madison Avenue
New York, New York 10017
- 27.1 Pecking Order in Chickens, 81-7817/1, \$24.95 L, FL, 4-5
Presents an experiment in which pecking order is established, demonstrating the phenomenon of social orders of dominance in animal groups. Part of a set of 8 color FL (89-4451-1) (\$199.60); a series of the more important behavioral animal studies done. Includes some of the work of Tinbergen and Shafer.
- 27.2 Bones, 89-2646/1, \$79.75 L, FL, 3-4
Using a technique permitting X-ray studies in motion, this series demonstrates the structure, movement and function of the principle parts of the body.
- 27.3 Darwin's Voyage, 89-4030/1 \$149.70 L, FL, 3-4
Series re-traces portions of Darwin's famous voyage aboard HMS Beagle--showing the same scenes Darwin saw; studying the animals which eventually contributed to his revolutionary theory of evolution by natural selection. The student is provided with the same kind of information available to Darwin, and is left to draw his own conclusions. Notes accompany the film.
28. Houghton-Mifflin
777 California Avenue
Palo Alto, California 94304
- 28.1 Overhead Visual Biology, 2-03058, L, OT, 4
1,77237, 2-77450, \$97.60.
A set of 25 OT visually presenting the field of botany.
- 28.2 Man and Environment \$51.10 L, K, Text, 4
A complete introductory life science program with special emphasis on ecology. Includes games and instructions for carrying out investigations.

29. Instructional Aids

Box 293

Owatonna, Minn. 55060

29.1 Earth Sciences \$99.00 E, Photos, 3-4

29.2 Modern Science I, \$142.00 G, OT, 3-4

This unit, which focuses on astronomy, meteorology, geology and life sciences correlates with the science text by Blanc, Fischler and Gardner.

29.3 Modern Science II, \$142.00 G, OT, 3-4
Continuation of above.

29.4 Modern Science III, \$142.00 G, OT, 3-4
Continuation of above with emphasis on the quantitative nature of science.

30. Instructional Material and Equipment

1520 Corner

Los Angeles, California 90025

30.1 Biology. 72023-003, \$87.50 L, OT, 5
21 OT comprise this general coverage of biology.

30.2 Earth Sciences Series. 62010-72012, \$283.50 E, OT, 4-5

31. Instructor Inc.

P. O. Box 6108

Duluth, Minnesota 55806

31.1 Primary Science Concept Series 661-668, \$28.00 G, Charts, 1-2
This set of 96 charts and teaching guides provide information on the physical and life sciences with the aim of motivating discussion.

31.2 Science Concepts and Processes 581-590, \$35.00 SM, Charts, 3-4
Unit is designed to encourage discovery through observation and exploration.

32. Journal Films Inc.

909 West Diversey Parkway

Chicago, Illinois 60614

32.1 Adapting to Changes in Nature \$135.00 L, FS (color) 2-3
FS illustrate the various forms of adaptation.

32.2 Evolution of the Hands \$125.00 L, FS, 3-4
A set of FS designed to illustrate the evolution of the hand and its adaptive value.

32. Journal Films Inc. (continued)

- 32.3 Life Span \$455.00 L, FS, 2-3
Compares and analyzes the varying life spans
of different animals.

33. Knowledge Aids
6623 West Howard Street
Niles, Illinois 60648

- 33.1 Springboard to Science 4100A, \$134.50 G, FS, C, Posters
Principle focus of this unit is on the life sciences 2
- 33.2 Science 1150, \$132.50 G, C, 3-4
This unit includes spirit duplicating masters and covers
physical, earth and life sciences.
- 33.3 Natural Science, 4100-A, \$179.95 G, C, FS, Texts
Character "Alphi" shares his adventures and 2
desires to discover more about the wonders of
science. Aimed at developing skills of reading,
listening, speaking and visual perception.
- 33.4 Alphi's I Wonder Why? 4301 \$390.00 G, F, 2-3
A set of films (3) aimed at stimulating
problem solving as well as self-initiated
experimentation.

34. Learning Arts
P. O. Box 917
Wichita, Kansas 67201

- 34.1 Elementary Science ESSE-fss, \$339.00 F, FS, 2-4
Total of 53 FS which can be grouped into units.
- 34.2 Life Sciences, lifsci-fr, \$148.00 L, OT, 2
- 34.3 *Science Readiness, SPSE-fssp, \$164.00 SM, FS, *
Contains four sets of FS labelled "observing
and describing, measuring, classifying and
experimenting".
- 34.4 *Science Readiness. SCIBEA-FR, \$174.00 SM, OT, *
Materials illustrate similarities-dissimilarities
using optical illusions.
- 34.5 Ecology and Man. EAMSE-FSS, \$147.00 K, OT, 5
Basic concepts of ecology and their applications
are contained in this unit.

34. Learning Arts (continued)

- 34.6 Ecological Crisis, \$72.00 K, C, 1-5
Unit focus on overpopulation, diminishing food supply, etc. and dramatically relates them to their basic causes.
- 34.7 Interdependence of Living Things, \$41.00 K, FS, 3-4
Explains basic principles of ecology.
- 34.8 Beginning Exploratory Science, \$168.00 G, F, 1-2
A unit designed to stimulate exploration and observation.
- 34.9 Imagination: World of Inner Space G, Records (33 1/3)
A collection of sounds that challenges the 3-4
imagination (eg., chimpanzee, eating). Makes contact with reluctant learners.

35. Learning Centers Incorporated
Princeton, New Jersey

- 35.1 Earth. BK172 & 180, \$250.00 E, Kit, 1-3
Materials include globes, weather maps and teacher's manuals and is designed for a class of 30 students.
- 35.2 Chick Embryology. K591, \$60.00 L, Materials, 1-4
A learning laboratory designed to show differences between the chick and human embryo.
- 35.3 Seed Garden and Greenhouse. K601, \$80.00 L, Materials,
3-4
A unit providing a complete examination of all aspects of botany. Includes wide range of materials and instrumentation.

36. Learning Media Corporation
231 North 63rd Street
Philadelphia, Pennsylvania 19139

- 36.1 Physical Science for Primary Children P, OT, 2
Sand, Heat, Light, Electricity and Magnetism, and Machines \$147.50
- 36.2 Conservation: Saving our Environment \$24.00 K, FS, 2-3
- 36.3 Changing the Face of the Earth, \$46.00 E, C, 2-3
A set of 10 C describing the various forms of surface features of earth.

36. Learning Media Corporation (continued)

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| 36.4 | <u>What are Animals?</u> \$193.50 | L, FL (Super 8)
1-2 |
| 36.5 | <u>Backyard Birds and Animals</u> \$150.50
Illustrates observations of familiar forms of life. Shows their life style. | L, FL (Super 8)
1-3 |
| 36.6 | <u>The Body</u> \$57.95
Illustrates the different systems of the human body. | L, OT, 2-3 |
| 36.7 | <u>Science: Doorway to Discovery</u> , \$27.60
Introduces areas of science that have interested man throughout history. | G, C, 3 |

37. Learning Research Association Incorporated
1501 Broadway
New York, New York 10036

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|------|---|--------------|
| 37.1 | <u>Explorations in Science</u> S30100, S30101, S30200, S30201, S30300, S30301, \$61.50
These three kits contain materials and directions for illustrating the concepts of volume density, weight as well as how they are measured. | SM, Kit, 1-2 |
| 37.2 | <u>Human Growth and Development</u> ME298CFX, \$143.00 | L, FS+C, 2-3 |
| 37.3 | <u>Ecology and You</u> , ME367CFX, \$72.50 | K, FS+C, 2 |
| 37.4 | <u>Taking a Good Look at Science</u> , ME294FX, \$45.00
Covers standard areas of physics. | P, FS, 3 |
| 37.5 | <u>Ecological Systems</u> SN52CFX, \$54.00
4 FS depicting the ecology of seashore, forest, ponds and desert. | K, FS+C, 4-5 |
| 37.6 | <u>The Story of the Universe</u> , SN35-38FX, \$176.00
A unit on astronomy and astronomical measurement. | P, FS, 4-5 |
| 37.7 | <u>Earth Sciences</u> , SN42LX, \$408.00 | E, FS, 4-5 |
| 37.8 | <u>Science: Doorway to Discovery</u> , ME292CX, \$29.95
An audio (6C) presentation of scientists discovering and testing new facts in the various sciences. | G, C, 2 |

38. McCormick-Mathers
450 West 33rd Street
New York, New York 10001

38.1 My World of Science.

G, Text, 2-3

Book 1	Student Text	\$1.00	Teacher's Text	\$1.35
Book 2	Student Text	\$1.20	Teacher's Text	\$1.59
Book 3	Student Text	\$1.47	Teacher's Text	\$1.68
Book 4	Student Text	\$1.59	Teacher's Text	\$1.83
Book 5	Student Text	\$1.59	Teacher's Text	\$1.86
Book 6	Student Text	\$1.59	Teacher's Text	\$1.86

Series covers major themes within the physical, life and earth sciences. Emphasizes the conceptual structure of science and scientific inquiry.

39. McGraw-Hill
8171 Redwood Highway
Novato, California 94947

39.1 Eggs and Tadpoles #07-017513-6 \$46.00

L, Kit, 1-4

Class kit for 30 that includes eggs and necessary equipment. Children's natural interest in living things is encouraged through observation and exploration; many questions can be answered by observation.

39.2 Challenges to Science Series, #07-058416-8 \$7.32

G, Text, 3-4

Emphasis of this series is on environmental awareness and on the development of analyzing, collecting and observing skills. Over 30% of the laboratory investigations are new and have never been used in a Junior High life science course.

39.3 Earth Science: (Two Sets) 245952, 245989, \$252.00 each E, OT, 4

This series covers in detail, astronomy, geology, mineralogy, and meteorology.

39.4 Ecology and Man, Set 1-3, 613375, 613382, 613390.

K, FS, 4

Materials cover natural and man-managed ecosystems and explores the ranges of geographic and seasonal changes.

39.5 Experiences in Science.

G, X, Text, 2-3

07-079671-8	\$259.20	Materials	Lab Log, Texts for 30	Grade 1
07-079672-6	259.20	Materials	Lab Log, Texts for 30	Grade 2
07-079673-4	265.20	Materials	Lab Log, Texts for 30	Grade 3
07-079674-2	265.20	Materials	Lab Log, Texts for 30	Grade 4
07-079675-0	270.60	Materials	Lab Log, Texts for 30	Grade 5
07-079676-9	270.60	Materials	Lab Log, Texts for 30	Grade 6

This program utilizes the child's curiosity to explore and discover the world around him through his own observation and experimentation. Covers all life, physical, and earth sciences.

39. McGraw-Hill (continued)

- 39.6 Astronomy Series \$74.50 (rental)
Introduces basic concepts of earth sciences
and illustrates the methods astronomers use.

E, F, 4

39.7 Environmental Studies

K, Multi-Media, 3

Marine and Seashore Pollution	07-07949 --2	\$110.00
The Great Swamp	07-07949 -0	90.00
Solid Waste Management	07-07949 -9	90.00
Air Pollution	07-07949 -7	125.00
Water Pollution	07-079499-5	120.00

A complete instructional program aimed at developing environmental awareness. Emphasises individual investigation and experimentation. Program includes texts, FS, FL, OT, masters and materials.

- 39.8 Match and Measure, 07-017721-X and 8, \$100.35
Unit designed to establish concrete concepts
of length, area, and volume.

SM, Kit, 1-2

40. Macmillan Publishing Company
School Division
Riverside, New Jersey 08075

40.1 The Macmillan Science Series.

SM, X, Text, 2-3

Science: Observing Things	Level 1	10298	\$2.67
Science: Finding Out	Level 2	10386	2.79
Science: Being Curious	Level 3	10474	3.00
Science: Comparing Things	Level 4	10562	3.21
Science: Testing Ideas	Level 5	10650	3.33
Science: Measuring Things	Level 6	10749	3.45

The above series is based on interrelated science learning, organized around basic concepts.

40.2 Programmed Learning Laboratory

P, E, Text (PI)
4-5

Motion	26300	\$1.26
Force	26302	1.26
Energy and Work	26304	1.26
Simple Machines	26306	1.26
Earth	26308	1.26
Light: Flow and Energy	26310	1.26

Step by step learning encourages mastery of skills.

40. Macmillan Publishing Company

40.3 Macmillan Science Labs

G, SM, X, Kit, 2-3

- The Macmillan Science Lab.	26610	\$82.50
Consumable Materials Kit, Level 1	26611	6.75
- The Macmillan Science Lab.		
Level 2 (includes Teacher's Manual)	26620	87.00
Consumable Materials Kit, Level 2	26621	15.75
- The Macmillan Science Lab.		
Level 3 (includes Teacher's Manual)	26630	97.50
Consumable Materials Kit, Level 3	26631	19.80
- The Macmillan Science Lab.		
Level 4 (includes Teacher's Manual)	26640	121.50
Consumable Materials Kit, Level 4	26641	15.75
- The Macmillan Science Lab.		
Level 5 (includes Teacher's Manual)	26650	121.50
Consumable Materials Kit, Level 5	26651	45.30
- The Macmillan Science Lab.		
Level 6 (includes Teacher's Manual)	26660	121.50
Consumable Materials Kit, Level 6	26661	7.65

A compact, portable Lab. provides all materials necessary for carrying out demonstrations, observations and experiments. Materials sufficient for a class of 30.

40.4 Macmillan Elementary Science Filmstrips

G, FS, 2-3

Filmstrip Set A for Level 3, Sun, Moon, and Earth; Our Changing Earth; Living on Land; Living in Water; Your Body's Needs; Heat. 10479 \$45.00

Filmstrip Set B for Level 4, Simple machines; Green Plants; Classifying Animals; Electricity; Light and Shadows; Weather. 10567 \$45.00

Filmstrip Set C for Level 5 Patterns of Growth; Physical Properties of Matter; Chemical Properties of Matter; Investigating the Atmosphere; Flight into Space; Exploring the Oceans. 10655 \$45.00

Filmstrip Set D for Level 6 Molecules in Motion; Planets; Light and Lasers; Ecological Systems; Animal Behavior; How Living Things Change. 10754 \$45.00

The four sets of FS are concept and process oriented and encourage student participation. Designed to be used with any science text.

41. Macmillan School Supplies

P. O. Box 568

Monterey Park, California 91754

- 41.1 Primary Science Concepts Charts, 010-310-10 to 17 \$28.00 G, Charts, 2
A set of 8 charts aimed at stimulating discovery and providing meaningful experiences.
- 41.2 Earth Science Series, 097-312-551-1 to 8 \$143.00 E, Prints, 3-4
Color study prints and accompanying text, covers all aspects of the earth sciences.
- 41.3 Discovery Through Science. 038-322-809 \$110.00 F, X, C, 3
This unit of 20 C and teacher's guide describes science activities and experiments.

42. Master Tape Library

California State Department of Education

721 Capitol Mall

Sacramento, California 95814

- 42.1 Concepts in Science. 195/69, 117/69, 053/69, 441/70 and 054/69. G, IT, 2-3, *
A series of IT covering the Harcourt Brace series of science texts. 35 hours of recordings.
- 42.2 *The Environmental Handbook 1085/71 K, IT, 5, *
A twelve hour recording of the text by De Bell.
- 42.3 *High School Biology 579/70 L, IT, 5, *
An IT (46 hours) presentation of the text by H. Durst.
- 42.4 *Today's Basic Science, 219/69, 348/69, 039/69 and 038/69. G, IT, 1-4, *
Four sets of IT (45 hours) covering the Today's Basic Science series published by Harper and Row.
- 42.5 The Wonderful World of Medicine, 356/69. L, IT, 3-4, *
An IT, four hours in length, made from the text by R. Calder.

43. C. E. Merrill Publishing Company
1300 Alum Creek Drive
Columbus, Ohio 43216

42.1 Principles of Science.

Aimed at developing scientific understanding in
a context of uniting principles and concepts.

SM, Text, 4

43.2 Principles of Science. \$150.00

Designed to accompany above texts.

SM, OT, 4

44. Moody Institute of Science
12000 East Washington Boulevard
Whittier, California 90606

44.1 Sense Perception. \$300.00

Give an understanding of the functioning of
the sensory system of the human.

L, F, 3-5

44.2 Living with the Atom \$290.00

P, F, 4-5

44.3 The Human Machine \$155.00

Emphasis focuses on concepts of structure and
function.

L, F, 3-5

44.4 Foodgetting Among Animals \$140.00

L, F, 3-4

45. Nasco

Fort Atkinson, Wisconsin 53538

- 45.1 The Human Body O800-44, \$48.00. L, FS, 4-5
Each of the FS focuses on specific structures and their functions (16 FS).
- 45.2 Electricity Series OT472, \$127.50. P, OT, 5
Covers basic circuits, generators, and magnetism.
- 45.3 Complete Light Series OT428, \$168.35, P, OT, 5
Covers light, reflection, color and refraction.
- 45.4 Sound OT436-ESr 7, \$36.90 P, OT, 5
- 45.5 Force and Motion OT386-Em 1-10, \$87.35. OT, H, P, OT, 5
Illustrates the concepts on force and motion.
- 45.6 Atomic and Molecular Models Z1871, \$42.00. P, FS, 5
6FS. Illustrates the concept of size and the properties of atoms and molecules.
- 45.7 Young People's Science Encyclopedia S1990, \$75.00. G, TEXT, 2-5
The 20 volumes comprising this set are written on two levels (3rd and 9th grade). Covers the physical and life sciences and describes many experiments the student can perform.
- 45.8 Prehistoric Life Z1954, \$36.00. L, FS, 3
Describes life forms of prehistoric animals.
- 45.9 Ecological Systems O2834L, \$34.50. K, FS, R, 4-5
Materials provide a visualization of widely separated geographic areas for extended time.
- 45.10 NTA Human Biological Model Z5690 M-HO-C, \$130.00. L, MODEL, 4-5
Model of human with removable parts.

46. G.P. Putnam's Sons

P.O. Box 10

East Rutherford, New Jersey 07073

- 46.1 The Riddle of Seeds SBN 698-30293-1, \$3.86. L, TEXT, 3
Text provides a different approach to the topic of seeds and their importance to life. Offers many projects for class and home.
- 46.2 The Story of Your Blood SBN 698-30332-6, \$4.19. L, TEXT, 3
Text gives vivid descriptions and illustrations of how blood works to keep the body healthy and alive.

Putnam(continued)

- 46.3 Finding Out for Yourself Books L, TEXT, 2-3
 Three volumes dealing with animals, plants and changes that take place in the world. Primary emphasis on learning "by yourself" as the best way to gain information. Encourages use of scientific method. Filled with thought-provoking projects.
 Gr. 3 - SBN 399-60560-6, \$3.68 1968
 Gr. 4 - SBN 399-60561-4, \$3.68 1968
 Gr. 5 - SBN 399-60562-2, \$3.68 1970
- 46.4 The Green Frontier; Stories of Chemurgy. SBN 399-60220-8, L, TEXT, 3-4
 \$3.86.
 Fascinating account of chemurgy. Covers problem of raising and improving food plants, developing new food and non-food uses for familiar and non-familiar species, finding practical and desirable uses for otherwise waste plants and waste parts of plants.
- 46.5 How It Works Series, \$33.38. G, TEXT, 4-5
 Clear non-technical explanations of how things actually work. Individual books \$3.69 JH
 Airplanes SBN 399-60010-8
 Automobiles SBN 399-60034-5
 Communication Satellites SBN 399-60102-3
 The Electronic Brain SBN 399-60151-1
 Motorcycles SBN 399-60477-4
 Parachutes SBN 399-60700-5
 Radar SBN 399-60748-X
 Telephone SBN 399-60624-6
 Weather Instruments SBN 399-60657-2
- 46.6 The Story of Life SBN 399-60609-2, \$15.01. L, TEXT, 3-4
 Logical, sequential presentation of essentials of life and its development, and of heredity and environment basic to the evolution of man.
- 46.7 Scientists' Nightmares: The Baffling, The Fake, and the Unsolvable SBN 399-60715-3, \$4.49. G, TEXT, 4-5
 A challenging selection of scientific mysteries, some explained some not, which have plagued and continue to plague scientists.
47. QED Productions
 P.O. Box 1608
 Burbank, California 91505
- 47.1 The Ecological Crisis ECE 10 6FS, 3C or records, K, FS, C, TEXT, 4-
 6 study guides, 1 world population statistic chart, \$69.00.

QED Productions (continued)

Series is designed to bring together such problems as pesticides, over-population, diminishing food supply, ecological disturbance, etc., and relate them to their basic causes dramatizing their factual statistics. Received a citation from National Council on Family Relations.

48. Rand McNally and Company
School Department
Box 7600
Chicago, Illinois 60680

- 48.1 Science Curriculum Improvement Study
Life Science Level One, Organisms Unit, 10106-4, \$112.00. Physical Science Level Five, Energy Sources Unit, 10141-2, \$220.00. Total cost for Level One program, \$2047.00.
Life Science and Physical Science each for six levels. A wide variety of physical materials and living organisms invites children to touch, manipulate, observe, learn. Works in three stages: exploration, invention, and discovery. Each stage serves to reinforce previous learning. Superbly suited to inner city needs.

G, TEXT, 2-3

- 48.2 Interaction of Earth and Time 95-2719, \$310.00.
Examines changes on, beneath and above the earth surface through time. Investigations of planets' structures and relationships, land forms, fossil records, etc., are all part of the program. Leads to a full understanding that the earth is not indestructible. Includes books, tests and varying equipment for 30 students.

E, TEXT, 4-5

49. Sargent-Welch Scientific Company

- 49.1 Auto Tutor Mark 4/111 8700/7700, \$1150-750.
Equipment to show programmed instructional material.
- 49.2 Elementary Biology T8730, \$144.
Covers plant and animal kingdom with emphasis on the human.
- 49.3 Elementary Earth Science T8735, \$240.00
5 PI reels, I-J.

AV EQUIPMENT

L, PI(A-V), 3-4

E, PI(A-V), 3-4

Sargent-Welch (continued)

- 49.4 Elementary Physical Sciences T8740, \$384.00.
8 PI reels. Covers traditional areas, light,
sound, heat. P, PI(A-V), 4-5
- 49.5 Elements of Physics T7756, T7757, \$760.00.
8 PI reels. Presentation of a first course
in physics. P, PI(A-V), 4-5
50. School Master Science
745 State Circle
Ann Arbor, Michigan 48104
- 50.1 The Five Senses 3600, \$11.50. L, MODELS, 3-4
- 50.2 Geology VLI-701-705, \$80.00. E, 35mm SLIDES, 3-4
- 50.3 Human Body EHB-1580, \$47.00.
120T, 1-H. L, OT, 3-5
- 50.4 Conservation ESC-1710, \$28.00.
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- 50.5 Ecology 620-401, \$34.95.
FS&C, 1-H. K, FS&C, 4-5
- 50.6 Sciences for Grade School TP-6-9-14, \$15.95.
Designed to encourage exploration, experimentation
and conceptualization. G, TEXT, 2
51. Scott Education
Holyoke, Massachusetts 01040
- 51.1 Earth Sciences 72010-72012, \$274.50.
Covers current topics in earth sciences,
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- 51.2 Human Nervous System JH 3420 FC, \$118.00.
Includes 8 FS&C. Covers structure and function
of nervous system. L, FS&C, 3-4
- 51.3 Animal Kingdom 72001-103, -203, 303, \$177.00.
39 OT. Depicts the continuity of the animal
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function. L, OT, 3-4
- 51.4 Pollution 3925-26, \$90.00.
Clear and incisive presentation of causes
and effects of air and water pollution.
Includes teacher guide. K, FS, OT, C, 2-3

52. Scott, Foresman and Company
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52.1* Sense and Tell 01693, \$54.00.
Unit develops the powers of observation,
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SM, TEXT, MATERIALS
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52.2 Measure and Find Out \$318.35.
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G, TEXT, 1-4

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\$6.12	3	"	"	
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\$7.26	6	"	"	Workbook
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53. See
3 Bridge Street
Newton, Massachusetts 02195

53.1' Science Books for Children DOVCOM, \$7.50.
Six books that focus on physical and life
sciences.

G, TEXT, 2-3

54. Sigma Educational Films
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54.1 Laboratory Biology \$72.00.
This set of 12 FS visually illustrate the
dissection of organisms.

L, FS, 4-5

54.2 Earthquakes and Volcanoes \$68.00.

E, FS, 1-4

55. Silver Burdett Company
Box 362
Morristown, New Jersey 07960

Silver Burdett Company (continued)

- 55.1 Silver Burdett Science Program G, TEXT, 2-3
 \$12.68 Grade 1
 \$15.09 2
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 \$14.67 4
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 \$18.90 6
 Program covers all sciences and includes teacher and student text plus spirit masters.
- 55.2 Silver Burdett Student Laboratory Program \$155.42. P, X, LAB KIT, 3-4
 Lab kits plus teacher guide are included covering electricity, wave motion, mechanics, and measurement.
56. Singer
 1345 Diversey Parkway
 Chicago, Illinois 60614
- 56.1 Learning About Your Eddy MMTC-15-K, \$167.00. L, FL, FS, C, 2
 A multi-media kit that includes 6 captioned FS, 16 study prints, 4 super 8 F and a set of C.
- 56.2 Physical Science MMTC-19, MMTC-17, \$247.00. P, FS, OT, C, 3-4
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- 56.3 Let's Explore the World of Nature 423-SA, 423-SB, E,L, FS, 3-4
 \$78.00.
 Students learn about plants and animals found in a variety of topographical and climatic conditions.
- 56.4 Experimenting in the Physical Sciences P, X, FS, 4
 449-SA, \$72.50.
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 Instructional materials on chemistry including 12 captioned FS.
- 56.6 Ecology ECF-90704, \$130.00. K, FL, 3-4
 Illustrates causal relationships, ecological problems and their potential solutions.

57. SRA

- 57.1 Inquiry Development Program in Earth Sciences E, F, 4-5
\$717.97.

This multi-media kit provides information and materials that invite the student to work and think like a geologist. Unit includes text, guides, photos, charts, graphs. 25F (regular or super 8).

- 57.2 Inquiry Development Program in Physical Sciences P, F, 3-4
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Unit provides the student with materials to pursue and test physical theory and concepts in a meaningful way (25 F standard or super 8).

58. Steck-Vaughn Company
P. O. Box 2028 Vaughn Building
Austin, Texas 78767

- 58.1 Elementary Science Series 0234-0249, \$15.96. G, TEXT, 2-4

Do You Know	Grade 1
Things Around You	2
You Find Out	3
The World About You	4
The Earth of Ours	5
Learning to Use Science	6
Exploring Our World	7
Scientific Living Today	8

Series provides general introduction to the various fields of science.

59. Sterling Educational Films
241 East 34th Street
New York, New York 10016

- 59.1 The Metric System \$630.00. SM, F(8mm), 3-5

4 8mm color films. Cover what is measurement and how area, volume, distance and weight are measured.

- 59.2 Seasons \$360.00. E, L, F(8mm), 2-4

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60. System for Education
612 North Michigan Avenue
Chicago, Illinois 60611

60.1 Earth-Space Sciences \$478.00. E, OT, 4-5
Demonstration kits, charts, manual.
This system consists of three units,
geology/geography, astronomy, and meteorology.

60.2 Magnetism and Electricity MI-7, E-1-7, \$224.00. P, F(super 8), 4-5
14 super 8 mm F.

61. Teaching Aids Incorporated
P.O. Box 3527
Long Beach, California 90803

61.1 Our World of Science Series. 2201-2224, \$105.84, G, C, 2-3
4.90 tape. Series contains 24C.

61.2 Science Giants 301-312, \$52.92. G, C, 4
Biographies of the great contributors to
earth science (12C).

62. Technifax Education Division
Holyoke, Massachusetts 014040

62.1 Animal Kingdom Vol. 1-11 72001-002, \$97.50. L, OT
This set of 29 OT covers all forms of
animals from paramecium to man, from
a structure-function approach. Materials
are ungraded.

62.2 Earth Sciences 72012-003, 72011-003, \$283.50. E, OF, 5
Program consists of three units astronomy,
geology, and meteorology. Teacher's guide
included.

63. Tweedy
208 Hollywood Avenue
East Orange, New Jersey 07018

63.1 Basic Science Series \$249.00. GEN, OT, 4-5

1101	Animal	38.00	8	OT
1102	Biology	26.00	6	OT
1103	Human Body	45.00	10	OT
1104	Chemistry	26.00	5	OT
1105	Geology	28.00	6	OT
1106	Astronomy	48.00	11	OT

Tweedy (continued)

1107 Meteorology 36.00 8 OT
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64. Vallant

237 Washington Avenue
Hackensack, New Jersey 07602

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| 64.1 | <u>Our Environment 1-111</u> | MNK-150C, 151C, 152C,
153C, \$196.00. | K, FS, CHARTS,
OT, C, 2-3 |
| 64.2 | <u>Physical Science</u> | VCT-1800, \$210.70.
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chemistry and properties of materials
(143C). | P, C, 5 |
| 64.3 | <u>Our World of Science</u> | VCT-2200, \$117.60.
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of content covered in science (24C). | G, C, 2-3 |
| 64.4 | <u>Environmental Sciences</u> | VRF-386C, \$129.50.
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| 64.5 | <u>Physical Science</u> | 500 CEJ-SR, \$145.00.
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| 64.6 | <u>Weather</u> | 500 HO-SR, \$112.00.
Unit includes 27 OT. | E, OT, 1-3 |
| 64.7 | <u>Basic Science</u> | VT-766-783
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various content areas of science. | G, OT, 2-4 |
| 64.8 | <u>Water Dweller Series</u> | 3447-61, \$402.50.
15 super 8 films, each \$23.50. By Disney
illustrating the variety of life forms
inhabiting the water. | L, F(super 8), 1-4 |
| 64.9 | <u>Measuring and Observing Our World</u> | 7631-40
\$249.50, \$24.95 per film. Films illustrate
various ways of making scientific measurements.
10 super 8 films. | SM, F(super 8), 1-3 |
| 64.10 | <u>Pictara Dictionary of Geographical Terms</u> | 1760-65
\$14.70. | E, FL, 3-5 |

65. Visual Materials Incorporated
Redwood City, California

- 65.1 Problems of Pollution WS 048, \$6.95. K, OT, 2
12 color transparencies, 14 duplication masters. Introduction to causes, effects and possible solutions to pollution and basic ecological problems as they relate to individuals. Provides a teacher transparency workbook with behavioral objectives and worksheets which provide pre-and posttests and study materials.
- 65.2 Understanding Solids, Liquids and Gases WS 020, P, SM, OT, 2-3
\$6.95.
12 OT, 14 duplication masters. Presentations and activities on the states of matter, movement of molecules, etc. Includes suggested experiments.

66. Wards
P.O. Box 1749
Monterey, California 93940

- 66.1 The Science of Life \$231.00. L, FS, 5
33FS.
168W9020 Checks and Balance in Nature \$56.00
168W9000 Man's Impact on Environment \$63.00
168W9010 Energy in Life \$56.00
168W9030 Ascent of Man \$56.00
Focuses on biological problems in human society emphasis is on concepts and understanding.

67. Warren's Educational Supplies
980 West San Bernardino Road
Covina, California 91722

- 67.1 Basic Science Lab Kits G, X, LAB, 3-4
Lab 1 Basic Science Concepts 198-655 \$54.50
Lab 2 Machines and Energy 198-663 \$54.50
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Approximately 60 experiments per lab principally focusing on physical sciences.

68. Franklin Watts Incorporated
845 Third Avenue
New York, New York 10022

- 68.1 The Franklin Watts Beginning Science Bookshelf P, L, TEXT, 1-2
SBN 531-C0732-4, \$71.78.

Franklin Watts Incorporated (continued)

"Let's Find Out Series" focuses on specific areas within the physical and life sciences. Planned to develop such processes as observation, evaluation, and drawing conclusions.

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| 68.2 | <u>The Franklin Watts Intermediate Science Bookshelf</u> SBN531-00731-6, \$70.91.
This series focuses chiefly on life sciences with special emphasis on the human physiology | L, TEXT, 3-4 |
| 68.3 | <u>Franklin Watts Advanced Science Bookshelf</u> SBN-00729-4, \$86.59.
Series presents biographies of scientists. | P, L, TEXT, 4 |

69. Welch Scientific Company
7300 North Linder Avenue
Skokie, Illinois 60076

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| 69.1 | <u>Autotutor Marke III</u> 7700, \$1250.00 (rental \$45.00 per month). | TEACHING MACHINE |
| 69.2 | <u>Basic Electricity</u> 7752, \$90.00.
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| 69.3 | <u>Elements of Physics</u> 7756, 7757, \$720.00 (\$64.00 rental). Self paced film presenting a complete course in physics. | P, F(PI), 5 |

70. Western Publishing Company, Incorporated
Education Division
850 Third Avenue
New York, New York 10022

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| 70.1 | <u>Golden Experience Earth Books</u> \$29.70.
Six texts covering birds, animals and the oceans. | L, E, TEXT, 3-4 |
| 70.2 | <u>Golden Nature Guides</u> \$58.95.
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| 70.3 | <u>Human Biology</u> J3-854, \$140.00.
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| 70.4 | <u>Elementary Science</u> J3-868, \$405.00.
161 OT. | G, P, OT, 4-5 |
| 70.5 | <u>General Science</u> J3-850, \$190.00.
51 OT. | G, OT, 5 |

71. Albert Whitman and Company
560 West Lake Street
Chicago, Illinois 60606

- 71.1 Experiments With Science \$29.92.
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through experimentation.
- 71.2 Story of Science Series \$124.75.
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G, TEXT, 4-5

72. H. Wilson Corporation
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- 72.1 Men of Science SC4-CT, \$47.00.
Describes the life and scientific contribution
of 12 major figures (6C).
- 72.2 Bugs and Other Insects SC6-CT, \$15.80.
Describes the growth and world of various
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Unit describes the science and history of
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L, C, 1-2

P, E, C, 3

73. Xerox
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Columbus, Ohio 43216

- 73.1 Discovering Science 0.70/pupil.
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G, NEWSLETTER, 3-4

G, TEXT, 4-5

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