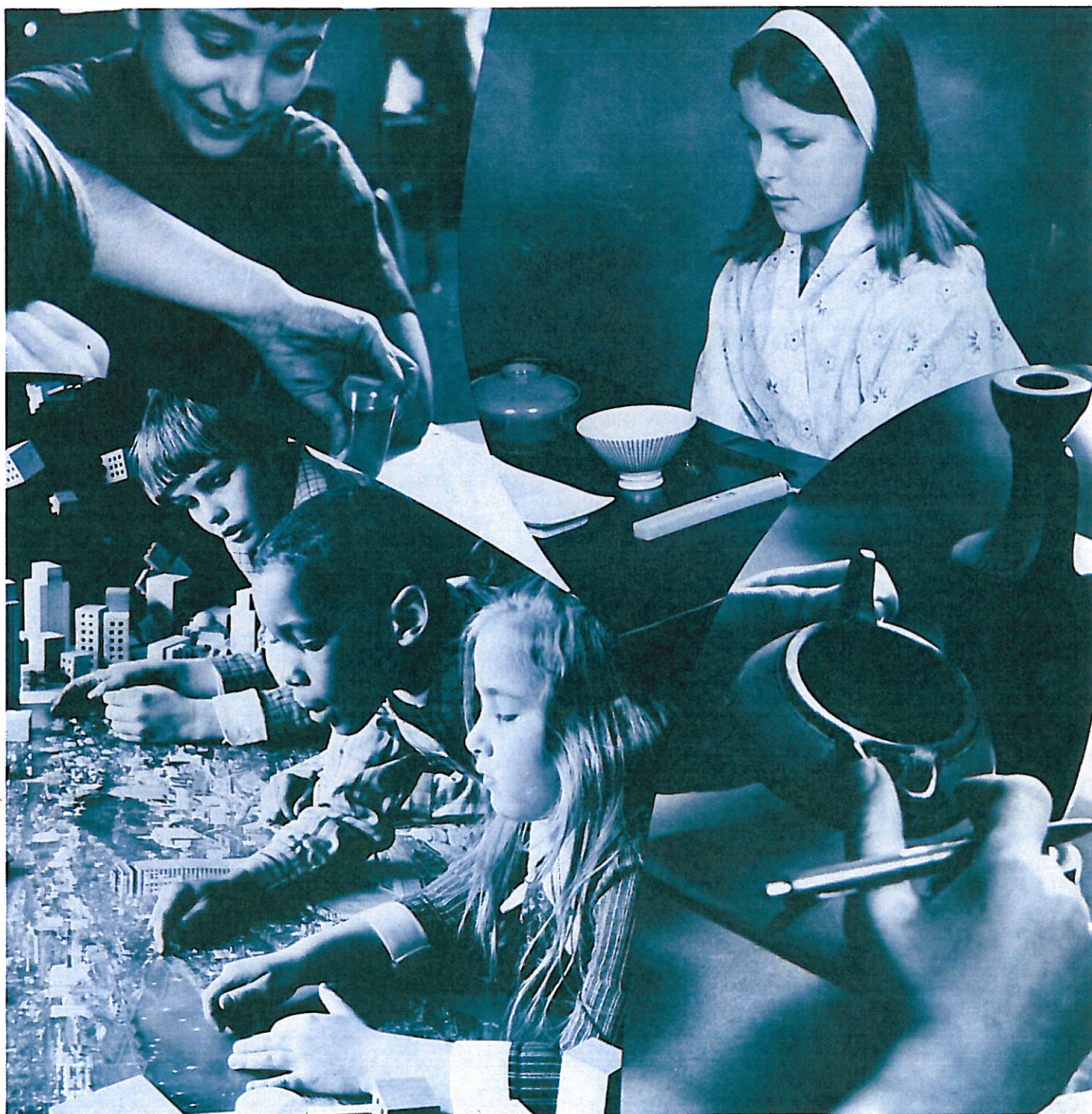
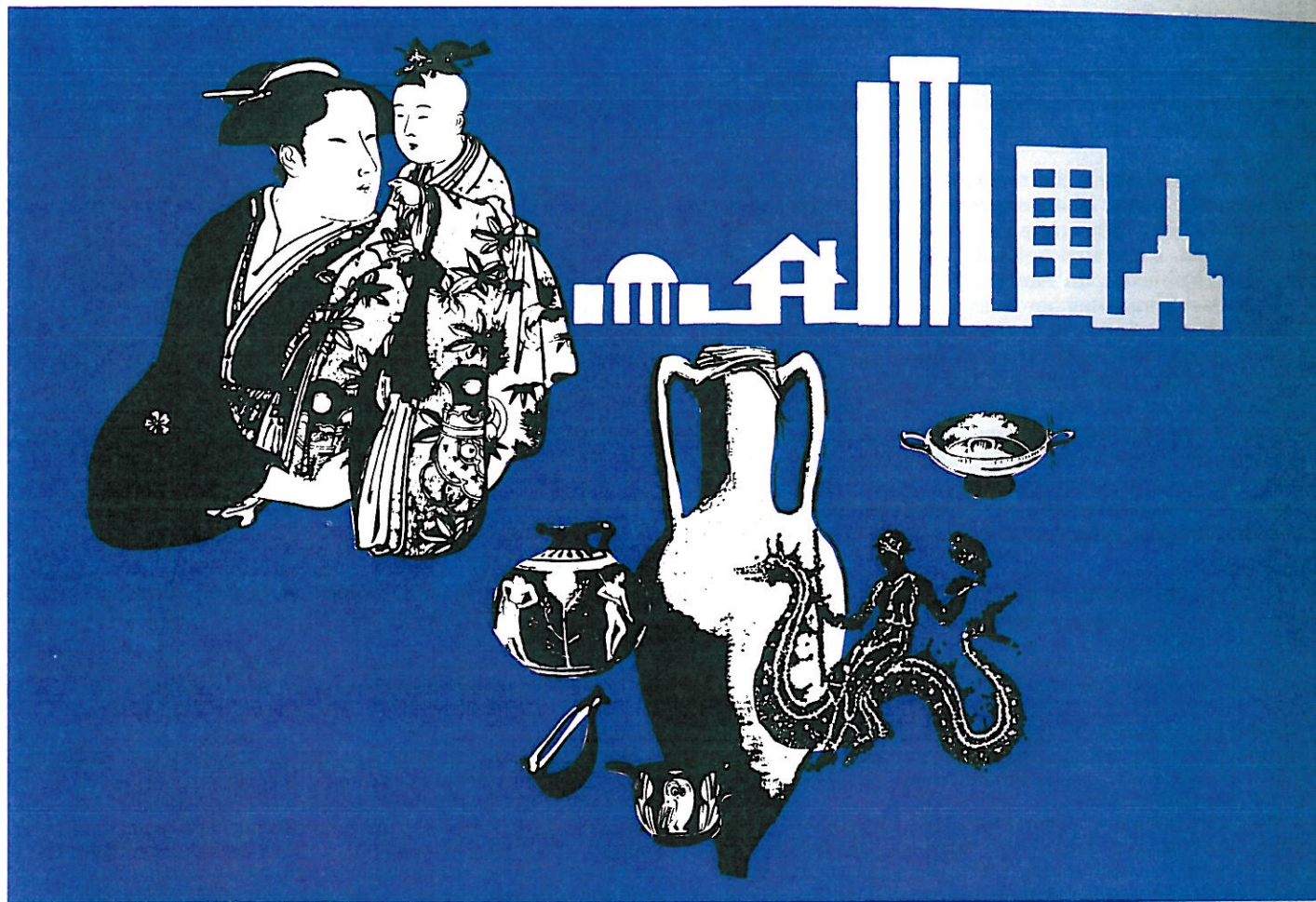


**MULTI-SENSORY LEARNING UNITS
FOR SOCIAL STUDIES**

THE CITY — KINDERGARTEN — GRADE 3
JAPANESE FAMILY — INTERMEDIATE GRADES
HOUSE OF ANCIENT GREECE — INTERMEDIATE GRADES
AND HIGH SCHOOL





INTRODUCTION

MATCH kits are self-contained multi-sensory units, each of which provides two to three weeks of intensive activity in social studies. The kits were originally designed by the Boston Children's Museum; American Science & Engineering, Inc. began the manufacture and distribution of the commercial editions of *THE CITY, A HOUSE OF ANCIENT GREECE* and *JAPANESE FAMILY* in 1968 and now over 100,000 students use MATCH within their curricula. Each kit consists of a selection of involvement activities which allows the student to develop an in-depth knowledge of the subject by using the materials that best teach to the topic.

MATCH makes extensive use of real materials because much of what we learn is attained via multisensory experience. The textbook is our most efficient and most valuable teaching tool but by confining the teaching of social studies to the printed page we are occasionally inviting tedium, sometimes describing abstractions which are beyond a child's comprehension, frequently presenting non-sequential concepts in sequential order and almost always limiting the opportunity for stu-

dents to learn from each other. MATCH combines books, films, records and, most important, real objects into an exciting effective learning system which allows children to work in small groups and as a class, to handle, study, experiment, record, conjecture, communicate and learn.

IN *THE CITY* the students construct and analyze a city and solve one of our major urban problems; in *JAPANESE FAMILY* the class becomes groups of 5 interacting Japanese families and a section of the classroom becomes a Japanese home; in a *HOUSE OF ANCIENT GREECE* 6 teams excavate an ancient Greek villa and, using their archeological "finds" reconstruct the villa. They learn by becoming involved.

Each kit contains a comprehensive teacher's guide which lists detailed instructions, learning objectives and helpful teaching hints.

MATCH units are supplied in ruggedized easily handled suitcase-sized containers for facility of movement between classrooms and ease of storage in a media center.

THE CITY — Kindergarten — Grade 3

THE CITY is about "cityness." Its purpose is to help young children form an idea of what a city is, what happens in it, how it changes. **THE CITY** is not planned to teach specific facts about cities but rather to make children aware that the form of the city and the life of the city are related; that the city is a dynamic assembly of people and their living and working environment.

THE CITY includes 16 sets of activities which will cover a 2-3 week period of intensive study (1 to 1½ hrs. per day). The following overview is a brief narrative outline of the activities in the program.

Overview:

The unit begins with a film about cities and city living through the experiences of three children in different American cities. First the class views the film without sound and discusses what they have seen. The film is shown again—this time with sound—and new questions are raised in a second discussion. Emphasis is on the city as an environment.

Next, small groups of children play with the city model in an unstructured situation, and the aerial photographs of the unit are introduced.

In the next activity, the class is divided into two groups: the kids from the east side and from the west side. Each group has a set of pictures of its side of town. The two sides of town visit each other to find out what they have in common and to learn more about the city in general.

The children build picture sets in which each set of pictures contains a particular theme and they consider the intersecting ideas that have been developed. It is a game, like Scrabble in form, using pictures instead of letters.

The teacher also presents sets of picture "postcards" which are grouped according to a common idea and the children try to discover what the idea is.

The children take a walking tour of the school neighborhood and build a model of the school neighborhood using

the blocks and magnet board. Using the model of the neighborhood that the children have built, the teacher demonstrates how the model of the city can be translated into a map of the city. The children complete the map and develop a key for it.

The next four activities involve the aerial photographs: detecting and identifying elements; using city road maps to find things in the photographs; making a city map from the photographs; comparing and interpreting the photographs. The children again see and discuss the film, "My City" in terms of the lives of the three children in it. Emphasis is on the nature, diversity and quality of lives in a city.

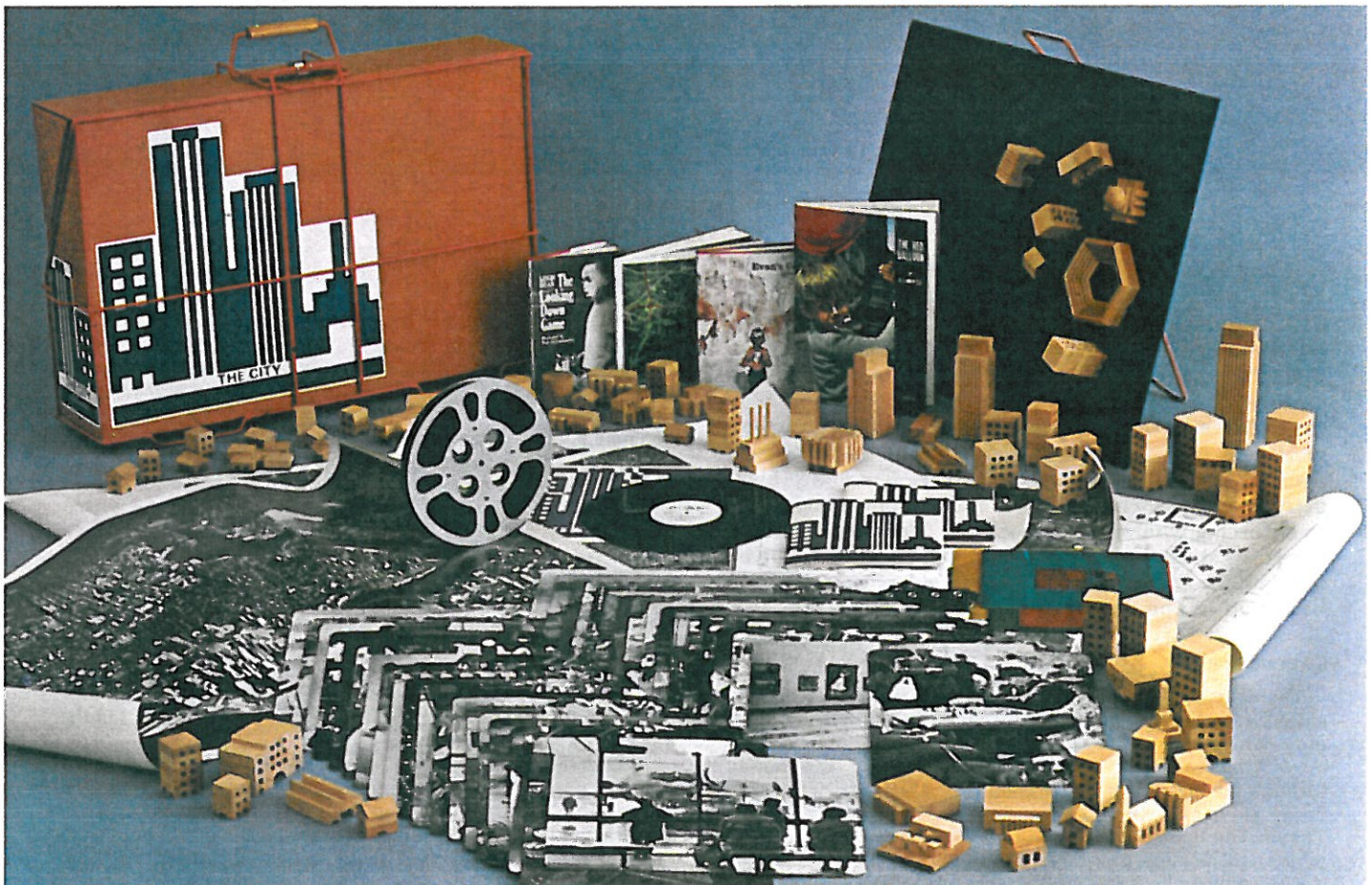
The children play a game in which a "magic window" is placed over a section of a city map; they discuss what they see happening. Using pictures from the picture pool, the children build as large a story as they can about the city.

The children try to identify simple city sounds from the record included in the unit. Following that, they try to analyze and interpret more complex sounds. Finally each child draws a picture of one of the sounds.

In order to convey a sense of the many specialized roles and the interdependence of people in the city, the children stage an accident identifying and playing the roles of the people who would be involved.

To make children aware that men make and change cities, groups of children work with the model to plan and build a brand new city. Each group submits its design to the rest of the class for discussion. Maps can then be made of the various designs.

The final activity is designed to make the children aware of the personal impact of growth and change in the city and give them a sense of the problems involved. As individual residents within a city neighborhood known as "Five Corners," the children try to solve the problem of how best to route a new highway through their neighborhood. Parents help their children develop personal solutions, then the students try to arrive at a common solution.





JAPANESE FAMILY — Intermediate Grades

The materials and activities in this MATCH unit offer an introduction to Japanese culture through the family. The students divide into five Japanese families with each child assigned a specific role. Through role play the children learn about Japanese family members, their work and how they live together, their basic possessions, manners and changing history. There are eight activities for each of the five families followed by a film re-enforcing what has been learned. The detailed teacher's guide and role cards provide simple, easily followed instructions and the materials allow a Japanese home to be set up in one section of the classroom.

Overview:

The class is divided into five Japanese families with each child becoming a specific family member (father, daughter etc.). The father is provided a Family Guide which complements the teacher's guide in order to lead his family through the activities. After establishing the family the children "move into their house" in Musachimo, a suburb of Tokyo. The house is represented by a Japanese family room which will occupy a corner of the classroom. The families are introduced to some of the common objects found in a

Japanese household and hear the sounds of Japan from the record album.

Each of the families then sets up house, using their respective kits of materials; each kit provides the materials and activities to provide the understanding of one aspect of the home, i.e. family room, altar, dining area, etc. After learning to use their objects, children demonstrate proper usage to the rest of the class.

In the next activity the children hold an open house where each family describes its section of the house to the other families.

The families then carefully study their family histories in order to learn about traditional Japanese family structure. A comparison of a Western culture family tree with a Japanese family tree provides a keen insight into their roles. An authentic Japanese register and photograph album provide models for the registers of the five families; a son of one family marries a daughter of another with the family changes recorded on the registers.

Another change takes place — the father retires. Each family holds a short ceremony during which the father passes the Family Guide and authority on to his eldest son.

The final activity summarizes the unit as a whole and each family makes a scrapbook reflecting its history and experiences.

HOUSE OF ANCIENT GREECE – Intermediate Grades and High School

HOUSE OF ANCIENT GREECE introduces children to the everyday life of an ancient Greek household, and to archeology as a tool for learning about people's lives long ago.

The children study the remains of the Villa of Good Fortune, one of the best-preserved houses of the classical period. The Villa was part of the ancient Greek city of Olynthus, excavated between 1928 and 1934 by Dr. David N. Robinson, an American archeologist.

The class simulates an excavation of the Villa of Good Fortune. Acting as archeologists, the children examine "finds" that were or could have been excavated from the Villa. These "finds" are photographs and reproductions of ancient artifacts. The photographs, taken by Dr. Robinson's team of archeologists, show artifacts that were actually dug up at Olynthus, either from the Villa of Good Fortune or from other houses nearby. The reproductions are of artifacts from the period that are like those found in the houses of Olynthus.

Overview:

A HOUSE OF ANCIENT GREECE contains eleven activities of varying lengths designed to be used together in a two or three week period.

It begins with two activities that prepare the children to think like archeologists. In the first they excavate a wastepaper basket, thereby experiencing the rudiments of the archeological process. In the second they are introduced to "reading" objects by discovering how much a penny, a nickel, a dime, and a quarter can tell about the United States in the twentieth century.

After this simple introduction to the process of archeology, the children see a film strip on Dr. Robinson's archeological expedition. The pictures include photographs taken by Dr. Robinson's team as they excavated the city of Olynthus and the Villa of Good Fortune.

In the next activity, the children discuss the process by which things get buried in the earth as time passes. Then they handle a pottery fragment and a coin that are over 2000 years old. These are the real thing — excavated in Greece. (The pottery fragments were gathered just for this unit by archeologists from the American School of Classical Studies in Athens.)

At this point the core of the unit gets underway. The children divide into six teams of archeologists, to study "finds" from the six sections of the Villa. Each team works independently following its own set of Research Guides. Students examine reproductions and photographs of ancient artifacts, trying to figure out what each one is; they ultimately piece together a mental picture of their section of the Villa and how the Greeks used it.

Following this "excavation" of the Villa, each team knows only its own section. To share their discoveries and to form a composite impression of life in the Villa, the teams plan presentations of their finds for an archeological seminar. Each team presents its finds, the conclusions it has reached about its section and a brief skit depicting an activity that would have occurred in the section. Excerpts from Dr. Robinson's notes on the Villa, and pictorial reconstructions help the children to see what the Villa of Good Fortune probably looked like.

Next comes a second filmstrip on Olynthus, showing one of the authors of this unit on a recent trip to Greece. The highlight is a tour through the remains of the Villa of Good Fortune.

The unit concludes with an activity that will help you evaluate what your class has learned about the process of archeology. Guided by their experience with A HOUSE OF ANCIENT GREECE, the children assemble their own time capsule. They select a number of small household objects that might convey to archeologists living 2300 years from now what life was like in "A HOUSE OF CONTEMPORARY U.S.A."



JAPAN

Program	\$ 495.00
Movie, 16mm-B&W-Sound	275.00
Complete	770.00

ITEMS

Honda Box and Teacher's Envelope	48.25
Kawai Box and Teacher's Envelope	83.25
Tanaka Box and Teacher's Envelope	130.85
Yoshida Box and Teacher's Envelope	51.25
Yamakawa Box and Teacher's Envelope	55.75
Teacher's Guide	4.00
Teacher's Envelope	26.75
Table	19.95
Magazine	1.50
Poetry Book	7.15
Comic Book	1.50
Record "Sounds of Japan"	4.98
Photo Album	8.95
Calligraphy Set	8.65
Extras Drawer	42.90
Teacher's Case with Wire Frame	19.95
Families Case with Wire Frame	19.95

* Prices subject to change without further notice.

THE MATCH™ PROGRAM

PRICE LIST

American Science and Engineering, Inc.
20 Overland Street
Boston, Massachusetts 02215

CITY

Program	\$ 357.00
Movie 16mm-color-sound 30 minutes	200.00
Complete	\$ 557.00

ITEMS

Wooden Buildings & Magnetic Board	264.98
Set of 4 Aerial Maps with Grommet Strips & 5 Corner Map	20.45
Teacher's Guide	4.00
Set of Ditto Masters 1 letter 1 5-corner map	3.00
Picture Pool of 36 Pictures	41.00
Set of 4 Magic Windows	15.00
Record "City Sounds"	4.98
Film "My City"	200.00
Book, <u>Evan's Corner</u>	3.95
Book, <u>The Red Balloon</u>	3.30
Book, <u>The Looking Down Game</u>	2.95
Book, <u>How To Read A City Map</u>	3.79
Case with Wire Frame	19.95

* Prices Subject to Change Without Further Notice.

GREECE

Program	\$ 525.00
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ITEMS

Alpha Kit	64.65
Beta Kit	58.55
Gamma Kit	98.25
Delta Kit	74.25
Epsilon Kit	129.50
Zeta Kit	68.10
Teacher's Guide	4.00
Set of 5 Villa Sketches	4.30
Villa Floor Plan	2.85
Map of Greece	2.85
Filmstrip "Olynthus Revisted" Commentary	6.00
Authentic Coin	13.75
Book, <u>Archaeologists and What They Do</u>	3.95
Book, <u>Classical Greece</u>	4.95
Book, <u>Everyday Things in Ancient Greece</u>	4.00
Case with wire frame	19.95

* Prices Subject to Change Without Further Notice

THE CITY Contents:

4 books: *The Red Balloon*, *Evan's Corner*, *How to Read A City Map*, and *The Looking Down Game*.

Picture Pool: 36 mounted photographs (11" x 14").

Aerial Photographs: 4 — 40" x 50" views of Boston, New York, Los Angeles, and Washington, D.C.

Magic Windows: 3 — children use these to see what is going on in the aerial photos.

LP Record: 1 (12") city sounds.

City Model and Chalkboard: 75 wooden buildings of different functional types. Buildings magnetically attach to a tiltable table for class viewing. Roads, etc. can be drawn on the plate with chalk.

Five Corners' Layout: Large layout used in city planning problem and ditto masters to be used for supplying student desk copies.

Film: *My City* (20 minutes 16mm sound, color).

Teacher's Guide: 64 pages.

Carrying Case to store and organize materials.

Price: Complete Unit \$557.00. Unit without 16mm film \$357.00.

JAPANESE FAMILY Contents:

Religious objects: Brass Bell, striker for bell, cushion, incense burner, incense, Buddha statue, ancestor tablet.

Clothing: Boy's kimono, girl's kimono, obi sash and bow, sash for girl's kimono, handkerchief, sash for boy's kimono.

Shoes: Geta (2 pair), slippers (1 pair), boy's black tabi (1 pair), girl's white tabi (1 pair).

Decorative objects: flower bowl, clay, dried flowers, scroll.

Table and tableware: soup bowl with lid, pickle plate, rice bowls (2), bean curd soup packets (10), child's chopsticks in box, bamboo chopsticks (5 pairs), table.

Japanese books: magazine, comic books, poetry book with translations, 35 calligraphy brushes, calligraphy kit with instruction chart.

Family album: Reproduction of authentic Japanese photo album.

Record: 12" LP Sounds of Japan.

5 Family Guides: directions to fathers for doing lessons and role cards for family members.

15 Family Histories of the five classroom families. *Teacher's Guide*, 34 pages.

Carrying case to store and organize materials.

Price: Complete without 16mm film — \$495.00.

Option: Film 16mm, sound, black and white, *The Japanese*. — **Price \$275.00.**

HOUSE OF ANCIENT GREECE Contents:

Authentic Coin and Pottery Shard.

Two filmstrips.

Printed material for each of the six archeological teams including photo find booklets, research guides and archeological notes [summarized from Dr. Robinson's notes].

Books: *Archeologists and What They Do*, *Everyday Things in Ancient Greece*, *Classical Greece*.

Artifacts: 2 pottery cups, discus thrower plaque fragment, metal sling bullet, mosaic stones, mortar & pestle, spoon, earrings, chiton and sash, statue of Athena, loom weight, Fibula (2), fishhook, nail, lamp, coins (3), lekythos, Head of woman, strygil, goat statue, aryballos, horse ring, wax tablet and stylus, knuckle bones.

Sketches: 5 villa sketches and a floor plan.

Teacher's Guide: 60 Pages.

Carrying case to store and organize materials.

Price: Complete unit \$525.00.

ORDERING INFORMATION

Prices and Terms: Prices are subject to change without notice. Terms are net 30 days. All materials are shipped f.o.b. shipping point. We normally prepay transport charges and add them to your invoice. Federal and states taxes, if and when applicable, are added to your invoice.

C.O.D. requests cannot be honored.

All orders will be shipped the best and most economical way unless you specify otherwise.

Materials on Approval: When specifically requested, materials will be shipped on 30-day approval. An invoice marked "On Approval" will be mailed after the materials have been shipped. If you wish to return the materials ordered within the 30-day approval period, you will be billed only for the shipping charges incurred by AS&E. All materials must be returned in saleable condition.

Circulation Information About MATCH Kits - 1972-73

Sponsored by a four year U.S. Office of Education grant, the MATCH Project was concerned with how real materials could be used to make classroom teaching and learning much more meaningful and fun.

MATCH stands for Materials and Activities for Teachers and Children. Taking the form of kits, MATCH Units are non-verbal systems of materials and activities that communicate. Designed for the relatively intensive treatment of specific topics over a two or three week period, they contain objects of all sorts: films, pictures, games, recordings, projectors, supplies, and a detailed Teacher's Guide which structures the use of the unit.

MATCH Unit activities are designed to make learning the product of the child's own actions. Children study film loops to find out what various birds eat; they grind corn to make an Algonquin food, nokake; they reconstruct life in ancient Greece by "reading" objects found in an excavated villa; they write, edit, illustrate and print their own book; they arrange troughs and wheels and tubes on a vertical board and see what happens when water is poured into the system at the top; they drill soapstone using a bowdrill the way Netsilik Eskimos do; they set up a Japanese family altar and make a prayer to Buddha and to their ancestors.

Altogether sixteen MATCH Units were developed and tested in the schools by teams of Museum staff members. Now American Science and Engineering, in partnership with the Museum, is marketing commercial versions of three MATCH Units for sale to school systems, curriculum centers and teacher's colleges. MATCH Units are also circulated for a fee from the Circulating Kits Department of the Museum. For information about renting MATCH Units and other Loan Exhibits from the Museum, call 617-522-4800, Extension 42.

Following is a list and brief description of the MATCH Units:

A HOUSE OF ANCIENT GREECE--(Grades 5-6) Through "excavating" a villa of ancient Greece, and by reading the artifacts, the class reconstructs the everyday life of the time.

THE ALGONQUINS--(Grades 3-4) Children savor the daily life of the Northeast Woodland Indians, scraping deerskin, hafting an arrowhead, preparing food, assembling a trap, acting out stories of spirit help.

SEEDS--(Grades 3-4) Experimenting with common fruits and seeds such as peanuts, beans, milkweed, and grape plant, children learn the mechanisms of seed dispersal.

THE CITY--(Grades 1-3) The relationship between the cities men build and the lives they live in them, is introduced through large photos, films, model buildings, records, etc. **

GROUPING BIRDS--(K-Grade 2) Children use birds in a variety of classifying games. Included are nine mounted birds in plexiglass containers, film loops, projector, pictorial game cards, story and reference books.

HOUSES- (Grades 2-4) An Eskimo igloo is compared with a Nigerian mud - and - thatch hut, to show how physical settings call for different ways of life. Children build a mud-and-bamboo wall, assemble an igloo, scrape deerskin.

ANIMAL CAMOUFLAGE-(Grades 2-3) Using a shadow box with a variety of backgrounds, together with model animals and mounted insects, children learn the principles of camouflage.

NETSILIK ESKIMOS-(Grades 3-4) A seal hunt and other activities of Netsilik life are recreated through the use of authentic Eskimo tools, clothing, other artifacts, films and records.

MUSICAL SHAPES AND SOUNDS-(Grades 5-6) Children play various instruments, take them apart and relate their shapes to the sounds they make. They also create their own instruments.

ROCKS-(Grades 5-6) Real rocks and fossils are coordinated with activities to show how they were formed and what they tell about the earth. Children make fossil prints, set off a volcano, dissolve limestone.

MEDIEVAL PEOPLE-(Grades 5-6) Using character books, costumes, props (Falconry gear, psaltery, wool carders, etc.), children enact episodes in the life of a medieval manor.

JAPANESE FAMILY-(Grades 5-6) Family life in modern Japan is explored through role playing. Box includes Japanese household items, clothing, family histories, film loops, and a projector.**

WATERPLAY-(K through Primary grades) A water table with things to manipulate; also, recordings, a film, and stories.

MATCH PRESS-(Grades 5-6) A "publishing company" is set up with a portable press, type, fonts, paper, ink and instruction cards. Class writes, edits, prints and binds a book of its own.

PADDLE-TO-THE-SEA (Grades 4-6) A classic story of the Great Lakes is made real through related objects and activities--creating a large mural-collage rigging a breeches buoy, bartering trinkets for furs, launching a class "Paddle".

IMAGINATION UNLIMITED-(Grades 4-6) The child's awareness of his unique perceptions and his ability to express them are developed through the use of illustrated word cards, unusual objects, and movies.

** Commercially available units.

MATCH Box Project Information and Materials

MATCH Units for sale: The first commercial editions of "The City" (grades 1-4), "Japanese Family" (grades 5,6) and "A House of Ancient Greece" (grades 5,6) can be purchased from the publisher: American Science and Engineering, Inc., 20 Overland Street, Boston, Massachusetts 02215.

MATCH Unit rental and leasing: the three commercial MATCH Units are no longer available for rental from the publisher. MATCH Boxes can be rented from the Museum by people in the New England area. The rental fee for each unit is \$30.00 for two weeks. Shipping and handling charges are extra. Because of the heavy demand for these boxes, reservations must be made in advance through the Loan Department of the Museum. Due to the heavy local demand and a lack of proper shipping facilities, the Museum does not circulate MATCH Boxes outside the New England states.

MATCH Units for examination at the Museum: the latest commercial editions and the original prototype MATCH Boxes can be examined in the Museum's Teacher Resource Center Monday through Friday 9-5, Thursdays until 9pm, and from 1-5 on Saturday. Special workshops on the nature and use of MATCH Boxes can be arranged by appointment.

MATCH Box Project Publications: The following publications are available in limited quantities from the Museum. In ordering, please send a check to the Children's Museum, Loan Department, Jamaicaaway, Boston, Massachusetts 02130.

MATCH Box Project Final Report (Vol.1)
Basic report containing purposes, methods, \$3.00
materials and project findings, 85pp.

Teacher's Guides to the original prototype units (Only the following are still available: Medieval People, Animal Camouflage, \$3.00
Musical Shapes & Sounds, Rocks, Paddle-To-The-Sea, Imagination Unlimited, MATCH Press.)

Note: Volumes I and II of the MATCH Box Project Final Report and all 16 original Teacher's Guides are available on microfiche and in hard copy through IEASCO Information Products, Inc. 4827 Rugby Avenue, Bethesda, Maryland 20014.

See special price information notices included in this packet.