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ABSTRACT

The opportunity for grade 5-6 students to explore careers and technology is provided by the curriculum guide, which is a component of Project LET (Learning Experiences in Technology). Inherent in each component is an awareness of careers and the way man does things. The guide is intended to be used as a working copy for professional staff. The integrated teaching units are evolutionary in nature as they are developed from the curriculum, utilizing student involvement and ideas. Unit topics include: anthropology and archaeology, city planning, crafts history and products, earth study, ecology, communications, homemaking, human biology, magnetism and electricity, political system, producing and retailing, scientific reasoning, seasonal projects, theater, and writing music.
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Learning Experiences in Technology

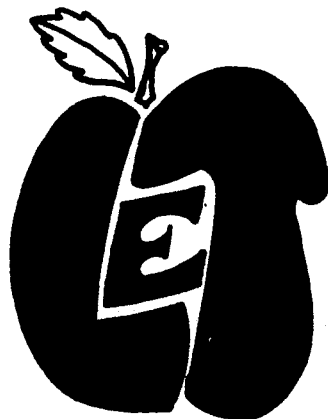
INTEGRATED TEACHING UNIT HANDBOOK

(VT 101 982)

Book III

for

Grades 5 and 6



LEARNING EXPERIENCES
IN TECHNOLOGY

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
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School District of the City of Royal Oak
4000 Crooks Road, Royal Oak, Michigan 48073

June 1973

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CE 005 205

PREFACE

This guide is intended to be used as a working copy for professional staff. It is not a completed document but a working draft which will be revised at the end of the 1973-74 school year. This document cannot stand alone but is designed to be used with in-service education and our "Project LET, Guide for Implementation."

The methodology used to implement the concepts of Project "LET" is the Integrated Teaching Unit. These Integrated Teaching Units are evolutionary in nature as they are developed from the curriculum, utilizing student involvement and ideas. They are continually being implemented, evaluated, and revised by the classroom teacher. The duration of each teaching unit varies to allow for flexibility, individuality, creativity, and fulfillment of the needs and interests of each child.

Each unit evolves from the existing elementary curriculum which includes the following components:

1. general overview
2. teaching/learning resources
3. concepts
4. behavioral objectives
5. methods of implementation
6. resource people and materials
7. student activities

Inherent in each component is an awareness of careers and the way man does things. The additional content provided for children in the "LET" classroom is the opportunity to explore careers and technology through the utilization of the Integrated Teaching Unit, parent and community resource people, and exposure to numerous careers.

TABLE OF CONTENTS

UNIT NO.

1. Anthropology and Archaeology:
 Cultural Studies:
 Ancient Egypt
 Ancient Greece
 Indians
 Tools
2. City Planning and/or Construction
3. Crafts-History and Products
4. Earth Study:
 Air and Weather
 Geology
 Oceanography
 Water
5. Ecology
6. Exploration of Creative Writing Forms
7. Graphic Communications - Books and Newspapers
8. Homemaking
9. Human Biology
10. Magnetism and Electricity
11. A Political System
12. Producing and Retailing:
 Newspaper Drive
 Production and Retailing
 UNICEF
13. Scientific Reasoning
14. Seasonal Projects
15. Theatre
16. Writing Music

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: ANTHROPOLOGY AND ARCHAEOLOGY

GRADE LEVEL: 5-6

GENERAL OVERVIEW: In this Anthropology and Archaeology section, the following Integrated Teaching Units have been combined and/or presented as a tentative guide for ideas in, application to or relevance to the upper elementary classroom:

Cultural Studies

Ancient Egypt
Ancient Greece
Indians

Tools

History and uses of

TEACHING/LEARNING RESOURCES:

1. Reference materials:

Cultural Studies -

Book: Social Sciences: Concepts and Values, Book 6, Chapter 1
Movie: Ari, Boy of Greece (Royal Oak film library)
Record: Interview with anthropologist Dr. Margaret Meade (Royal Oak IMC)

Tools -

Books: ABC's of Hand Tools - General Motors Corporation
Carpentry for Children - Leavitt
Children Study American Industry - Gilbert
Doing Work - Blaugh
Technology for Children - Scobey
This is Automation - Hirsch
Time Life Series on Development of Tools
World of Work Encyclopedia
Movies: ABC's of Hand Tools
Fossils are Interesting
Greenfield Village Movie
History of Living Things
Filmstrips: New Stone Age
Old Stone Age

2. Field Trips:

Cultural Studies -

Arkona, Ontario, Canada (Fossils)
Cranbrook Science Museum
Greek Town (Detroit)
Waterloo Recreation Area Gravel Pit (Fossils)

Tools -

Greenfield Village
Lumber yard
Walk to construction site
Walk to various businesses to observe uses of tools
Woodworking shop

3. Human Resources

Cultural Studies -

Anthropologist
Archaeologists
Lapidary

Tools -

Carpenter

4. Activities

Role playing -

Anthropological survey of peoples racial stock, attitudes,
social status, housing types, etc.

Role playing -

Pre-historic man depicting his culture
Making puppets, models, sun dials, pottery, mummies, water-carriers,
pyramids, masks, dolls, dioramas, and wooden objects

UNIT TITLE: CULTURAL STUDIES

CONCEPTS

BEHAVIORAL OBJECTIVES

Social Studies

A comparison of cultures:

Clothing

Housing

Food

Climate

Geographic location

Tools

Religious beliefs

Social structure

Norms of behavior

Training of children

Government

As a result of this unit, each child will be able to:

Describe clothing (of various societies under study)
Compare homes
Enumerate foods

Differentiate between climates of various societies under study

Recognize geographic locations on a map or globe

Differentiate between tools of various societies

Differentiate between religious beliefs

List social structures

Distinguish between norms of behavior

Describe training of children in each society

Science

Animals

Preservation of materials

List animals common to society under study

Differentiate between methods of preserving materials

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Research and simulate tools, homes,
clothes and foods of various societies

Make pyramids, Make a kayak

Make a water carrier

Make mummies - make kachina dolls -
make masks

UNIT TITLE: CULTURAL STUDIES (continued)

CONCEPTS

BEHAVIORAL OBJECTIVES

Math

History of measurement

As a result of this unit, each child will be able to:

Tell what each society contributed to the history of measurement

Language Arts

Research

Note taking

Outlining

Reporting

Locate information concerning each society

Generalize from gathered research information

Reorganize research information

Report information via oral and/or written reports

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Make sundials

UNIT TITLE: CULTURAL STUDIES (continued)

CONCEPTS

BEHAVIORAL OBJECTIVES

As a result of this unit, each child will be able to:

Careers

People and their job roles:

Producing

Servicing

Identify jobs within various societies
Recognize and identify tools used within each society
Discuss the necessity of the job

List various products used by each society

List services provided to the society

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

UNIT TITLE: TOOLS

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Social Studies</u></p> <p>History</p> <p>Application</p>	<p>As a result of this unit, each child will be able to:</p> <p>Investigate, gather data, and compare tools through the ages</p> <p>Manipulate properly a saw, hammer, dremel saw, T square, clamp, drill</p>
<p><u>Math</u></p> <p>Measurement</p> <p>Planning</p>	<p>Measure piece of wood, and measure accurately in 1/4" and 1/8" sections</p> <p>Prepare a design for the assembly of an object</p>
<p><u>Careers</u></p> <p>People and their job roles</p>	<p>Describe at least five jobs requiring the use of tools</p>

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HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ANTHROPOLOGICAL OBSERVATIONS

II. ACTIVITY FORMAT:

A. Tools and materials

Pencils
Paper

B. Procedures for this activity (with helpful hints)

1. a. Observe one neighborhood block to determine size of houses, condition, type of construction; or
- b. Observe people of one neighborhood block to detect type of clothing, house, car, etc.; or
- c. Observe people's behavior on one neighborhood block to determine prevailing moods, attitudes; or
- d. Observe people's physical characteristics on one neighborhood block to determine their racial stock(s).
2. Construct a bar, line, circle or distribution curve graph to represent observations made in the field (step 1).
3. Attempt to interpret graph representations into human attitudes, values, social class, racial stock (whichever is pertinent to type of observation made).

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING EXAMPLES OF FOSSILS

II. ACTIVITY FORMAT:

A. Tools and Materials

Pails	Small milk cartons	Newspapers
Mixing sticks	Vaseline	Small objects
Plaster of Paris 10#	Water	(toys, etc.)

B. Procedures for this activity (with helpful hints)

1. Rub a coating of vaseline on small objects to be "fossilized"
2. Pour plaster of paris into 8 ounce milk cartons
3. Let harden until slightly firm
4. Depress objects into plaster of paris
5. Remove object when plaster of paris is firm
6. Let sit over night
7. Rub a coating of vaseline over "mold" formed
8. Pour about 1 inch of plaster of paris to make "cast"
9. Let harden (about one hour)
10. Pull mold and cast apart

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING KACHINA DOLLS

II. ACTIVITY FORMAT:

A. Tools and Materials

Toilet tissue rolls
Feathers
Leather

Plain fabric
Printed fabric

B. Human Aides and Resources

Art Teacher

C. Procedures for this activity (with helpful hints)

Using toilet tissue rolls as a base for dolls, students can make kachina dolls. Page 62 of Social Studies: Concepts and Values (Grade 5) shows three dolls and pupils may enlarge upon those ideas.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ARCHAEOLOGICAL DIG

II. ACTIVITY FORMAT:

A. Tools and Materials

Large plastic bag
Waste paper from separate room

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. Empty contents of different rooms waste paper baskets in plastic bag.
2. Student must dig for finding and list concrete reasons for placement in each particular booklet.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING MUMMIES

II. ACTIVITY FORMAT:

A. Tools and Materials

Newspaper	Water
Wheat paste	Coat hangers
Sheeting	

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. Make form of mummy from coat hanger
2. Mix wheat paste - stuff coat hanger with wads of newspaper, then with strips of newspaper coated with wheat paste, make layers to cover form of the mummy.
3. Make several layers of the strips of newspaper.
4. Final layer should be made with strips of sheeting.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

REPORTS ON OCCUPATIONS

II. ACTIVITY OF FORMAT:

A. Tools and Materials

Chalk board Books on occupations
Paper
Pencils

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. Brainstormed occupations
2. Narrowed down list later
3. Choose job they wanted to explore
4. Outlined what they wanted to know
5. Researched
6. Wrote rough draft
7. Wrote final copy
8. Presented findings to class

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING PRE-HISTORIC WORKING MODEL TOOLS

II. ACTIVITY FORMAT:

A. Tools and Materials

Tool panel compliment	Twine
Sticks	1/2 inch doweling
Flat rocks	

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

Hammer

1. Cut stick to length for hammer handle
2. Select flat rock for head
3. Tie rock to handle with twine

Bowdrill

1. Cut doweling to length for drill
2. Sharpen end of drill
3. Make bow of twine and a thin strip of wood or a small diameter stick

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MURAL - PAINTING MURALS OF DEVELOPMENT OF TOOLS

II. ACTIVITY FORMAT:

A. Tools and Materials

Assorted brushes
Old coffee cans
Smocks for children

Tempora paint
Paper

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. Preplanning murals
2. Organizing material needed
3. Paint mural

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

THE MAKING OF A FAMILY

II. ACTIVITY FORMAT:

A. Tools and Materials

Paper, etc.	Scissors
Boxes	Paste

B. Human Aides and Resources

Parents and relatives

C. Procedures for this activity (with helpful hints)

Discuss "Family Tree"

Discuss careers of family

List questions to ask -

Why in jobs?

What knowledges, skills and attitudes needed?

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: CITY PLANNING AND/OR CONSTRUCTION

GRADE LEVEL: 5-6

GENERAL OVERVIEW: This unit encompasses city planning and/or construction.

TEACHING/LEARNING RESOURCES:

1. Reference materials:

Books: World Almanac
Encyclopedias
Social Science Texts
Trade Books

Maps: City plans of Royal Oak
City plans of other cities
Road maps

Slides: Famous and/or relevant sections of American cities

Suggested Specific: Read Unit 2 of The Social Sciences: Concepts and Values, Harcourt Brace Jovanovich

2. Field Trips:

Walk around neighborhood
Trip to city hall
Trip to another city - unlike their own (for comparisons and contrasts)

3. Human Resources:

City planner
Travel agency representative
People from other cities to discuss their cities

4. Activities:

Roleplaying: Taking on the roles of various city officials' jobs
Bring an architect and design a city

Hands-on Activities:

Reading maps

Taking an imaginary trip using maps

Designing their own street

Designing and making to scale on plywood, their own cities

Making sketches of possible city plans

Other:

Identify 20 cities in the United States, including their locations, the chief occupations of the people in the city and the populations of the cities.

UNIT TITLE: CITY PLANNING

CONCEPTS

BEHAVIORAL OBJECTIVES

Social Sciences

People who work in a city

Why cities grow where they do:

urban growth and decay

suburban development
zoning laws

Different kinds of cities

Chief occupations

Locations of cities

Correlation of city location and
chief form of industry

As a result of this unit, each child
will be able to:

List 5 occupations pertinent to
city employment

List 5 reasons why cities grow where
they do

Identify 2 characteristics of urban
slum areas

Identify one reason for the existence
of suburban areas

List 5 different kinds of cities
according to prime importance or fame

Recognize and cite evidence for a
relationship between locations
and major occupations of a city.

Science

Interrelationship between a city
and its natural resources

Physical outlay of city

Symmetrical construction of city

Discuss why natural resources are
important to a city.

Plan and build or construct a model
city using glue, wood, styrofoam or
such available materials.

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Speaker - city planner

Speaker - city planner

Design and construct to scale cities of plywood, styrofoam, glue, etc.

Write a report on cities, their locations, chief occupations and populations

Design and construct to scale cities of plywood, styrofoam, glue, etc.

UNIT TITLE: THE MATHS

CONCEPTS

Maths

Maths

Maths

Learning Objectives

Maths

Maths

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

UNIT TITLE: CITY PLANNING (continued)

CONCEPTS

BEHAVIORAL OBJECTIVES

Careers

People and their job roles

Managing
Producing
Servicing

As a result of this unit, each child will be able to:

Identify main type of work performed in each of the following occupations:

city planners
construction contractor
construction engineer
construction worker
researcher

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Speaker - city official

Roleplay various jobs in a city

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

DESIGNING AND MAKING A SCALE MODEL OF A CITY

II. ACTIVITY FORMAT:

A. Tools and Materials

1/4" plywood	rulers	clamps
paint	woodburners	goggles
shellac	saws	graph paper

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

Design city on graph paper.
Alter scale to piece of plywood.
Put in city buildings.
Put in residential areas.
Name city.
Paint, woodburn, etc., city to highlight certain areas.

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: CRAFTS - HISTORY AND PRODUCTS

GRADE LEVEL: 5-6

GENERAL OVERVIEW: This section includes units of study relating to crafts during various periods of history.

TEACHING/LEARNING RESOURCES:

1. Reference Materials:

Films: (available from IMC)
Autobiography of a Man
Beginnings and Growth of Industrial America
Biography of a Chair
The Cotton Farmer
Discovering Texture
*Greenfield Village
*Henry Ford Museum
Life in a Medieval Town
Medieval Manor
Medieval Times: Guilds & Trades
What Is Automation
Why Man Creates

*Available free from Greenfield Village

Filmstrips:

Castle Life
Cotton Spinning and Weaving
Fair-Medieval, The
How Industry Began
Learning About Indian Crafts
Medieval Manor
Medieval Towns & Cities
Town
Town & Its Guilds

Realia:

Candle-snuffer
Candle-mold
Loom
Christmas Tree Candle Holder
Cotton from Plant to Product

Books:

Exploring the Old World, Ahesihwede
Human Adventure, The, Cappelluti and Grossman
Made in the Middle Ages
Medieval Days and Ways
Principles and Practices in the Teaching of
Social Sciences, Books 5 & 6, Harcourt, Brace & Jovanovich
Teaching Children About Technology, Scobey, pp. 307-8, pg. 348

Newspaper:

Detroit News - Nov. 28, 1971 Good Earth Almanac

2. Field Trips:

Trip to a lumber yard
Greenfield Village
Plant - Ford Motor Company
Detroit Institute of Arts
The Weavery

3. Human Resources:

Parents with weaving skills, looms, etc.
Students from Macomb College
Guides and Craftsman at Greenfield Village
Art Teacher

4. Activities:

Role Playing
Apprentice
Journeyman
Craftsman
Assembly line worker
Quality control man
Packager
Company sales manager
Advertising manager

Hands on activities

Candle-making
Carpentry
Weaving
Soap making
Brick making
Tapestry making
Design a wall hanging
Weave a belt
Make loom
Tic tac toe boards
Make printing sets
Tin Smiths

UNIT TITLE: CRAFTS - HISTORY AND PRODUCTS

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Social Science</u></p> <p>Middle Ages</p> <p>How goods are produced</p> <p>American Heritage (Greenfield Village)</p> <p>Economics</p> <p>Crafts</p>	<p>As a result of this unit, each child will be able to:</p> <p>List 5 reasons why the middle ages were important</p> <p>List 3 characteristics of the raw material they used to make a product</p> <p>List 5 facts about Greenfield Village List 5 facts about Henry Ford Museum</p> <p>Compute cost/profit relationship for each product made</p> <p>Discuss critically the importance and the utilization of each craft with which each child became involved</p>
<p><u>Math</u></p> <p>Measuring</p> <p>Geometry</p> <p>Money</p>	<p>Accurately measure the materials necessary for each product to be made</p> <p>Plan and prepare geometric patterns</p> <p>Accurately make change for products sold</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Trip to Greenfield Village and Henry Ford Museum

Keep records of cost of materials and sales

Group discussion

Make each individual project and/or product

Sell objects

UNIT TITLE: CRAFTS - HISTORY AND PRODUCTS (continued)

CONCEPTS

BEHAVIORAL OBJECTIVES

Language

Writing plans

Reports

Following directions

Letter - Writing

As a result of this unit, each child will be able to:

Formulate plans necessary to make each product

Relate through the written or oral word, how each product is produced and used

Interpret directions necessary for a product to be made

Distinguish between and write accurately an invitation, a thank-you note and a letter to people directly involved in the implementation of the unit

Art

Texture

Colors

Identify, differentiate and use varying textures within products made

Compare and contrast colors necessary to make an attractive, saleable item

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Write various forms of written communication

Let students experiment with color and texture before making their product

UNIT TITLE: CRAFTS - HISTORY AND PRODUCTS (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Careers</u></p> <p>People and their job roles:</p> <p>Producing</p> <p>Servicing</p> <p>Personnel</p> <p>Tools</p>	<p>As a result of this unit, each child will be able to:</p> <p>Make a product from raw materials through the packaging process</p> <p>Distribute, advertise, sell and repair each product he has made</p> <p>Identify working conditions necessary for each job station of products and services produced to be made</p> <p>Compare and contrast the economic rewards gained through each occupation involved in making a product</p> <p>Describe and distinguish between the characteristics, tools and importance of each craftsman and his job</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Through:

- 1) dial discussion
- 2) written reports
- 3) oral reports
- 4) pictures

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

INKLE LOOM

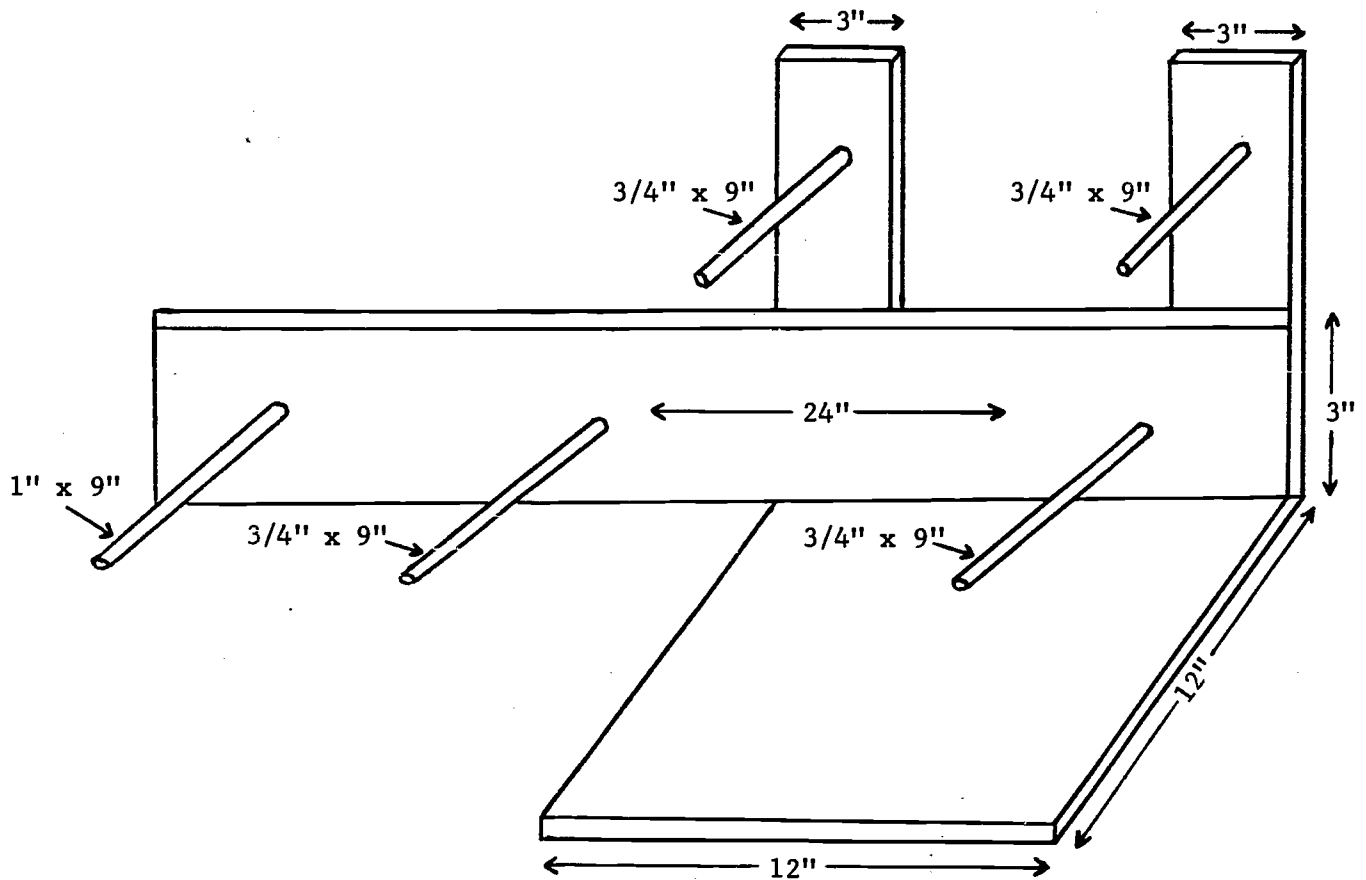
II. ACTIVITY FORMAT:

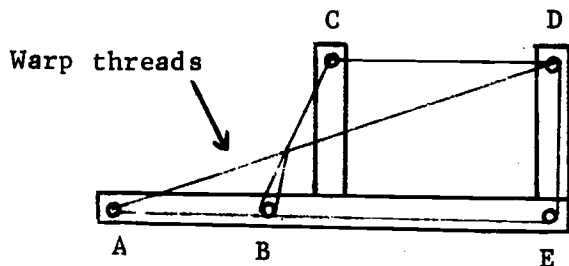
A. Tools and Materials

Tool Panel compliment
Materials for drawing (pine)

B. Procedures for this activity (with helpful hints)

1. Cut four dowels each 9" x 3/4"
2. Cut one dowel 9" x 1"
3. Cut two boards 3" x 3/4" x 10"
one 12 x 12 base
4. Cut one board 3" x 3/4" x 24" long
5. Drill 4 (four) 3/4" holes as shown
6. Drill one 1" hole as shown
7. Glue and nail pieces together
8. Insert dowels with glue





Basic Threading of Warp

Heddles = 12" strings, tied in a loop,
attached to dowel in this manner

Attach 9 heddles
(white cotton string)
to dowel 8" as shown



Thread first warp string (yarn) through loop of heddle, over dowel C, around D and E, back to A. Tie end.

Second warp string goes next to heddle, not through, around dowels D and E, back to A. Tie end.

Continue in this manner to thread 17 warp strings, using 9 heddles.

To Weave:

Place loom in front of you with open edge on your right. With left hand, raise up all the warp threads directly in back of heddles until you see a definite opening between layers of threads. This is called an "up shed". Weave through, using yarn wrapped around cardboard. Next press down threads in back of heddles. This is a "downshed". Weave back through. Place right hand in between layers and "beat down" (pack threads closer together). Continue in this manner, pulling threads toward you until length desired. Untie knots to remove.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

CANDLE-MAKING (SAND CASTING)

II. ACTIVITY FORMAT:

A. Tools and Materials

Burner	Wax	Sand (not fine)
Double Boiler	Paper cones	Sticks
Tin Can	Wicking	

B. Procedures for this activity (with helpful hints)

1. Put moist sand in box
2. Put one cone in sand, point down
3. Remove cones; sand should retain shape of cone
4. Insert wicking (across paste-stick) into sand mold
5. Pour wax into mold
6. Allow wax to cool and solidify
7. Remove candle from sand

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

CANDLE-MAKING (MOLDING)

II. ACTIVITY FORMAT:

A. Tools and Materials

Hot plate	Wax	Scent	(for multiple
Double boiler	Stearic acid	Candle wicking	batch
String	Crayons for	Vegetable oil	
Molds	coloring wax	Paste sticks	

B. Procedures for this activity (with helpful hints)

1. Melt wax
2. Coat molds with vegetable oil
3. Cut wicking and tie to paste sticks
4. Dip wicking into wax; return wicking to mold
5. Add scent to wax
6. Pour wax into molds
7. Let stand overnight
8. Release candles from molds
9. Wipe off vegetable oil from candles

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

CANDLE DIPPING

II. ACTIVITY FORMAT:

A. Tools and Materials

Double burners	Nails	Scent
Hot plate	Paraffin wax	Colored crayons
Staplers	Wicking	Wax hardener
Plastic bags for packaging		
Construction paper for labeling		

B. Procedures for this activity (with helpful hints)

1. Melt paraffin, scent and wax hardener in double boiler over hot plate
2. Pupils stand in revolving circle, dipping candles when passing melted wax
3. Decorate by carving, pasting labels, etc.
4. Package and label finished product
5. Sell finished product

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING AND DESIGNING SHIELDS

II. ACTIVITY FORMAT:

A. Tools and Materials

Saws	Woodburning Set	Plywood
Scissors	Oaktag	
Paintbrushes	Corrugated Cardboard	

B. Procedures for this activity (with helpful hints)

1. Research history of shields
2. Draw rough draft on oak tag
3. Cut pattern from oak tag
4. Trace pattern on corrugated cardboard
5. Cut out design
6. Paint design
7. Let dry
8. Varnish shield

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING TAPESTRIES

II. ACTIVITY FORMAT:

A. Tools and Materials

Needles	Scrap material	Glue
Scissors	Yarn	
Burlap	Thread	

B. Procedures for this activity (with helpful hints)

1. Design pattern
2. Cut out pieces of material needed or coded colors of yarn
3. Work yarn or material pieces on burlap

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING SMALL WOOD OBJECTS (KEYCHAINS, PENCIL HOLDERS, ETC.)

II. ACTIVITY FORMAT:

A. Tools and Materials

Sandpaper	Chisel	Glue
Hammers	Wood scraps	Paste-sticks
Saws	Paint	

B. Procedures for this activity (with helpful hints)

1. Make pattern for object to be made
2. Trace pattern on wood
3. Carve wood
4. Sand wood
5. Paint finished object

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING SOAP

II. ACTIVITY FORMAT:

A. Tools and Materials

Pyrex mixing bowl	Cotton sheet	Wooden frame (to pour
Spoon	Newspapers	soap into)
Hot plate	Old blanket	1/4 pint cold water
(6) 1/2 ounce of lye-flake form 3 pound tallow or lard		

B. Procedures for this activity (with helpful hints)

1. Follow directions on can of lye for making soap
2. Or consult Teaching Children About Technology, Scobey, pp. 362-4
3. Or consult Detroit News, January 9, 1972 - Good Earth Almanac

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING WALL HANGINGS

II. ACTIVITY FORMAT:

A. Tools and Materials

Burlap	1/2" Doweling
Crewel needles	Yarn

B. Procedures for this activity (with helpful hints)

1. Draw design first on sheet of paper
2. Approval of design by teacher
3. Procure material from teacher (burlap and yarn)
4. 1 1/2" hem in top of each hanging sewn with sewing machine
5. Steam press each hanging
6. Insert doweling

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

LOOPER-WEAVING LOOM

II. ACTIVITY FORMAT:

A. Tools and Materials

Ruler	Hammer
Saw	Miter Box
Cutting pliers	6 d finishing nails
3/4" x #16 Wire brads (1 pound per 10 students)	
1" x #18 Wire brads (1 1/2" for corners)	
2 pieces soft wood 3/4" x 3/4" x 7 1/2"	
2 pieces soft wood 3/4" x 3/4" x 9"	
2 pieces hardboard or plywood 1/8" x 2" x 2"	

B. Procedures for this activity (with helpful hints)

1. Using 6 d finishing nails, nail soft wood frame together
2. Cut 2" square of hardboard diagonally in half and nail the triangles across corners with 3/4" x #16 wire brads
3. Lay out and mark 20 equally spaced points on each side of the frame
4. Drive a #18 wire brad at each point, leaving 1/2" of the brad sticking up
5. Using a piece of coat hanger wire about 12" long, shape a weaving hook

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ALUMINUM FOIL EMBOSSING

II. ACTIVITY FORMAT:

A. Tools and Materials

Depression instruments (paste sticks, pencils, meat picks, popsicle sticks)

B. Procedures for this activity (with helpful hints)

1. Make rough draft on paper of tentative product
2. Make copy of pattern in aluminum plates and pans
3. Depress design in tin
4. Paint over designs with black poster paint
5. Wipe excess paint off

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

RELIEF PRINTING

II. ACTIVITY FORMAT:

A. Tools and Materials

Brayer	Corrugated cardboard	Glue
Exacto-knife	Large sheets of white paper	
Printing ink	Newspapers	

B. Procedures for this activity (with helpful hints)

Make pattern for design
Cut out pattern from corrugated cardboard
Glue pattern to another piece of corrugated cardboard
Spread ink (from tubes) on a piece of newspaper
Roll brayer in ink
Roll inked brayer over corrugated cardboard pattern
Remove "printed" paper

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

WEAVING (MAKING A WAFFLE WEAVE)

II. ACTIVITY FORMAT:

A. Tools and Materials

Saws	Scrap wood
Hammers	String
Nails	Yarn

B. Procedures for this activity (with helpful hints)

Saw plywood into pieces 10" x 2" x 1/2"

Nail sides together

On opposite sides 1/2" apart, nail small nails

Attach string to nails

(Refer to Teaching Children About Technology, Scobey, p. 348)

*SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: EARTH STUDY

GRADE LEVEL: 5-6

GENERAL OVERVIEW: In this earth study section, the following integrated teaching units have been combined and/or presented as a tentative guide for ideas in application to or relevance to the upper elementary classroom:

Air and Weather
Geology
Oceanography
Water

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: AIR & WEATHER

GRADE LEVEL: 5-6

TEACHING/LEARNING RESOURCES:

1. Reference materials:

Books: Science Texts
Trade Books
Library Books
National Weather Service will provide used weather maps

2. Field Trips:

National Weather Service,
Metropolitan Airport

3. Human Resources:

Weatherman
Science teacher

4. Activities:

Role-playing
Weather forecasters using instruments made by the students

Construct Barometer
Construct Anemometer
Construct Wind Vane
Construct Hair Hygrometer
Construct Card File
Interviewing a Weatherman

UNIT TITLE: AIR & WEATHER

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Social Sciences</u></p> <p>Maps and Globes</p>	<p>As a result of this unit, each child will be able to:</p> <p>Identify and read a weather map and from it accurately predict weather</p> <p>Construct a map showing geographical relation to climate</p>
<p><u>Science</u></p> <p>Instruments</p> <p>Clouds</p> <p>Atmosphere</p>	<p>Recognize and define common terms associated with weather</p> <p>Identify a minimum of five weather instruments describing accurately how they operate and what they measure</p> <p>Manipulate correctly five weather instruments</p> <p>Interpret findings from weather instruments and formulate weather predictions from findings</p> <p>State five reasons for the need of accurate weather predictions</p> <p>Construct and demonstrate a weather instrument</p> <p>Differentiate between types of clouds and their effect upon weather</p> <p>Differentiate and diagram layers of the atmosphere</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Have weather maps available
practice reading them

Make and use weather instruments

Research, identify and discuss various
cloud formations; layers of the atmosphere

UNIT TITLE: AIR & WEATHER (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Math</u></p> <p>Measurement calculation</p>	<p>As a result of this unit, each child will be able to:</p> <p>Interpret, compute and record information from weather instruments</p>
<p><u>Language Arts</u></p> <p>Writing</p> <p>Interviewing</p> <p>Vocabulary</p>	<p>Make a log and record daily weather findings</p> <p>Discuss critically weather concepts with a weatherman by first preparing questions for the interview</p> <p>Define vocabulary words, alphabetize and file them</p>
<p><u>Art</u></p> <p>Collage</p>	<p>Gather weather pictures and reorganize them to make a collage</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Invite weatherman into the classroom

Gather pictures from old newspapers and magazines

UNIT TITLE: AIR & WEATHER (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Careers</u></p>	<p>As a result of this unit, each child will be able to:</p>
<p>People and their job roles:</p>	<p>Identify and discuss job roles of those people who work at a weather station</p>
<p>Functions Locations Tools Characteristics</p>	<p>Prepare a chart of relationships of various careers to weather</p>
<p>Management</p>	<p>Identify and discuss job roles of those people who work for radio and TV in the area of weather</p>
<p>Planning Organizing Controlling</p>	<p>Identify those management functions required of a weather station</p>
	<p>Role play a hiring position for a job in a TV station</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Invite people connected with weather careers into the classroom

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ANEMOMETER

II. ACTIVITY FORMAT:

A. Tools and Materials

coat hanger
milk carton
medicine dropper
four pointed paper cups
paper clips or stapler

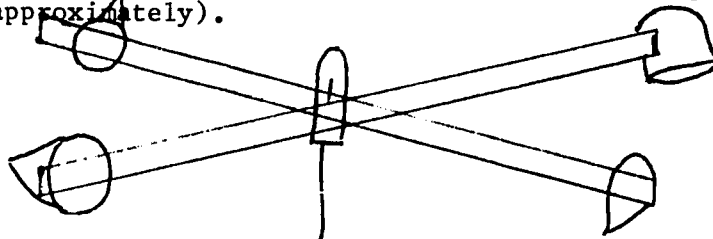
B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

Untwist hanger. Break off crooked ends. Bend into shape. (see diagram) Holding medicine dropper by rubber bulb, melt glass tip over flame or burner. Tip should be closed. Allow to cool. Cut 4 strips, one from each corner of milk carton, about 3/4" from corners. These are the arms. Make large colored circle on one cup (to count the turns). Cut 2 slots 3/4" wide, in each of the paper cups. Slip folded strips into slots of cups, one to each. Take off rubber bulbs, fasten arms to dropper with clips. Slip dropper over upright wire.

III. Results of this activity (after implementation)

Count number of turns in 30 seconds, divide by 5, and that will give you miles per hour (approximately).



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BAROMETER

II. ACTIVITY FORMAT:

A. Tools and Materials

milk carton	needle	paper clip
small tin can	broomstraw	rubber band
balloon	4x6 card	penny
thread	glue	

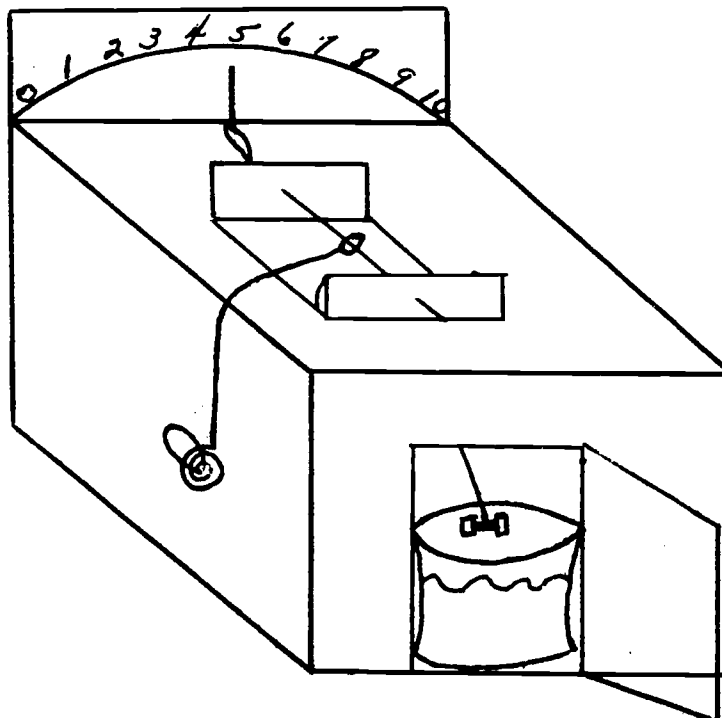
B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

Fold in open end of carton (becomes bottom). Cut H slit on top of carton, fold up flaps, insert needle through flaps. Glue 4" broomstraw into eye of needle. Cut door in front. Stretch balloon piece over tin can, fasten with rubber band. Attach thread to balloon with tape. Run thread up through H, wrap around needle twice, hang down over the side and attach penny and clip for weight. Make gauge with degrees, attach to back with tacks. See diagram.

III. Results of this activity (after implementation)

Most barometers worked well enough to register some change on the gauge.



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

HAIR HYGROMETER

II. ACTIVITY FORMAT:

A. Tools and Materials

milk carton	glue
needle	a hair - 9"
broomstraw	thumbtacks
scotch tape	blank card
penny	paper clip

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

Wash the hair.

Cut an "H" on one side of the carton.

Bend two tabs up and punch hole in each with needle.

Split off broomstraw about 3" long. Put one end through eye of needle and glue it there.

Cut narrow slit at far end of carton, push paper clip in halfway.

Draw half circle on card and print as shown.

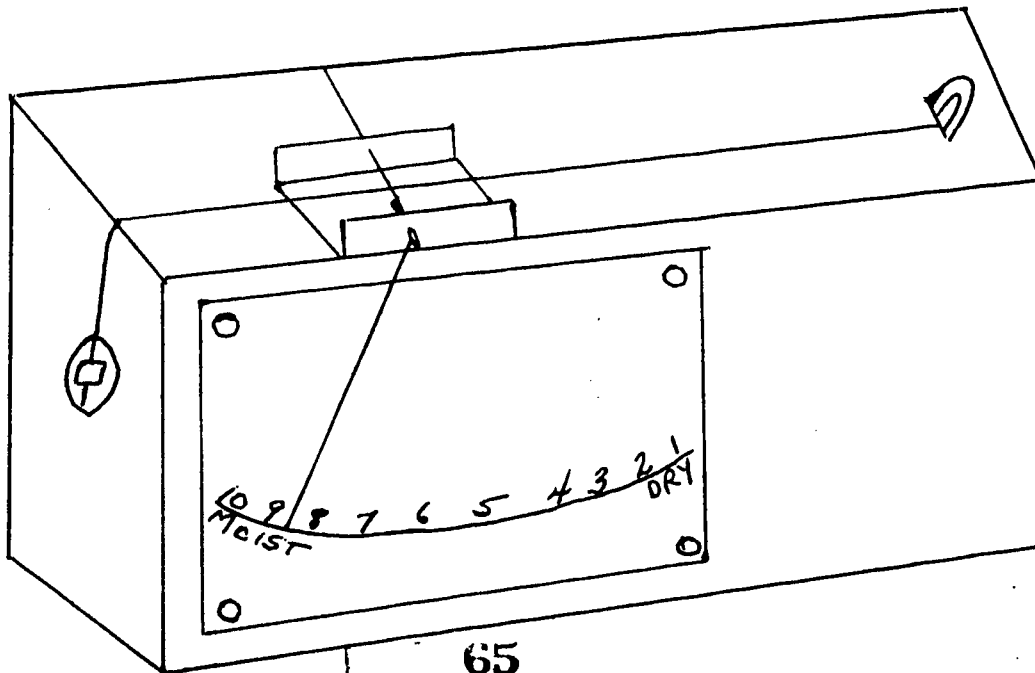
Thumbtack to card.

With tape fasten one end of hair to penny.

Place needle and straw into holes in "H" tab.

Wind hair around needle, one turn from underneath and around.

Glue free end of hair onto paper clip. The penny should hang over end of carton.



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

WIND VANE

II. ACTIVITY FORMAT:

A. Tools and Materials

medicine dropper
milk carton
coat hanger
paper clips
staples

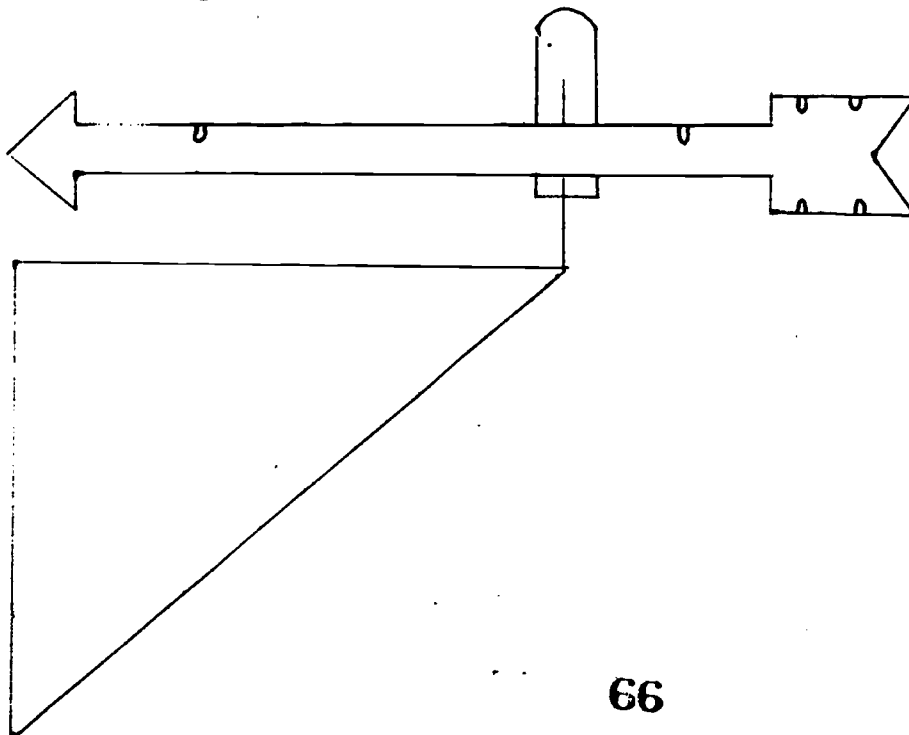
B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

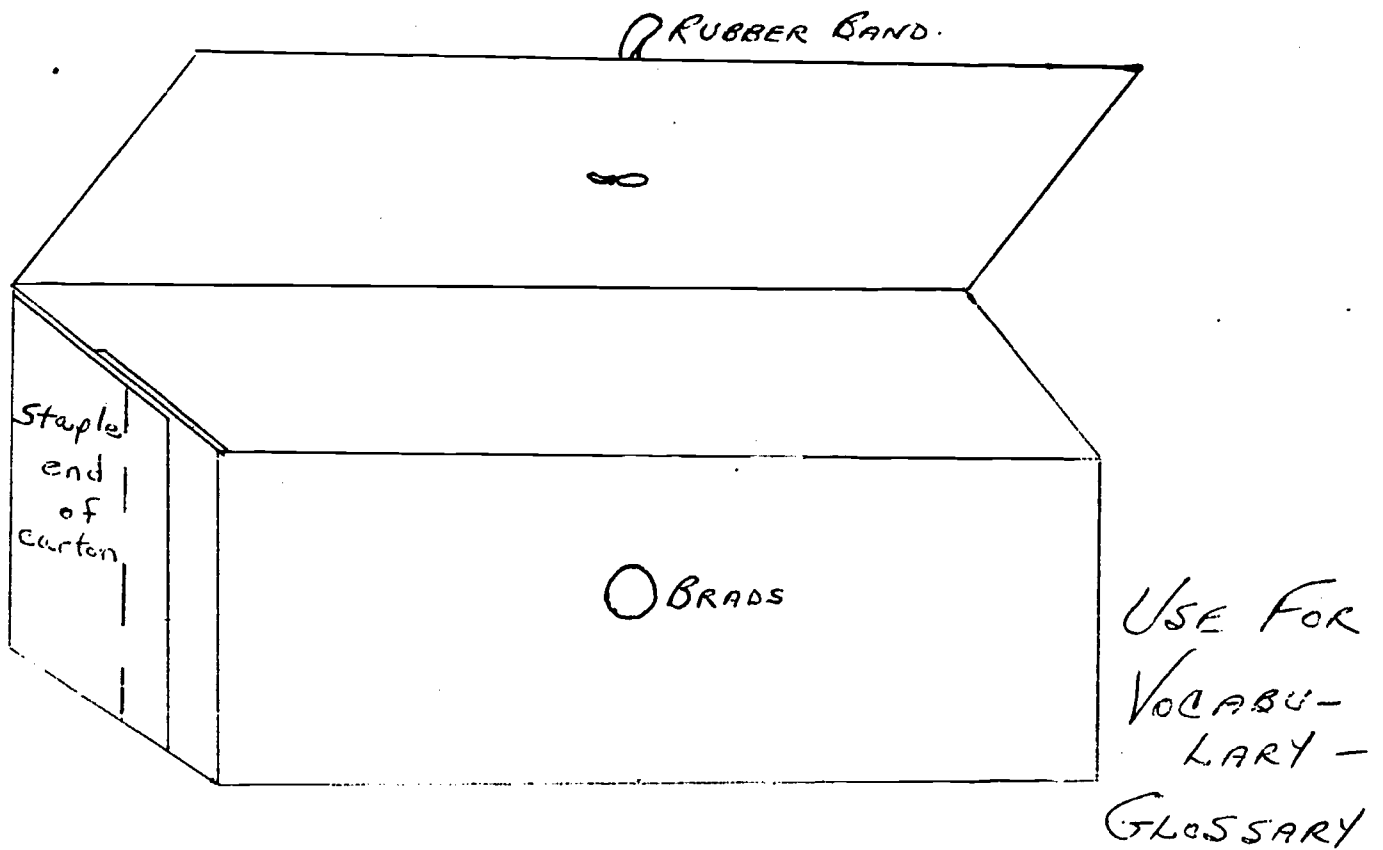
Make a coat hanger bracket just like the one for anemometer. Prepare medicine dropper in the same way. Cut a double strip of paper from corner of carton, similar to anemometer, but 2" away from the corner. Cut in shape of arrow. Push tube of dropper between 2 parts of the arrow, closer to the point than tail. Fasten with paper clips or staples.

III. Results of this activity (after implementation)

It will point to the direction from which the wind is blowing because the tail is larger and catches more wind.



CARD FILE - MILK CARTON



SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: GEOLOGY

GRADE LEVEL: 5

TEACHING/LEARNING RESOURCES:

1. Reference materials:

Books: Science for the Elementary School, Victor
Probe (Educational Services of Michigan)

2. Field Trips:

Rock quarry - Chelsea, Michigan
Arkona, Ontario - Rock quarry
Sylvania, Ohio - Rock quarry
Miner's Den Rock Shop - Royal Oak

3. Human Resources:

Parents
Jeweler
Lapidary

4. Activities:

Rock collection
Make a volcano
Reports
Grow crystals
Make a sedimentary rock
Make a fossil

UNIT TITLE: GEOLOGY

CONCEPTS

BEHAVIORAL OBJECTIVES

Science

Rocks

Changes in the earth's surface

Interdependence of man and earth

As a result of this unit, each child will be able to:

Recognize and identify the three major rock groups

Distinguish between formation of three major rock groups

Relate and differentiate between the forces that change the earth's surface

List ways in which man depends on the solid earth

Language Arts

Brainstorming

Gathering information

Suggest jobs associated with the solid earth

Discriminate among jobs suggested and identify jobs to be studied

Gather data from various sources

Reformulate data and write report

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Make rock collection and identify each
Make a sedimentary rock

Make a volcano

Write reports

UNIT TITLE: GEOLOGY (Continued)

CONCEPTS

BEHAVIORAL OBJECTIVES

Careers ·

People and their job roles:

Functions

Locations

-exterior

-climatic

Working conditions

Training

As a result of this unit, each child will be able to:

Investigate, identify and describe jobs related to the solid earth

Discuss locations of geological work and characteristics of each

Understand the various education required for people who work in jobs related to geology

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING A VOLCANO

II. ACTIVITY FORMAT:

A. Tools and Materials

flower pot
plaster of paris or clay
evaporating dish or tin can
Ammonium dichromate (from Troy Scientific)

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Invert flower pot; cover it with clay or plaster of paris
2. Extend above the pot to create crater
 - a. crater 2"-3" across
 - b. 1-1/2" deep
3. Insert small dish or can - surround can with plaster of paris
4. Pour IT of ammonium dichromate into crater
5. Hold a match to the ammonium dichromate until it lights
6. The volcano erupts, shoots sparks into the air and green fluffy material is formed

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ROCK COLLECTION

II. ACTIVITY FORMAT:

A. Tools and Materials

rocks from home	newspaper
books on rocks	hammers
vinegar	magnifying glass

B. Human Aides and Resources

Parents

C. Procedures for this activity (with helpful hints)

1. Collect rocks
2. Divide rocks into groups according to similarities of color, shape, material
3. Decide how they were made
4. Crack rocks
5. Using magnifying glass, examine crystals inside
6. Using vinegar, test for limestone
7. Wet rocks to see if they smell like soil or sand
8. Make display of identified rocks
9. Brainstorm on jobs connected with rocks

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

RESEARCH REPORTS - MOUNTAINS, EARTHQUAKES, VOLCANOES, GLACIERS,
GEYSERS AND FAULTS

II. ACTIVITY FORMAT:

A. Tools and Materials

texts
library
newspapers

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Students pick one of the 6 topics
2. In each report each student answers these questions:
 - a. How does this change occur?
 - b. How does this change affect the people in the area?
 - c. How are new jobs created when this change occurs?
 - d. What are the jobs created when this change occurs?

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING A SEDIMENTARY ROCK (SANDSTONE)

II. ACTIVITY FORMAT:

A. Tools and Materials

sand
cardboard container
plaster of paris

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Put sand in container
2. Add plaster of paris - mix well
3. Add a small amount of water
4. Allow to dry
5. Discuss:
 - a. How sandstone is used
 - b. How sandstone is taken from earth
 - c. Jobs involved with sandstone

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

FOSSILS (MAKING)

II. ACTIVITY FORMAT:

A. Tools and Materials

modeling clay	sandpaper
small milk carton	vaseline
molding plaster	a shell

B. Human Aides and Resources

Parents

C. Procedures for this activity (with helpful hints)

1. Put a 1/2" layer of clay on bottom of milk carton
2. Grease remainder of carton with vaseline
3. Press shell into clay; remove shell without disturbing impression
4. Mix plaster and water into thin paste - pour into carton
5. When hardened, tear carton, remove plaster block
6. Sandpaper the edges until smooth and straight
7. Discuss what person uses this technique - what does his job involve
8. What other jobs use molds and casts to build things

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

GROWING CRYSTALS

II. ACTIVITY FORMAT:

A. Tools and Materials

sugar
tumbler
deep saucer
string

B. Human Aides and Resources

Jeweler

C. Procedures for this activity (with helpful hints)

1. Dissolve as much sugar as possible in a tumbler half filled with hot water
2. Pour solution into deep saucer
3. Put string into saucer, allow some of string to hang over edge
4. Put saucer in quiet corner - let evaporate for two days
5. Pour off solution
6. Examine crystals with magnifying glass
7. Discuss how man uses crystals to his advantage
8. Have a jeweler come into room and talk to class about his job and how he works with crystals

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: OCEANOGRAPHY

GRADE LEVEL: 5-6

TEACHING/LEARNING RESOURCES:

1. Reference materials:

Films: Fortnight at Nine Fathoms
The Sea
Man in the Sea
The Earth: Its Ocean

2. Field Trips:

Diving Equipment Company
Belle Isle Aquarium and Dawsin Museum, Belle Isle
Tropical Fish Store

3. Human Resources:

Parent or school personnel with diving experience

4. Activities:

Design and build a model sea lab - either scale-model or life size

Role playing:

Aquanauts

Scientists

Engineers

Biologists

Describing their own part in a sea lab venture

UNIT TITLE: OCEANOGRAPHY

CONCEPTS

BEHAVIORAL OBJECTIVES

Math

Measurement

Geometry

Scale

Sea Measurement

As a result of this unit each child will be able to:

Use linear measurement

Design using geometric shapes

Reduce life-size measurements to scale model

Define and demonstrate knots, fathoms

Science

Marine Biology

Engineering design

Investigate a sea animal or fish of his choice-report to group regarding
a) habitat (environment)
b) protective devices
c) life cycle

Discover, contrast and compare various undersea habitats (sea labs, Tektite II, etc.). Within groups design a sea lab to meet the groups' specification.

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
<p>Using large boxes, measure and cut according to design group has made of their sea lab</p> <p>For scale models, reduce design measurement to scale, stating scale used, following same scale throughout</p>	
<p>Using library books, films, filmstrips, shells, starfish, etc., put together a Marine Biology Center. Encourage bringing in collections, books, from home</p> <p>There are many resource books available on undersea exploration, habitats, sea labs, stress group cooperation</p> <p>Draw final design with measurements, specifications</p>	<p>Show movie: The Sea</p> <p>Movie: Man in the Sea</p> <p>Parent who is an industrial designer, draftsman, engineer to give some direction</p>

UNIT TITLE: OCEANOGRAPHY (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Language Arts</u></p> <p>Reports</p> <p>Letters</p> <p>Interview</p>	<p>As a result of this unit, each child will be able to:</p> <p>Prepare written report Deliver report orally using realia, pictures or charts</p> <p>Write invitation, thank-you letters to speakers</p> <p>Write interview questions and conduct interview</p>
<p><u>Art</u></p> <p>Murals</p>	<p>Prepare and produce a group mural of</p> <ul style="list-style-type: none">a) undersea lifeb) undersea exploration vehicles

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
<p>Design stationery with sea life theme</p> <p>Thank-you letter may be written with one or two sentences from each student rather than individual letters: requires cooperation and reading what has been written beforehand</p> <p>May interview parents with diving hobbies, tropical fish owners, fish store owners, speakers for class newsletter or school paper</p>	<p>Art teacher</p>

<p>Using dark or medium blue background paper, or flocked paper, sketch first with pencil, then finish with chalks, crayons, paints or whatever medium group decides</p>	<p>Art teacher</p>
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UNIT TITLE: OCEANOGRAPHY (Continued)

CONCEPTS

BEHAVIORAL OBJECTIVES

Careers

People and their job roles:

Scuba diving and snorkeling (as hobbies)
Scuba diving (professional)

Equipment sales

Teaching of diving

Aquarium employees

Aquarium sales

Tropical fish

Marine biologists

As a result of this unit, each child will be able to:

Recognize and cite evidence for scuba diving as hobby, snorkeling as hobby

Discuss equipment and other requirements, interview manager, discuss job requirements and related careers

Interview diving teacher, discuss job requirements, roles

Examine roles of different types of aquarium workers

Discuss careers with owner, manager, salespeople

Interview a marine biologist, examine roles of aquanauts, marine biologists

Biologists in books and films

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
<p>Have resource person demonstrate equipment needed for hobby and any prerequisites for diving</p> <p>Visiting diving sales outlet. Manager should be available for interview, discussion, demonstration</p> <p>Have diving teacher come in, or visit store which sells equipment and gives lessons (check YMCA also)</p> <p>Visit Aquarium at Belle Isle - discuss roles with any available employees</p> <p>Visit local tropical fish or aquarium sales store</p> <p>See movie <u>Fortnight at Nine Fathoms</u> for insight into lives of aquanauts, scientists, biologists</p> <p>Read comic book <u>Popeye, Marine Science Careers</u></p>	

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BUILDING A SEA LAB

II. ACTIVITY FORMAT:

A. Tools and Materials

refrigerator boxes or large cartons
scissors
exacto knives
rulers
pencils
paints

B. Human Aides and Resources

Books on undersea habitats

C. Procedures for this activity (with helpful hints)

Divide into groups. Each decides whether to make large or scale model habitat. Using resource books, each group designs its own Sea Lab on paper, carries design over onto cardboard, cuts and assembles. This can be as simple or complex as group desires. "Full size" sea labs may be large enough for 2 or 3 students. They may include portholes, entry-ways, "pressure gauges," and any other equipment group decides on.

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: WATER

GRADE LEVEL: 6

TEACHING/LEARNING RESOURCES:

1. Reference materials:

Pamphlets from water authority
Children & Technology, Scobey

2. Field Trips:

Trip to pumping station in Berkley
Visit Oakland County Water Authority

3. Human Resources:

Guide from Oakland County Water Authority

4. Activities:

Measuring water pressure
Constructing water wheel
Tracing source of Mississippi River
Experimenting with beans to show that they need water
Reconstitution of dried fruit
Brainstorming - concentrating on uses of water

UNIT TITLE: WATER

CONCEPTS

BEHAVIORAL OBJECTIVES

Social Science

Irrigation

Water supply

As a result of this unit, each child will be able to:

Purpose and defend reasons for irrigation

Identify the variables connected with the water supply in various parts of the world

Science

Water cycle

Water pressure

Water purification

Discuss critically and identify the variables in the water cycle

Discover and justify use of water pressure

Propose and defend reasons for the necessity of water purification

Identify and justify methods of water purification

Math

Measurement

Gather data from home on the amount of water required in each student's home

Compute from information gathered, amount of water used by entire class for one day

Compute water needed for individual operations (i.e., washing dishes, washing clothes, watering lawn, etc.)

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

UNIT TITLE: WATER (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Language Arts</u></p> <p>Reports</p> <p>Spelling</p>	<p>As a result of this unit, each child will be able to:</p> <p>Gather data for reports from various sources</p> <p>Write report</p> <p>Identify and use properly spelling words associated with water</p>
<p><u>Careers</u></p> <p>People and their job roles:</p> <p>Managing</p> <p>Servicing</p> <p>Hiring</p>	<p>List occupations relating to water</p> <p>Identify and describe the role of a sewer, piper and layer</p> <p>Identify the management practices that are utilized by the water department</p> <p>Discuss critically the services concerned with water purification</p> <p>Identify and differentiate between methods of water testing</p> <p>Propose and defend reasons for the necessity of a plumber</p> <p>Role play a prospective employee being interviewed for a job as a meter reader</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

EXPERIMENTING WITH BEANS SHOWING NECESSITY OF WATER

II. ACTIVITY FORMAT:

A. Tools and Materials

various beans
pans
paper toweling
water

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Put beans in pan with some wet paper toweling
2. Observe beans for a couple days
3. Record findings
4. Beans will sprout in 2-3 days

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

WATER PRESSURE

CONSTRUCT A WATER WHEEL (See Children & Technology by Scobey, p. 370)

II. ACTIVITY FORMAT:

A. Tools and Materials

five gallon can
water
corks

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

Punch three holes in the can; one, a quarter of the way down from the top; one, half way down; one, three-quarters of the way down. Put corks in the holes and fill the can with water. Pull the three corks and observe the length of the spout of water from each hole.

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: ECOLOGY

GRADE LEVEL: 5-6

GENERAL OVERVIEW: In this Ecology section, the following integrated teaching units have been combined and/or presented as a tentative guide for ideas, in application to or relevance to the upper elementary classroom:

1. Plants in Our Society
2. Interdependence of Living Things
3. Pride in Property

TEACHING/LEARNING RESOURCES:

1. Reference materials:

Plants -

Books: You Visit a Spaghetti Factory and Bakery
Your World - We Visit a Bakery
Science for the Elementary School - Victor, pp. 343-44
World Book Encyclopedia

Films: Bakery Beat
Color of Life
Conserving Our Soil Today
Understanding Our Earth: Soil
Let's Watch Plants Grow
Plants That Grow From Leaves, Stems and Roots

Interdependence -

Books: The Birth and Growth of a Tree
How Birds Keep Warm in Winter
The Quail
Something Told the Wild Geese
Sounds of a Distant Drum
Sounds of a Mystery
A Tree Called Moses
Trees Alone Do Not Make a Forest
Wild Flowers of Michigan

Charts: Audubon Nature Charts - Bird Migration
Audubon Nature charts:
1. Common North American Evergreens
2. Common Seed Travelers
3. Forest Food Chains

4. Leaves of Common Trees - Compound
5. Leaves of Common Trees - Simple
6. Twigs of Common Trees

Birds of North America
 Birds of Prey
 Growth of a Tree
 Products of the Tree Farm
 Winter Birds

Films: ABC's of Tools
 Birds in Winter
 Cry of the Marsh
 Discovering the Forest
 Maps are Fun
 Nature's Half Acre

Film-
 strips: Forests
 Forests: A Stable Community
 Helping the Birds
 How Birds Serve Man
 Learning About Birds
 Life in the Forests
 Looking at Birds
 Migration of Birds
 Observing Birds in Nature
 Primeval Forests
 Telling Trees Apart
 Trees
 Using Forests Wisely
 Walk in the Woods
 What is a Bud

Flat
 Pictures: Common Birds
 Forests
 Traveling with the Birds

2. Field Trips:

Plants -

Belle Isle Aquarium (Food cycle)
 Belle Isle Botanical Garden
 Quickstad Park - Royal Oak
 Seven Ponds Nature Center - Dryden, Michigan
 S.E.O.V.E.C.
 Stoney Creek Nature Center and Trails

Interdependence -

Cumingston Park
 Pet Store
 Poultry Farm
 Slaughter House
 Trip to ranch for cows; steer; sheep; hogs; etc.

Various housing projects
Veterinarian farm visit
Veterinary Clinic

3. Human Resources:

Plants -

S.E.O.V.E.C. Horticulturist
Naturalists at Seven Ponds Nature Center
Florist
M.C.C. Students
S.E.O.V.E.C. Food Services
Coast Guard Cook

Interdependence -

Botanists
Landscapers
Naturalists
Conservationists
Carpenters
Lumberjacks
Poultry farmers
Florists
Farmers
Ranchers
Herders

4. Activities:

Plants -

Starting plants from seeds
Controlled experiments for testing good growing conditions
Making boxes for plants
Writing reports on plants
Planting gardens
Building model bakery
Planting wheat in boxes
Baking rolls
Baking homemade bread

Interdependence -

Role playing:

Role of herder, with class as herd
Role of farmer, etc., at auction to buy or sell animals
Role of animal "keeper" as the role varies geographically
Draw basic structure of a bird
Building bird feeder
Study plants and animals in relation to environment and ecology

Pride in Property -

Clean up school:

flower beds

playground

Plant new flowers

Make bricks to be used in flower beds

Refinish wooden top desks

Cleaning off formica top desks

UNIT TITLE: PLANTS

CONCEPTS

BEHAVIORAL OBJECTIVES

Social Science

How plants are used in industry

How people use plants

Ecology (cleanup)

As a result of this unit, each child will be able to:

List five ways in which plants are used in industry

List five ways in which people use plants

Justify reasons for cleanup of classroom or work area when activity is completed

Science

Identification of plants

Planting seeds and plants

List the parts and functions of flowering plants

List three plants used for medicinal purposes

List 10 plants used as food crops

List five green plants and five non-green plants

Distinguish between simple and complex plants

Identify five types of plants found in immediate area

Plant and nurture wheat in planter

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
<p>Writing reports on plants</p> <p>Planting gardens</p> <p>Making boxes for plants</p>	
<p>Controlled experiments for testing good growing conditions</p> <p>Starting plants from seeds</p>	

UNIT TITLE: PLANTS (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Science</u> (Continued)</p> <p>Growth of plants</p> <p>Trade plants with other areas</p>	<p>Identify the variables in growing plants</p> <p>Recognize how green plants make their own food</p> <p>Describe the process by which plants produce carbon dioxide</p> <p>Differentiate between traits of plants grown in different areas</p>
<p><u>Language Arts</u></p> <p>Research</p> <p>Following directions</p> <p>Oral discussions</p> <p>Listening skills</p> <p>Thank-you letters</p> <p>Writing reports</p> <p>Spelling</p>	<p>Locate information about subject under study in library</p> <p>Interpret and apply written instructions</p> <p>Describe orally plant-animal dependence and relationships</p> <p>Write a thank-you letter</p> <p>Write for information about wild flowers</p> <p>Write a summary of a field trip</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Planting wheat in boxes

Writing reports on plants

UNIT TITLE: PLANTS (Continued)

CONCEPTS

BEHAVIORAL OBJECTIVES

Mathematics

Measurement

As a result of this unit, each child will be able to:

Measure wood for planter from a large piece
Measure ingredients for baking rolls
Measure designated amounts of soil, water, plant food

Careers

People and their job roles:

Hiring

Training

Working conditions

Describe the steps involved in being hired for a job

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Baking rolls
Baking homemade bread
Starting plants from seeds
Planting gardens
Making boxes for plants

Building a model bakery

I. NAME OF ACTIVITY

PLANTING AND GROWING SEEDS

II. ACTIVITY FORMAT:

A. Tools and Materials

seeds (lima, radish, bean)	vaseline
blotters	aluminum foil
soil	water
charts to show growth	

B. Human Aides and Resources

Teacher
Parents

C. Procedures for this activity (with helpful hints)

1. Give seeds to students
2. Let them experiment with many different growing conditions
3. Have them keep a chart of the growth and changes in the seeds (plants)
4. Discuss with class the conditions they found best for growth - then discuss greenhouses

I. NAME OF ACTIVITY

BAKING ROLLS

(Recipe follows for Quick Yeast Bread)

II. ACTIVITY FORMAT:

A. Tools and Materials

mixing bowls

measuring cup

measuring spoons

sauce pan

knife

wire mixer

baking pans

B. Human Aides and Resources

two mothers

C. Procedures for this activity (with helpful hints)

The class was divided into two groups, and a mother worked with each group, showing them separately how the dough was made and baked

I. NAME OF ACTIVITY

HOMEMADE BREAD

II. ACTIVITY FORMAT:

A. Tools and Materials

ingredients
bowls
dish cloths

mixing spoons
measuring spoons, cups

B. Human Aides and Resources

3 mothers

C. Procedures for this activity (with helpful hints)

1. Recipe (attached) makes 2 loaves, divide into groups of 2. Each group brings a set of measuring cups, spoons, a wooden spoon, one large bowl and one small bowl. Each child brings one bread pan and a clean dish cloth to cover bread while rising.
2. If you begin making the bread by 9:00 a.m., the second rising will take place during lunch, and you can bake the bread by 2:00 p.m.

QUICK YEAST BREAD

PLANTS

2 pkg. dried yeast
1 cup lukewarm water
1 t. sugar
1 cup milk - scalded
2-1/2 t. salt
1/3 cup sugar
2 eggs, well beaten
1/3 cup melted shortening (Crisco), half butter
6-1/2-7 cups sifted all purpose flour

METHOD

Sift flour into large bowl and set aside.

Soften yeast in lukewarm water with 1 teaspoon sugar in large mixing bowl. Have another bowl, greased with Crisco or Pam ready.

Bring milk to boil in sauce pan (scald). Take off heat, add salt and 1/3 cup sugar. Cool to lukewarm by setting mixture in pan in another pan with cool water in it. When mixture is cooled, add to yeast in bowl along with the 2 beaten eggs.

Melt shortening, butter mixture in small pan over heat. Cool in larger pan with cool water in it.

Add 4 cups flour into yeast-egg mixture and beat until smooth. Add melted cooled shortening, butter mixture and again heat until smooth. Stir in and knead enough flour to make a smooth, elastic dough but not too stiff.

Place in greased bowl, turning dough over once. Cover bowl. Let rise in cozy warm place (85 degrees) about 1 hour, or until double in size. Then turn out onto lightly floured board and shape into rolls or three loaves. Place in greased pans - cover. Let rise again in warm place until double, about 30 minutes.

Bake in moderate oven (400 degrees) 15-20 minutes for rolls.

Bake loaves 20 minutes at 400 degrees, then reduce heat to 350 degrees and bake 20 minutes longer.

Let loaves cool before taking them out of pans.

MAKES 2 DOZEN ROLLS, OR 3 SMALL LOAVES.

HOMEMADE BREAD

PLANTS

2 cups milk
3 T. sugar
1 T. salt
1/2 cup margarine or butter
1/2 cup warm water (105-115 F.)
2 pkg. active dry yeast
6-1/2 to 7 cups sifted all-purpose flour
2 T. melted butter

1. In small sauce pan, heat milk just until bubbles form around edge of pan. Remove from heat, pour in small bowl. Add sugar, salt and 1/2 cup butter. Stir until butter is melted. Let cool to lukewarm.
2. Pour water into large bowl. Sprinkle yeast over water in large bowl, stirring until dissolved. Stir in milk mixture.
3. Add half your flour, beat with your mixing spoon until smooth - about 2 minutes.
4. Gradually add remaining flour, mixing it in with hand until dough is stiff enough to leave side of bowl.
5. Turn out dough on your LIGHTLY FLOURED table, cover with bowl; let rest 10 minutes.
6. Knead dough for ten minutes.
7. Place dough in SLIGHTLY GREASED bowl, turn dough around so greased side is up. Cover with your towel. Let rise in warm place until double in bulk, or about one hour.
8. Punch down dough with fist. Turn dough onto SLIGHTLY FLOURED table. Divide in half, shape each half into a ball. Cover with towel, let rise ten minutes.
9. Stretch dough until it is about 27 inches long (3 times as long as pan in which it will be baked.)
10. Fold dough in thirds, pressing or rolling any air pockets until dough is a 7 inch square.
11. Fold dough into thirds pressing to remove any air pockets. Seal edge and ends of loaf by pinching together. Roll loaf to smooth it. Place in SLIGHTLY GREASED pan.
12. Brush loaf with melted butter. Cover with towel, let rise until double in bulk - about one hour.
13. Bake 40 to 50 minutes at 400 F. Cool on racks.

I. NAME OF ACTIVITY

CONSTRUCTION OF PLANTER BOXES

II. ACTIVITY FORMAT:

A. Tools and Materials

saws
nails
hammers
lumber

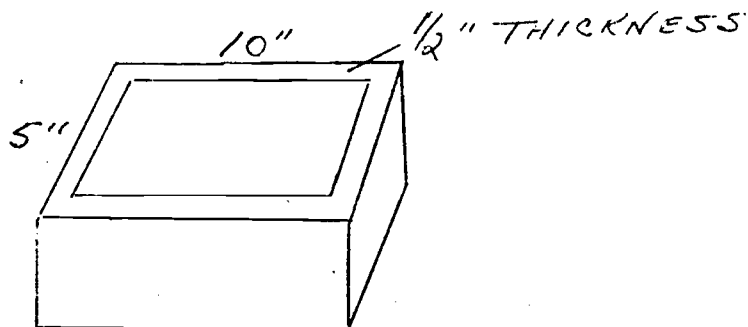
B. Human Aides and Resources

Students from M.C.C.
Irene Mann

C. Procedures for this activity (with helpful hints)

The planter boxes should be lined with plastic sheeting to prevent leakage and rotting of wood. The plastic was stapled into the inside of the boxes.

(Get order from Irene Mann)



I. NAME OF ACTIVITY

MAKING BOXES TO SHOW VARIOUS SOIL PRACTICES

II. ACTIVITY FORMAT:

A. Tools and Materials

saws	scissors	screening
tools	soil	glass jars with metal tops
putty knife	wood	

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Cut wood into pieces to construct a box, open at one end, which is 30 in. long, 9 in. wide, and 6 in. deep
2. Nail screening to open end
3. Seal sides with putty to make watertight
4. Fill boxes with soil and experiment with these concepts:
 - a) loose soil erodes more than packed soil
 - b) the steeper the slope, the greater the erosion
 - c) contour plowing reduces erosion
 - d) terracing reduces erosion
5. Make watering cans from glass jars with metal tops - punch holes in top

HANDS ON ACTIVITY (STUDENT PERFORMED)

INTERDEPENDENCE

I. NAME OF ACTIVITY

MAKING BIRD FEEDERS

II. ACTIVITY FORMAT:

A. Tools and Materials

saws	hammers	stain
sandpaper	wood	files
nails	vices	varnish

B. Human Aides and Resources

Parents - two parent volunteers (preferably men).

C. Procedures for this activity (with helpful hints)

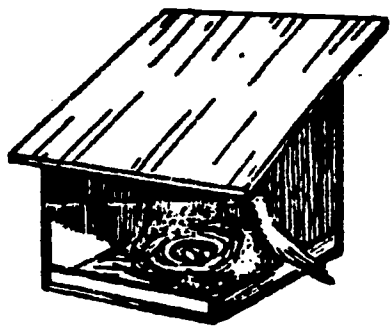
Class discussion and resulting decision on whether feeders are to be constructed by individual, pair of students, small group or mass production method

Class decided feeders to be produced via mass production
Teacher acts as group coordinator
Adult works with measuring group
Adult works with cutting group
Adult works with constructing group
Adult works with rough finishing group (filing and sanding)
All groups participate in final staining and varnishing

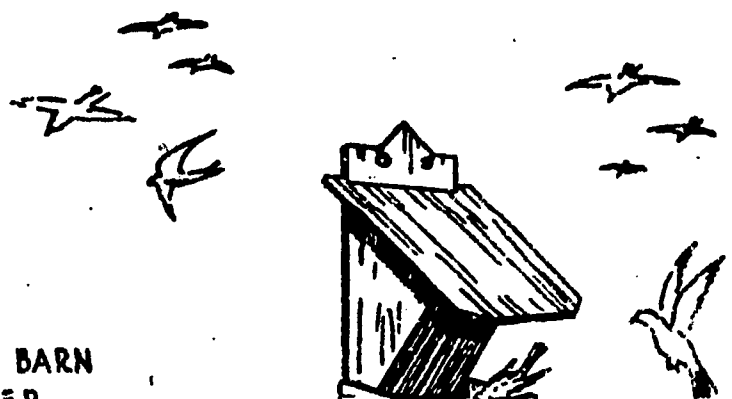
INTERDEPENDENCE

NESTING SHELTER-FEEDING BOX

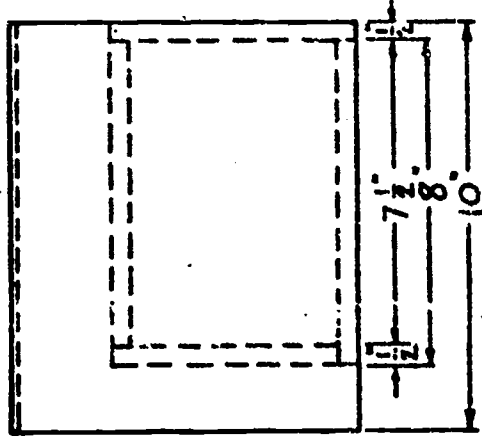
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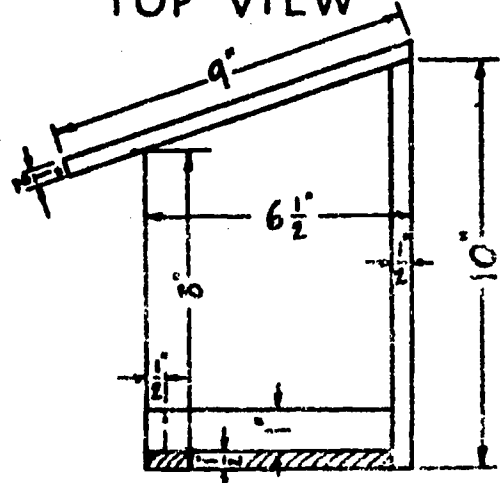
FOR
ROBIN PHOEBIE SONG SPARROW BARN
SWALLOW CATBIRD OR THRASHER



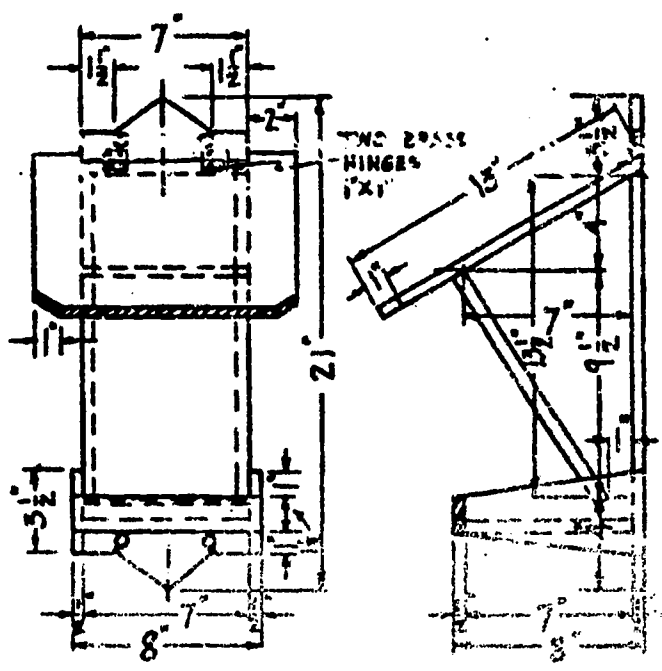
FEEDING BOX



TOP VIEW



FRONT VIEW



FRONT VIEW SIDE VIEW

UNIT TITLE: INTERDEPENDENCE OF LIVING THINGS

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Social Sciences</u></p> <p>Domestication of animals</p> <p>Birds</p> <p>Interdependence of plants and animals</p>	<p>As a result of this unit, each child will be able to:</p> <p>List one product (other than meat) of each domesticated animal under study</p> <p>Match a farm animal with a U. S. geographic area where the animal is most prominent</p> <p>Identify local birds, their migration patterns, food and aesthetic value</p> <p>Discuss the interdependence of society of living things for food, construction, transportation, medicine and protection</p> <p>List ways trees are used by man</p> <p>Recognize and cite evidence for care of living things unable to protect themselves</p>
<p><u>Science</u></p> <p>Classification</p> <p>Birds</p> <p>Interdependence of plants and animals</p>	<p>Identify locally grown trees and describe their assistance in soil composition</p> <p>State the food and shelter requirements of various types of birds (local, birds of prey, carrion-eaters).</p> <p>Describe plant-animal dependencies and relationships (food, protection, transportation)</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Building a bird feeder

Study plants and animals in relation to environment and ecology

Draw basic structure of a bird

Building a bird feeder

Study plants and animals in relation to environment and ecology

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Role play a herder, with class as herd
Role play a farmer
Role play a rancher at an auction to buy
or sell animals
Role of animal "keeper" with role varying
geographically

UNIT TITLE: INTERDEPENDENCE OF LIVING THINGS (Continued)

CONCEPTS

BEHAVIORAL OBJECTIVES

Careers (Continued)

Describe the steps involved in being hired for a job

State the education needed to be a veterinarian

Differentiate between the roles of farmers, ranchers, herders in relationship to animals

State the roles of processors in marketing

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

UNIT TITLE: PRIDE IN PROPERTY

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Social Sciences</u></p> <p>Property pride</p> <p>Cooperation</p>	<p>As a result of this unit, each child will be able to:</p> <p>Recognize and cite evidence for neatness as being a desirable quality of mutually-held property</p> <p>Recognize and cite evidence for teamwork as being a requisite in keeping mutually-held property neat</p>
<p><u>Science</u></p> <p>Changing material appearance</p>	<p>Refinish a desk following given directions</p>
<p><u>Language Arts</u></p> <p>Listening skills</p> <p>Following directions</p>	<p>Manipulate materials for refinishing desks following given directions</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Clean up school
Flower beds
Playground
Plant new flowers
Make bricks for use in flower beds

Refinish wooden desk tops
Cleaning formica desk tops

UNIT TITLE: PRIDE IN PROPERTY (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Math</u></p> <p>Measurement</p>	<p>As a result of this unit, each child will be able to:</p> <p>Measure sandpaper and varnish needed to refinish a desk</p>
<p><u>Careers</u></p> <p>People and their job roles:</p> <p>Personnel</p>	<p>State qualifications needed for carpentry</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

I. NAME OF ACTIVITY

MAKING BRICKS

II. ACTIVITY FORMAT:

A. Tools and Materials

cement	brick molds	rulers
containers	boards	measuring cup
motor oil/brush	trowels	wooden spoon or stick

B. Human Aides and Resources

Teachers, parents, college students, LRT

C. Procedures for this activity (with helpful hints)

1. Mix concrete in containers by measuring 4 cups cement to 2 cups water. (should be the consistency of dough)
2. Brush inside of mold with oil
3. Pour mixture in mold - let set for about 1 hour or until mixture will not push in
4. Take brick out of mold and let set until hard

I. NAME OF ACTIVITY

REFINISHING WOODEN TOP DESKS

II. ACTIVITY FORMAT:

A. Tools and Materials

sandpaper - coarse
sandpaper - fine
varnish (we used special sealer with custodian)

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Plan activity
2. Sand desks
 - a) groups of two or three
 - b) as other completed work - helped others
3. Switch to fine sandpaper
4. Custodian (in this case) - use electric sander to get difficult spots
5. Varnish with a sealer

I. NAME OF ACTIVITY

PLANTING BULBS

II. ACTIVITY FORMAT:

A. Tools and Materials

hoe	fertilizer
water sprinkling can	screening for protection of garden
spade	tongue depressors to label experiments
flower bulbs	

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Plant bulbs in 4 areas around school
 - a) Area 1 - Geraniums, fertilizer, water, no light or locus seeds
 - outside b) Area 2 - Geraniums, fertilizer, light, no water
 - c) Area 3 - Geraniums, light, water, and fertilizer
 - d) Area 4 - Different kind of flower, light, water, fertilizer
 - inside e) Area 5 - Geraniums, light, water, fertilizer
 - f) Area 6 - Geraniums, water, fertilizer, no light
2. Weekly graph growth of flowers
3. Group reports to class on results

UNIT TITLE: EXPLORATION OF CREATIVE WRITING FORMS

CONCEPTS

BEHAVIORAL OBJECTIVES

Language Arts

Story writing
Creative writing

Story classification

Dramatization

Narration

As a result of this unit each child will be able to:

Write a story for play adaptation

Classify the story into the category of myth, tale, or legend

Differentiate between narration and dramatization

Math

Measurement and Proportion

Construct a stage
Devise a curtain system
Use of tools in measurement

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: EXPLORATION OF CREATIVE WRITING FORMS

GRADE LEVEL: 5-6

GENERAL OVERVIEW: The purpose of this unit is to introduce the child to the different forms of writing (mythology, legends, and tales). The child will then compose his own myth, legend or tales.

TEACHING/LEARNING RESOURCES:

1. Field Trips:

See a play and go backstage - lighting, make-up, costumes, sets, etc.

2. Human Resources:

Puppeteer
Make-up artists

3. Activities:

Narration and dramatization
Produce and present a play for a school assembly

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Writing of original plays

Make a stage for puppets

UNIT TITLE: EXPLORATION OF CREATIVE WRITING FORMS (continued)

CONCEPTS

BEHAVIORAL OBJECTIVES

Careers

People and their job roles:

Producing

Managing

Servicing

As a result of this unit, each child will be able to:

Identify different types of work related to theater:

Stage production -

Carpentry

Play production -

Puppetry

Costuming

Tailoring

Make-up

Writing

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Attend play and go backstage to
interview behind-the-scenes workers

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKE STAGE FOR PUPPETS

II. ACTIVITY FORMAT:

A. Tools and Materials

1/2" plywood (2 sheets 4 by 6)	
1 saber saw	2 screen hooks
4 door hinges	Measure
Washers	Screw driver
Nuts and bolts	Electric drill
Curtain rods	Sand paper
Stain	Material for curtains
Pliers	

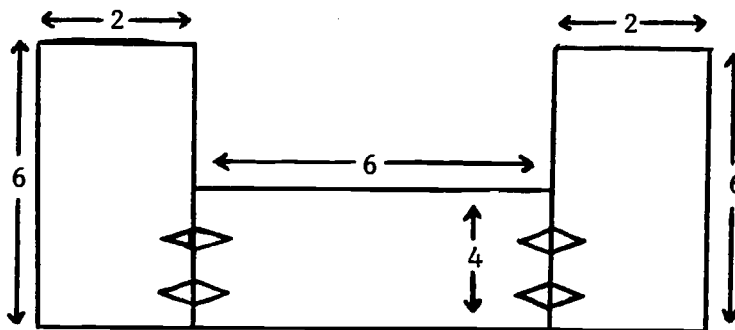
B. Human Aides and Resources:

One teacher aide

C. Procedure for this activity (with helpful hints)

Cut one sheet of 4' by 6' into two 2' x 6' sheets (sand and stain)
Put hinges approximately 6" from bottom and top of middle 4' by 6' sheet

Drill holes, attach hinges and curtain rods



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY:

MAKE PUPPETS

II. ACTIVITY FORMAT:

A. Tools and Materials

Pattern - shown below

Sewing machine

Percale - 6 yards

Glue

Scissors

Felt and fabric scraps

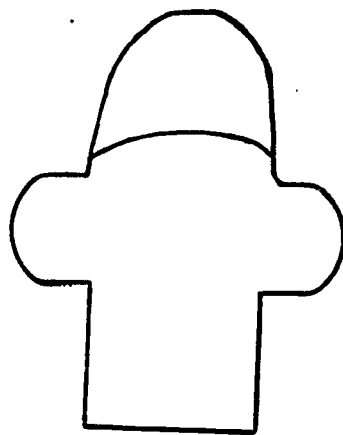
Needle and thread

B. Human Aides and Resources

None

C. Procedures for this activity (with helpful hints)

Make pattern to fit largest hand in class



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY:

WRITING OF ORIGINAL PLAYS

II. ACTIVITY FORMAT:

A. Tools and Materials

Pencil

Paper

B. Human Aides and Resources

None

C. Procedures for this activity (with helpful hints)

Children listened to examples of effective dialogue.

Children were encouraged to act out plays, revise during acting, and use constant feed-back to polish final scripts.

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: Graphic Communications - Books and Newspapers

GRADE LEVEL: 5-6

GENERAL OVERVIEW: This unit encompasses the making of paper, books and newspapers.

TEACHING/LEARNING RESOURCES:

1. Reference materials: Films, filmstrips, loops, books, etc.

Books: The Papermakers: Teaching Children About Technology
How Paper is Made
The Magic of Paper
More Experiments in Science
The Printers
Printing as a Hobby

Communication: From Cave Writing to TV

Kits: Activity Cards - Detroit News
Daily Detroit News delivered two weeks
Detroit News Classroom Kit

Films: From Trees to Books

Filmstrips: The Book
Egypt I
Handwritten Books
History of Printed Books
How Books Are Made
Paper Industry - The Paper Mill
Paper Industry - Trees in the Forest
Story of Paper

2. Field Trips:

Detroit News
Royal Oak Board Printing Office
Royal Oak Public Library
S.E.O.V.E.C. Print Shop

3. Human Resources:

Detroit News - Director of Education
- Public Relations
- Guide

Public Library Librarian

4. Activities:

Books: Producing hardbound books individually
Mass-producing hardbound books

1. Assembly line production
2. Composing stories
3. Illustrating stories
4. Acting out occupational concepts

Newspaper: Making paper
Block printing
Activities from Detroit News kit
Role playing

1. Early Egyptian paper maker
2. Early scribe
3. Early historic picture writer in caves
4. Cartoonists

Current events
Production of school newspaper

1. Future writer
2. Write news story for TV
3. Print stories

Job application

UNIT TITLE: GRAPHIC COMMUNICATIONS - BOOKS AND NEWSPAPERS

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Social Sciences</u></p> <p>History</p> <p>Economics</p> <p>Communications</p> <p><u>Science</u></p> <p>Change of state</p> <p><u>Math</u></p> <p>Measurement</p> <p>Quantity</p>	<p>As a result of this unit, each child will be able to:</p> <p>Recall notable achievements in the history of paper making.</p> <p>Use money and parpare change Compute cost and profits of selling published newspapers Understand the concept of "salaries"</p> <p>Identify four services provided the public by newspapers</p> <p>Relate a graphic description of the process of making newsprint from wood and water</p> <p>Measure with ruler the dimensions of booklets on oak tag Measure a 6 inch by 9 inch piece of cardboard with a ruler Measure an 11 inch by 17 inch piece of paper into two 5½ inch by 8½ inch sections</p> <p>Count the amount of paper needed for making books Do math activities in Detroit News Kit</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Make paper
Role playing - Early Egyptian paper making

Production of classroom or school newspaper

Making paper
Role playing - Early Egyptian paper making

Producing hardbound books individually

Mass-producing hardbound books
Producing hardbound books individually
Do activities in Detroit News Kit

UNIT TITLE: GRAPHIC COMMUNICATIONS - BOOKS AND NEWSPAPERS

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Art</u></p> <p>Illustrating</p> <p><u>Careers</u></p> <p>People and their job roles:</p> <p> Research</p> <p> Production</p> <p>Retailing</p> <p>Personnel</p>	<p>As a result of this unit, each child will be able to:</p> <p>Illustrate, with at least 4 pictures (3 inch by 4 inch minimum size), a Christmas story written in a book with 8 pages (4 folded sheets)</p> <p>Devise a plan for producing books in class</p> <p>Prepare patterns for shape and size of booklet covers manufacture, with materials made equally and sufficiently available by the teacher to all pupils, a hardbound book, liner page and 8 book pages</p> <p>Sew, with needle and thread, 5 holes into the folded median line of 4 sheets of paper into the book cover so that the pages are bound into the cover</p> <p>Relate at least 2 advantages of working on an assembly line</p> <p>Relate at least one disadvantage of working on an assembly line</p> <p>Given a newspaper, construct a booklet discriminating between various types of newswriting (features, sports)</p> <p>Experience sub-assembly and final assembly techniques</p> <p>Type, edit, and print newspaper stories</p> <p>Identify jobs involved in producing newspapers</p> <p>Advertise product orally</p> <p>Advertise product through demonstration</p> <p>State qualifications and personal characteristics in a job application form</p> <p>Identify job qualifications</p> <p>Realize job responsibilities</p> <p>Choose a job he is qualified for</p> <p>Use good reporting and interviewing techniques in obtaining news stories</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Produce hardbound books individually
Mas-produce hardbound books

Produce hardbound books individually
Mass-produce hardbound books

Produce classroom or school newspaper

Produce classroom or school newspaper

Produce hardbound books individually
Mass-produce hardbound books
Produce classroom or school newspaper
Apply for jobs

UNIT TITLE: GRAPHIC COMMUNICATIONS - BOOKS AND NEWSPAPERS

CONCEPTS

BEHAVIORAL OBJECTIVES

Language Arts

Reading

As a result of this unit, each child will be able to:

Do activities according to written directions

Discuss current news events after reading them

Writing

Compose and write an original story; or given Robert Martin's Haunted House orally, change the ending of the story, with either composition being limited in content to the physical confines of the space in the pupil's manufactured book

Compose and write an original Christmas story of no less than 50 and no more than 300 words

Apply creativity or originality in Christmas stories

Write a thank-you note to a guest speaker

Write a news story

Devise a headline for a news story

Listening

Do activities according to spoken directions

Speaking

Use continuity in storytelling

Discuss the format of a news story

Spelling

Spell correctly and define 90% of newspaper terms used in unit study
Identify ten meanings of a list of twenty newspaper terms

Grammar

Apply the 5 basic w's (who, what, where, when, why) in newspaper paragraph
Identify and correct 4 mistakes in a given sample news story containing 5 mistakes

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Discuss current events
Produce classroom or school newspaper

Produce hardbound books individually
Mass-produce hardbound books

Produce classroom or school newspaper

Produce hardbound books individually

Mass-produce hardbound books

Produce classroom or school newspaper

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ASSEMBLY LINE PRODUCTION OF HARDBOUND BOOKS

II. ACTIVITY FORMAT:

A. Tools and Materials

Decorative cloth	8½ x 11 paper
Shirt cardboard	Paste
8½ x 11 unlined paper	Needle and thread

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

Procedure:

1. Cut 14 x 10 inch piece of decorative cloth from bolt.
2. Cut 12 x 9 inch of shirt or thin cardboard (approximately 1/16 inch thick).
3. Fold cardboard into 6 x 9 inch sections for cover.
4. Cut or use 8½ x 11 inch unlined sheets of paper.
5. Fold 8½ x 11 inch paper sheets in half, producing 5½ x 8½ inch pages.
6. Paste decorative cover onto cardboard, cutting exposed cloth corners diagonally to avoid overlapping on folded edges.
7. Insert folded white paper into cover and sew this signature of pages onto cover in 5 places: once inch from top, half inch down, one inch down, one inch down, half inch down, leaving 4 inches of thread at bottom to bring in to middle and tie with thread sewn into cover.

Assembly Line Production of Hardbound Books:

1. Have pupils brainstorm about necessary stations and personnel to manufacture books on an assembly line with procedures listed in steps 1-7 of Activity above.
2. Have pupils organize themselves into groups named in brainstorming (step 1 above) and make signs naming stations and giving directions to perform job in that station.
3. Distribute materials needed for and produce books according to steps 1-7 of Activity above.
4. Proceed to compose and illustrate Christmas stories in books, incorporating copyright and title pages.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

INDIVIDUAL CONSTRUCTION OF HARDBOUND BOOKS

II. ACTIVITY FORMAT:

A. Tools and Materials

Decorative cloth	8½ x 11 paper
Shirt cardboard	Paste
8½ x 11 unlined paper	Needle and thread

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

Procedure:

1. Cut 14 x 10 inch piece of decorative cloth from volt.
2. Cut 12 x 9 inch of shirt or thin cardboard (approximately 1/16 inch thick).
3. Fold cardboard into 6 x 9 inch sections for cover.
4. Cut or use 8½ x 11 inch unlined sheets of paper.
5. Fold 8½ x 11 inch paper sheets in half, producing 5½ x 8½ inch pages.
6. Paste decorative cover onto cardboard, cutting exposed cloth corners diagonally to avoid overlapping on folded edges.
7. Insert folded white paper into cover and sew this signature of pages onto cover in 5 places: one inch from top, half inch down, one inch down, one inch down, half inch down, leaving 4 inches of thread at bottom to bring in to middle and tie with thread sewn into cover.
8. Proceed to compose and illustrate Halloween story in book, incorporating copy right page and title page.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING BOOKS

II. ACTIVITY FORMAT:

A. Tools and Materials

Scissors	Binding tape	Wall paper
Paper cutter	Oak tag	White paper
Stapler	Colored paper	

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Write story.
2. Transfer story to sheets of folded white paper.
3. Illustrate book.
4. Staple pages in the middle.
5. Cut tagboard about 1 inch larger all around than size of open pages.
6. Cover tagboard with wallpaper or colored paper.
7. Affix with binding tape.
8. Illustrate cover.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BOOK MAKING

II. ACTIVITY FORMAT:

A. Tools and Materials

Construction paper	Tape
Writing paper	Glue
Rulers	Scissors
Needles	Thread

B. Human Aides and Resources

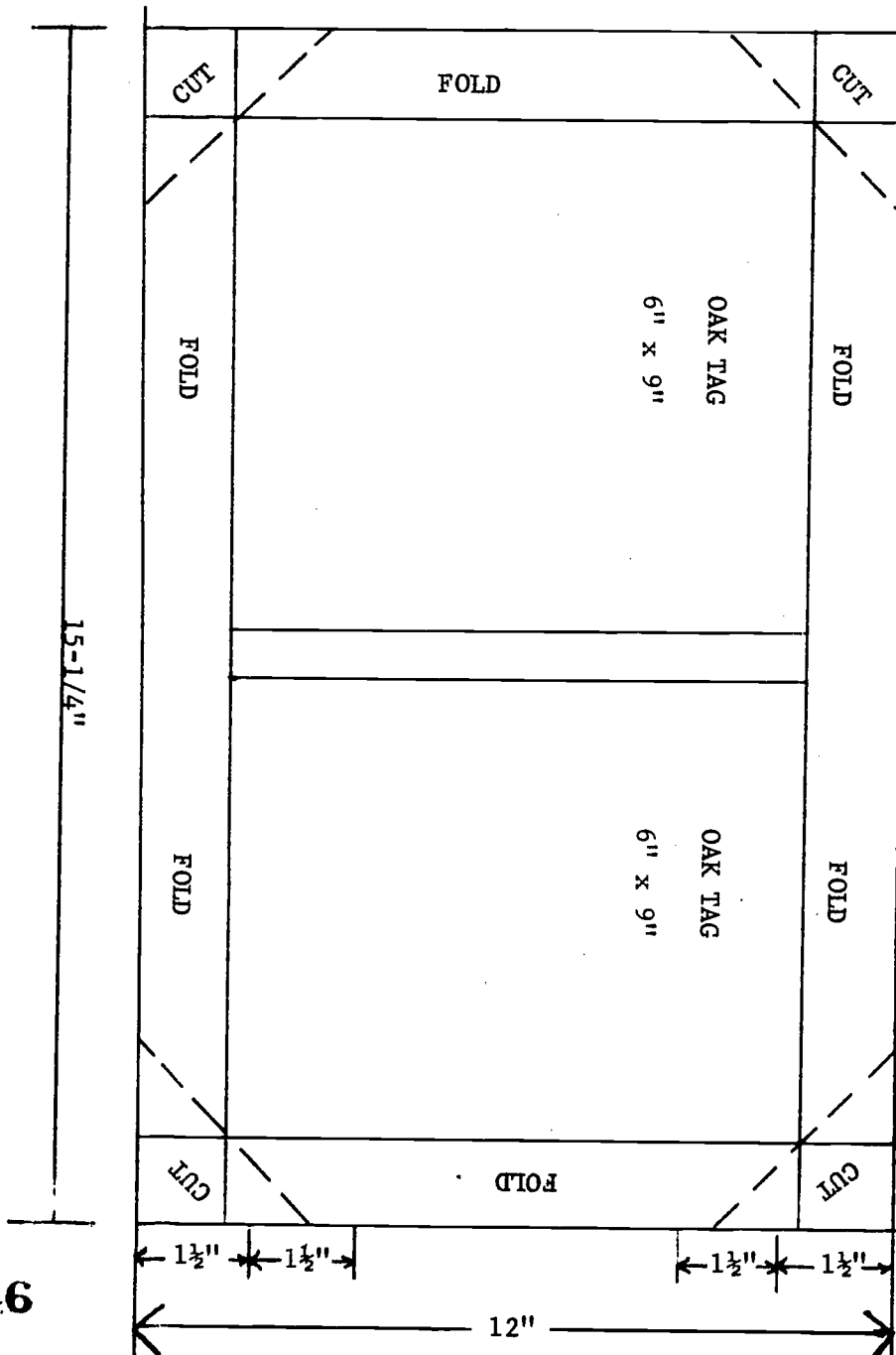
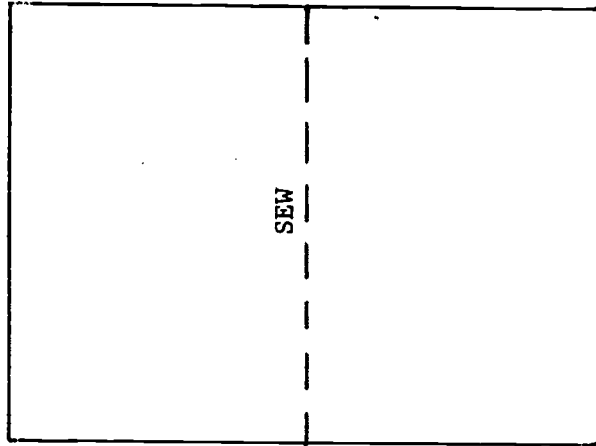
C. Procedures for this activity (with helpful hints)

1. Lay out construction paper to desired dimensions (see drawing).
2. Cut off excess paper and fold.
3. Count out the desired number of writing papers and background paper.
4. Sew writing paper together.
5. Place oak tag into folded portions of construction paper.
6. Tape oak tag.
7. Glue writing paper unto oak tag.

Student jobs:

- | | |
|------------------------|-------------------------|
| 1. Layout | 5. Sewers |
| 2. Cutters and folders | 6. Tape oak in booklets |
| 3. Oak tag cutters | 7. Final assembly |
| 4. Paper counters | |

WRITING PAPER
8-1/2x11"



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING BOOKS

II. ACTIVITY FORMAT:

A. Tools and Materials

Rulers	Paper punch	Cardboard
Scissors	2 paper cutters	Heavy duty string
Brushes	Reinforcements	Paint
Pencils		Paper (8½ x 11 - unlined, unholed)

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. a. Measure cardboard (4½ x 11)
b. Measure paper (4½ x 11)
2. a. Cut cardboard with cutter
b. Cut paper with cutter
3. a. Measure 2 holes on cardboard edge
b. Cut paper with cutter
4. a. Punch holes in cardboard
b. Punch holes in paper
5. Bend cardboard near holes
6. Reinforce holes, cardboard
7. Tape borders of cardboard
8. a. Paint cardboard
b. Count paper - 10 sheets
9. Assemble paper between cardboard covers
10. Install and tie string

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING PAPER FROM RABBIT PELTS

II. ACTIVITY FORMAT:

A. Tools and Materials

Putty knife	Frame for stretching pelt
Rabbit pelts	Pumice
Lime	French chalk (siluate of magnesium)
Rubber gloves	

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

See page 395-396 in Teaching Children About Technology

By Scobey

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING PAPER FROM PAPYRUS

II. ACTIVITY FORMAT:

A. Tools and Materials

Large kettle	Papyrus - like stalks
Scissors	
2 clean pieces of cloth	
Mallet	
Stone for polishing	

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

See page 395 - Teaching Children About Technology
by Scobey

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING PAPER FROM PULP

II. ACTIVITY FORMAT:

A. Tools and Materials

Egg beater	Hot plate	2 full sheets of	Laundry bleach
Window screen	Wooden spoons	newspaper	Paper towels
Iron		Kraft paper	Laundry starch
Cooky pan		Soap powder	

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Tear 2 full sheets of newspaper into tiny pieces like confetti.
2. Place in a quart of H₂O.
3. Beat this mixture with egg beater until the pieces are well broken up (can add Kraft paper).
4. Beat till thin paste.
5. Add a couple spoonfuls of soap powder.
6. Boil till soft - skim off ink.
7. Let mixture cool; add 3 tbs. of laundry bleach - let stand $\frac{1}{2}$ hour.
8. Pour mixture into a gallon of H₂O.
9. Stir mixture well.
10. Pour diluted mixture over a window screen; lay over sink - allow to drain.
11. Place paper toweling over it to squeeze out excess.
12. Place a dry paper towel on top of the mass of paper fibers - lift all layers from screen.
13. Place layers on table; put another piece of toweling on top of the newspaper - press with a warm iron.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING PAPER

II. ACTIVITY FORMAT:

A. Tools and Materials

Toilet paper	Felt
Starch	Paper making frame
Large buckets	Egg beaters

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Tear toilet paper into very small pieces.
2. Add water and starch - beat with eggbeater until pulp.
3. Dip frame in mixture - get a thin layer of pulp on screen.
4. Place felt over screen.
5. Squeeze out excess water.
6. Let dry overnight.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

NOTE PAPER AND ENVELOPES, CARDS

II. ACTIVITY FORMAT:

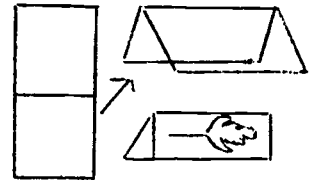
A. Tools and Materials

Scissors Leaves
Oak tag Crayons
Ditto paper

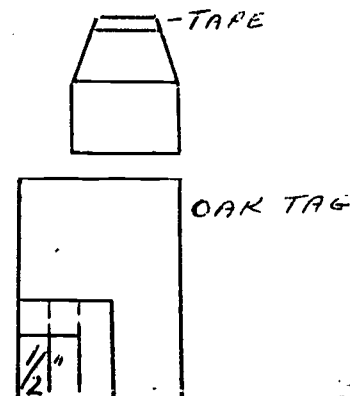
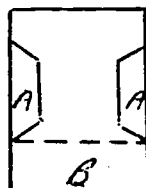
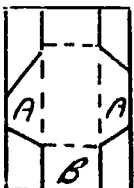
B. Procedures for this activity (with helpful hints)

List (chronologically) a step by step procedure for each activity being made in the unit.

- For Note Paper:
1. Cut or rip paper into half.
 2. Fold half into two parts.
 3. Put leaf under top paper.
 4. Rub crayon or crayons over leaf.



- For Envelopes:
1. Take paper - put leaves under and rub with crayons.
 2. Cut as follows.
 3. Fold "A" in both sides.
 4. Put rubber cement on "A".
 5. Fold "B" up.
 6. Two sided tape - leave cover on until used.
 7. Box - place envelope on Oak tag, allowing 1/2" space around. Cut on folded lines - glue with rubber cement.



SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: HOMEMAKING

GRADE LEVEL: 5-6

GENERAL OVERVIEW: In this homemaking section, the following integrated teaching units have been combined and/or presented as a tentative guide for ideas in, application to, or relevance to the upper elementary classroom:

Food preparation
Sewing

TEACHING/LEARNING RESOURCES:

1. Reference materials:

Books:

ABC Caloric Counter - Basic Health Publication
About Foods and Where It Comes From
American Cooks Cookbook
Better Homes and Gardens Cook Book
Bread the Staff of Life
Elementary School Math
Food the Substance of Life
This is Automation

Films:

Bakery Beat
Dairy Farmer, the Changing Way of Life
Doing Great Things - Kraft
Foods from Grain
Story of Wholesale Market
What is Automation

Filmstrip:

Garment Factory
How America is Clothed
Milk from the Cow to You
Retail Store
Story of Bread, Grain from Farm to Table
Story of Milk
Services We Buy
Things We Buy
Thinks We Make

2. Field Trips:

Koeplinger Bakery, Inc.
To a pancake house
To a pizzeria
Wilson Dairy

3. Human Resources:

Representative from the following occupations:

Bakery
Small restaurant
Pizzeria

4. Activities

Role playing: Chefs preparing recipes - Kneaders - Bakers -
Decorators - Cookie-cutters - Runners - Packagers -
Consumers

UNIT TITLE: HOMEMAKING

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Social Sciences</u></p> <p>Economic choice</p>	<p>As a result of this unit, each child will be able to:</p> <p>Make a Christmas project to donate to poor, helpless or unfortunate people</p>
<p><u>Science</u></p> <p>Heat</p> <p>Change of state</p> <p>Health</p>	<p>Observe effect of heat on ingredients of pancake batter</p> <p>Recognize and cite evidence for pancake batter changing form to solid pancake over heat</p> <p>Investigate nutrition of foods to be prepared during unit study</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Baking cookies
Making popcorn balls
Sewing owl cases for glasses

Baking cookies
Baking bread
Making pancakes
Making butter
Baking rolls
Making pizza

UNIT TITLE: HOMEMAKING (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Math</u></p> <p>Measurement</p> <p>Fractions</p> <p>Number System</p> <p>Money</p> <p>Time</p>	<p>As a result of this unit, each child will be able to:</p> <p>Measure ingredients used in recipes of foods to be prepared during unit study</p> <p>Recognize quantities of food recipes in fraction form</p> <p>Count items produced during unit study</p> <p>Price each item produced during unit study</p> <p>Identify time needed for preparing foods to be prepared during unit study</p>

Language Arts

Reading

Identify proper procedure for activity by reading recipes and/or directions

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Baking cookies
Baking bread
Making pancakes
Making butter
Baking rolls
Making pizza

Baking cookies
Baking bread
Making pancakes
Making butter
Baking rolls
Making pizza
Making owl cases for glasses

UNIT TITLE: HOMEMAKING (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Art</u></p> <p>Decorating</p>	<p>As a result of this unit, each child will be able to:</p> <p>Use his own pattern to decorate his finished product</p>
<p><u>Careers</u></p> <p>People and their job roles:</p> <p>Producing</p> <p>Personnel</p>	<p>Justify group work and cooperation in producing goods</p> <p>Recognize the many jobs available from "field to table."</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Decorating cookies

Baking cookies
Baking bread
Making pancakes
Making butter
Baking rolls
Making pizza
Making owl cases for glasses

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

SEWING - OWL CASE FOR GLASSES

II. ACTIVITY FORMAT:

A. Tools and Materials

Scissors	Pattern	Glue
Pen	Thread	
Sewing machine	Felt or heavy material	

B. Procedures for this activity (with helpful hints)

1. Cut owl from pattern
2. Sew 2 owl pieces together
3. Cut out features of owl for decoration
4. Glue features onto owl

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

A PIZZA LUNCH

II. ACTIVITY FORMAT:

A. Tools and Materials

knives, bowls, (paper) plates, (plastic) forks, mixers, blenders, measuring cups, grease, pizza cutter, pizza pans, oven

Materials necessary for each item to be made:

	(cucumbers		(sauce	sausage
	(tomatoes		(cheese	green pepper
Salad	(green pepper	Pizza	(water	onions
	(lettuce		(yeast	spices
	(oil		(flour	grease
	(spices			

B. Procedures for this activity (with helpful hints)

1. Cut and trim vegetables for salad
2. Prepare salad dressing
3. Prepare dough for pizza -(see bakery Pizza activity)
4. Trim pizza
5. Bake pizza and toss salad
6. Enjoy, enjoy!

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BAKING PIZZA (about 8 people)

II. ACTIVITY FORMAT:

A. Tools and Materials

1 envelope dry yeast	1 1/2 cups drained canned tomatoes
2 Tablespoon warm water	1/2 cup chopped onions
1 cup boiling water	1/2 teaspoon basil
1 Tablespoon shortening	1/2 teaspoon oregano
1 teaspoon salt	pepper
1/2 teaspoon sugar	1/2 cup spaghetti sauce
3 cups presifted flour	1/2 cup sliced pepperoni
8 ounces shredded pizza cheese	

B. Procedures for this activity (with helpful hints)

Preheat oven to 425° F. Grease pizza pan.
Soften yeast in warm water in small bowl.
Let stand 5 minutes. Stir until dissolved.
Pour boiling water over shortening in bowl.
Add salt and sugar. Stir until smooth.
Cool to lukewarm, stir in yeast. Gradually
add flour, beating well to soft dough. Knead
on lightly floured board until smooth. Stretch
and pull to fit pan. Let rise in warm place
for 15 minutes. Sprinkle on cheese. Top
with tomatoes. Sprinkle with onions, basil,
oregano and pepper. Spread on spaghetti sauce
and pepperoni. Bake in preheated oven for
25 minutes or until crust is golden brown.
Cut into wedges.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BUTTER MAKING

II. ACTIVITY FORMAT:

A. Tools and Materials

Wooden bowl	Blender	Salt
Wooden paddle	Rubber scraper	Pasteurized whipping
Quart size jar with lid	Water	cream

B. Procedures for this activity (with helpful hints)

1. Pour cream into jar
2. Shake jar until cream thickens
3. Add a little water to jar as mixture thickens
4. Scrape mixture into wooden bowl and press out milk
5. Wash remaining mixture in water
6. Pour water off until water is clear
7. Salt butter (remaining mixture) lightly
8. Put butter on plate
9. Shape butter into desired design

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

PANCAKE SUPPER

II. ACTIVITY FORMAT:

A. Tools and Materials

Tools necessary for each item to be made:

Frying pans	Pencils
Pancake turners	Cash register (?)
Spoons	Broom
Measuring cups	Map
Bowls - mixing	Knives and forks
Coffee pots	Trays
Cream and sugar servers	Additions by children

Materials necessary for each item to be made:

Paper plates (plastic coated)	Oil
Milk	Syrup
Eggs	Meat (bacon and sausage)
Mix	Paper (mats - tablecloth)
Napkins	Cloth (aprons)
Coffee	Thread
Sugar	Towels
Cream (dry?)	Soap
	Sponges

B. Procedures for this activity (with helpful hints)

1. Research recipe (2 or 3)
2. Cost of ingredients and/or material
3. Selling cost
4. Advertising
5. Arrange for materials and facilities
6. Prepare tablecloths, menu, aprons, place mats, music
7. Select work assignments and assign
8. Obtain material for pancakes, etc.
9. Serve supper
10. Clean up
11. Figure profit and allocate same

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BAKING ROLLS (QUICK YEAST BREAD)

II. ACTIVITY FORMAT:

A. Tools and Materials

2 pkg. dry yeast	2 1/2 teaspoon salt	1/6 cup melted butter
1 cup lukewarm water	1/3 cup sugar	6 1/2 to 7 cup sifted all-purpose flour
1 teaspoon sugar	2 eggs, well beaten	
1 cup milk - scalded	1/6 cup melted shortening	

Mixing bowls	Sauce pan
Measuring cup	Knife
Measuring spoons	Wire mixer
Baking pans	

B. Procedures for this activity (with helpful hints)

METHOD

Sift flour into large bowl and set aside.

Soften yeast in lukewarm water with 1 teaspoon sugar in large mixing bowl. Have another bowl, greased with Crisco or Pam ready.

Bring milk to boil in sauce pan (scald). Take off heat, add salt and 1/3 cup sugar. Cool to lukewarm by setting mixture in pan in another pan with cool water in it. When mixture is cooled, add to yeast in bowl along with the 2 beaten eggs.

Melt shortening, butter mixture in small pan over heat. Cool in larger pan with cool water in it.

Add 4 cups flour into yeast - egg mixture and beat until smooth. Add melted cooled shortening, butter mixture and again beat until smooth. Stir in and knead enough flour to make a smooth, elastic dough, but not too stiff.

Place in greased bowl, turning dough over once. Cover bowl. Let rise in cozy warm place (85 degrees) about 1 hour, or until double in size. Then turn out onto lightly floured board and shape into rolls or three loaves. Place into greased pans - cover. Let rise again in warm place until double, about 30 minutes.

Bake in moderate oven (400 degrees) 15 - 20 minutes for rolls. Bake loaves 20 minutes at 400 degrees, then reduce heat to 350 degrees and bake 20 minutes longer. Let loaves cool before taking them out of pans.

MAKES 2 DOZEN ROLLS OR 3 SMALL LOAVES.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING POPCORN BALLS

II. ACTIVITY FORMAT:

A. Tools and Materials

Popcorn
Popcorn popper
Syrup

B. Procedures for this activity (with helpful hints)

1. Assembly line stations

- a. Pop the popcorn
- b. Measure and prepare syrup
- c. Put popcorn and syrup together - form into balls
- d. Cooling table
- e. Packaging table
- f. Pricing table

2. Selling at the fair

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BREAD MAKING FROM STARTER

II. ACTIVITY FORMAT:

A. Tools and Materials

Hot plate	Fork
2 small pans	Spoon
Measuring spoons	Bowls
Cups	1 bread board
1 medium sized potato	1 bread pan
flour	1/2 Tablespoon sugar
1 cup milk	1 Tablespoon shortening
1 1/2 teaspoon salt	

B. Procedures for this activity (with helpful hints)

Prepare Starter

Cook 1 medium-sized potato in a small pan with enough water to cover it. After it is soft, mash it thoroughly in water in which it's cooked. Add 1 1/2 teaspoons salt, 1/2 tablespoon sugar, and 1/2 cup flour. Mix thoroughly, adding more water if necessary, until the consistency is that of thin buttermilk. Set in a warm place until the mixture begins to bubble.

Set the Sponge

On the evening preceding the baking day, set aside a small portion of the starter, and mix the remainder with enough flour to make a batter that will hold together but light enough to drop from a spoon. Set this batter in a fairly warm place overnight so it will become bubbly and spongy. In the morning, take out a small amount of the sponge, and add it to the starter that was saved.

Mix and Bake Bread

Scald 1 cup of milk, add 1 tablespoon shortening, and let cool. Add 1 cup flour, stirring well. Add the sponge and mix. Mix with flour until a dough is made that can be kneaded. Turn out on a floured board and knead until smooth, about 5-10 minutes. Place in a greased bowl, set in a warm place to rise. When it has doubled in size, punch down and let rise again until almost double in size. Mold into loaf, place in a greased pan, and let rise again until double in size. Bake moderately in a hot oven. 45-50 minutes.

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: HUMAN BIOLOGY

GRADE LEVEL: 6

GENERAL OVERVIEW: A study of the major systems of the body and careers related to the medical profession, including the area of cosmetology.

TEACHING/LEARNING RESOURCES:

1. Reference Materials:

Books:

Science Milestones, Science Digest
Mr. Wizard's Science Secrets, Don Herbert
101 Science Projects, George Stone
Science in the Elementary School

Movies:

Digestion in Our Bodies
Human Body - The Digestive System
Human Machine
Nutritional Needs of Our Bodies
Breathing
The Respiratory System

Filmstrips:

Your Heart and Lungs
Digestion of Foods
Our Health Department
Public Health
Anthony Van Leeuwenhoek
Louis Pasteur
William Harvey
Your Bones and Muscles
Your Muscles

Pictures:

Health Helpers
Medical Helpers

2. Field Trips:

Beaumont Hospital
Ambulance Service
Oakland County Health Department
S.E.O.V.E.C. - Dental Assistant Program

3. Human Resources:

School Nurse
Receptionist in Doctor's Office
Registered Nurse
Public Health Nurse
Students from S.E.O.V.E.C. Dental Health Program
Dietician from Hospital
Student in Make-up from Macomb Community College

4. Activities:

Dissecting animal organs
Hatching of eggs
Taking temperatures, blood pressure, pulse
Quiz Bowl Game
Booklet of drawings
Cleaning teeth
Balanced diets
"Growing Up" Program
Microscopic use - cells
Model of the lungs
Model of the arm
Model of a spirometer
Model of a stethoscope
Model of blood circulation
Watching make-up demonstration and then apply own make-up

UNIT TITLE: HUMAN BIOLOGY

CONCEPTS

BEHAVIORAL OBJECTIVES

Science

Cells

As a result of this unit, each child will be able to:

Examine, identify, compare and contrast the various parts of cells

Tissues

Identify various tissues within the human body

Organs

Identify and differentiate between various organs within the human body

Systems

Discover and discuss critically the main systems of the human body

Health and Safety

Recognize and cite evidence for good health and safety practices

Drugs

Discuss critically, and identify the variables involved in drug use and abuse

Nutrition

Compare and contrast menus recorded of individuals' meals (for a week)

Plan meals that are necessary for a balanced diet

Skin Care

Identify the variables in applying make-up to one's face and relate why this is necessary for a good, healthy skin

Eyes, Ears

Identify and describe the principle parts and functions of the eye and ear

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Examine many different slides of cells under a microscope

Role-playing

Have students keep a record of their food intake for a week

Use models from Instructional Materials Center

UNIT TITLE: HUMAN BIOLOGY (continued)

CONCEPTS

BEHAVIORAL OBJECTIVES

Math

Measurement

As a result of this unit, each child will be able to:

Measure and compute weight of another student and convert weight to ounces, pounds, grams, kilograms, etc.

Compare and contrast weights computed of humans to those of animals of the same age

Compute blood pressure of other individuals in class

Compute heart beats per minute while engaged in various activities

Language Arts

Spelling

Recognize, use and spell correctly terms related to health and the human body

Writing

Differentiate the various forms of letter writing and apply this knowledge

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Write thank-you letters, business letters, etc.

UNIT TITLE: HUMAN BIOLOGY (continued)

CONCEPTS

BEHAVIORAL OBJECTIVES

Art

Drawing

As a result of this unit, each child will be able to:

Prepare diagrams of body systems

Identify individual organs on the diagram

Prepare diagrams of different kinds of cells found in the body

Careers

People and their job roles:

Working conditions

Servicing

Producing

Discuss critically jobs associated with the health, medical and nutritional fields

Identify the variables, compare and contrast the working conditions of jobs in the health, medical and nutritional fields

Distinguish between the services provided by various jobs in the above mentioned fields

Investigate various products (such as artificial limbs, kidney machines, etc.) manufactured for the purposes of aiding various functions of the human body

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Using trade books, overhead transparencies, etc., to draw diagrams

Have guest speakers come in and speak with the students

Field trips

Models could be made of some of these products

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

DISSECT HEARTS

II. ACTIVITY FORMAT:

A. Tools and Materials

1 pluck (sheep)	Microscopes
plastic straws	Scissors
5 pig hearts	Newspapers

B. Procedures for this activity (with helpful hints)

1. Put straw through left auricle, through mitral valve to left ventricle, cut along straw. Clean out clots.
2. Repeat above process on right side. Hints, use newspaper to cover desk, have large plastic bag for disposal, have microscopes to examine tissue.
3. Pluck -
 - a. Discuss organs
 - b. Cut pieces of lungs - have child insert straw and blow to cause lung to expand

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

APPLYING OWN MAKE-UP FOR PLAY

II. ACTIVITY FORMAT:

A. Tools and Materials

Cold Cream for base
All kinds of cosmetics

B. Procedures for this activity (with helpful hints)

1. Each applied own make-up as closely as they could to earlier demonstration.
2. Flood lights must be used in play in order to make this effective.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

STAGE MAKE-UP DEMONSTRATION

II. ACTIVITY FORMAT:

A. Tools and Materials

Volunteer
Theater Make-up

B. Human Aides and Resources

Student from Macomb Community College

C. Procedures for this activity (with helpful hints)

1. We picked the main elf to be made up
2. Talked about importance of using proper base
3. Stage uses a grease paint, but told us how to use cosmetics
4. Demonstrator showed us how not to have make-up patchy - how to make a person old or young, and highlight features
5. Must be able to see features in last row

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING A SPIROMETER

II. ACTIVITY FORMAT:

A. Tools and Materials

Metal cutter	8mm tubing (rubber)
5 inch metal kitchen funnel	Straw
1 gallon glass jug	Ruler
Rectangular aquarium	

B. Procedures for this activity (with helpful hints)

Please see 101 Science Projects by George K. Stone, p. 3.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING A MODEL TO SHOW HOW THE LUNGS WORK

II. ACTIVITY FORMAT:

A. Tools and Materials

Scissors	Rubber band
Lamp chimney	Rubber balloon - large
1-hole rubber stopper	Rubber balloon - small
Glass tubing	

B. Procedures for this activity (with helpful hints)

Please see p. 605 in Science for the Elementary School by Edward Victor

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING A MODEL OF A STETHOSCOPE

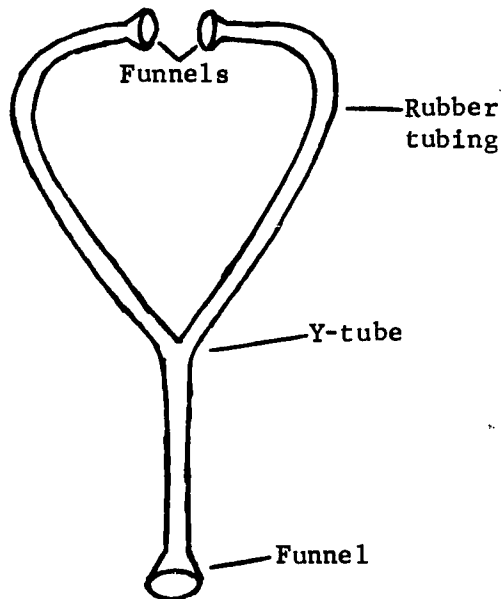
II. ACTIVITY FORMAT:

A. Tools and Materials

3 funnels
3 pieces of rubber tubing
1-Y piece of glass tubing

B. Procedures for this activity (with helpful hints)

1. Make a stethoscope from 3 funnels, a glass tube or T-tube plus one short piece of rubber tubing and 2 longer pieces of rubber tubing (see diagram)
2. Let the kids take turns listening to heartbeats
3. Compare the heartbeats of the kids when they are quiet with their heartbeats after they have jumped up and down 15 or 20 times or exercised vigorously



SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: MAGNETISM AND ELECTRICITY

GRADE LEVEL: 6

GENERAL OVERVIEW: Based on science guide unit: "Investigated magnetism, electricity, how they are related and how man uses them."

TEACHING/LEARNING RESOURCES:

1. Reference materials: Films, filmstrips, loops, books, etc.

Films: from Detroit Edison Company

from Consumers Power Company

Film loops: from L.E.T. office

Filmstrips: from Detroit Edison Company

Books: from L.E.T. office

Pamphlets: from Detroit Edison Company
from Consumers Power Company

Royal Oak Science Guide, pages ME 19 to ME 27

2. Field Trips: (within and out of school)

Edison plant of St. Clair
Detroit Edison Company

3. Human Resources: (role models, parents, students, school personnel)

Royal Oak Schools Electrician
Royal Oak Schools Assistant Electrician

4. Activities: (role playing, hands on activities, interviewing)

Made permanent magnets

Made electromagnets

Made electromagnetic games, telegraph, fuses

Made complete electrical circuits with power sources,
conductors, appliances and switches

Kept a notebook of occupations in the field of electricity

Make a bulletin board of occupations in the field of
electricity

UNIT TITLE: MAGNETISM AND ELECTRICITY

CONCEPTS

BEHAVIORAL OBJECTIVES

Social Sciences

Economics

As a result of this unit, each child will be able to:

Prove that electrical power is an efficient source of power

Science

Magnetism:

magnetic materials and non-magnetic materials

magnetic fields

electromagnets

Recognize which materials are magnetic and shows a magnetic field

List materials necessary for electromagnets

Electricity:

conductors and insulators

circuits

cells and batteries

Discover materials that act as a conductor or insulator of electricity

Explain the electrical current in series, parallel and simple circuits

State reason for electrical operation of cells and batteries

Differentiate between cells and batteries

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
<p>Make electromagnetic games, telegraphs, fuses</p>	
<p>Make permanent magnets</p> <p>Make electromagnets</p> <p>Make electrical circuits (various types)</p> <p>Making electrical circuits</p>	

UNIT TITLE: MAGNETISM AND ELECTRICITY (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Mathematics</u></p> <p>Linear measure</p> <p>Electrical measures</p>	<p>As a result of this unit, each child will be able to:</p> <p>Measure accurately materials used in constructing electrical equipment</p> <p>Compute ohms, amps, volts and voltage (ohms law)</p>
<p><u>Language Arts</u></p> <p>Record information</p> <p>Oral discussion</p> <p>Spelling</p>	<p>Write up observation of experiment</p> <p>Discuss occupations using magnets and electricity</p> <p>Spell correctly 15 related words</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Make electrical equipment

Introduce electricity units by building
bulletin board on occupations

UNIT TITLE: MAGNETISM AND ELECTRICITY (continued)

CONCEPTS

BEHAVIORAL OBJECTIVES

Careers

People and their job roles:

 Servicing

 Producing

 Personnel

 Working conditions

As a result of this unit, each child will be able to:

List two occupations which people maintain and repair products which have electro-magnets

Construct an electrical apparatus

Predict favorable working conditions

List six favorable working conditions of an industry

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Write a report on two service occupations
in electricity

Make electrical equipment (games,
telegraphs, etc.)
Role playing showing different kinds of
working conditions

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ELECTROMAGNET CONSTRUCTION

II. ACTIVITY FORMAT:

A. Tools and Materials

Insulated wire
Dry cells
Large nails

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Wrap insulated wire, about six turns, around a large iron nail.
2. Connect the bare ends of the wire to the terminals of the dry cell.
3. Count the number of thumb tacks the nail picks up.
4. Double the turns of the wire around the nail.
5. Count the number of thumb tacks the nail picks up.
6. Wire together two dry cells.
7. Count the number of thumb tacks the nail picks up.
See pages ME 19 to ME 27 of the Royal Oak Science Guide for other related activities.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ELECTROMAGNETIC GAMES, FUSES, TELEGRAPHS

II. ACTIVITY FORMAT:

A. Tools and Materials

Size 48H bulbs	Nails	Insulated copper wire
Plywood 1" X 4" (pine)	Metal from tin can	Dry cells
Screws	Gum wrapper foil	Cardboard

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Students make sketch of project from book.
2. Decide on materials needed for construction.
3. Students assemble materials, proceed on construction.
4. When making electromagnetic games, cut out small figures, otherwise electromagnet may not be strong enough to pull across cardboard.

Bulletin Board of Electrical Occupations

1. Brainstormed together
2. List brainstormed jobs on board
3. Make bulletin board of jobs brainstormed and listed

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: A POLITICAL SYSTEM

GRADE LEVEL: 5-6

GENERAL OVERVIEW: In this unit, the political system of the United States, units have been combined to encompass the areas of elections and courtroom procedures.

TEACHING/LEARNING RESOURCES:

1. Reference materials:

Books: Concepts and Values, Book 5
How Our Government Helps Us, Benefic Press
Primary Supplementary Social Studies Program

Films: American Presidency
White House Past and Present
Profile of the Presidency

Realia: Campaign Materials Old and New
Reproductions of Old Campaign Buttons (Standard Oil)

Pamphlets: 1972 American Voter - General Motors
Newspapers and magazines
Guide to Voting Procedures
Procedures for Election Workers

2. Field Trips:

Royal Oak City Hall (to observe a court case)
Historical Shop, Royal Oak
Visits to city, county, state and federal offices

3. Human Resources:

An elected city official
A representative from each of the major party headquarters
Someone with historical realia (i.e., old campaign buttons, dishes, etc.)
Poll worker

4. Activities:

Brainstorming - beginning activity to find out what students know
Nominations of candidates
Campaign speeches and rally
Campaign posters and literature
Voter education (2 students to each room to instruct students as to how voting booth works)

Construction of booths

a) secret ballot

b) for non-readers - pictorial ballots

Tallying votes (counted rolls in rooms)

UNIT TITLE. A POLITICAL SYSTEM (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
	<p>As a result of this unit, each child will be able to:</p>
<p><u>Careers</u></p>	
<p>People and their job roles:</p>	<p>Propose and defend reasons for jobs affiliated with government (including courts)</p>
<p>Managing</p>	<p>Organize classroom election from convention to voting</p>
<p>Producing Distributing</p>	<p>Produce and distribute campaign materials</p>
<p>Servicing</p>	<p>Prepare materials to advertise the campaign</p>
	<p>Discuss critically the services provided by the courts</p>
<p>Personnel selection</p>	<p>Discuss critically the procedure for selection of candidates</p>
	<p>Identify the variables in the wages, working conditions and fringe benefits of various candidates</p>
<p>Job Mobility</p>	<p>Identify the variables of what may happen to those people not elected</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Role playing

UNIT TITLE: A POLITICAL SYSTEM (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Language Arts</u></p> <p>Writing</p>	<p>As a result of this unit, each child will be able to:</p> <p>Prepare campaign literature for classroom election</p> <p>Prepare thank-you notes for resource people, realia and field trips</p> <p>Prepare a political ad from a positive point of view</p>
<p><u>Art</u></p> <p>Design</p>	<p>Make campaign posters and campaign buttons</p>
<p><u>Music</u></p> <p>Songs</p>	<p>Discover and examine campaign songs</p>

METHOD OF IMPLEMENTATION	RESOURCE PEOPLE & MATERIALS
Make posters	

Make posters

UNIT TITLE: A POLITICAL SYSTEM

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Social Sciences</u></p> <p>Political Parties</p> <p>History</p> <p>Race</p> <p>Government Branches</p> <p>Voting</p>	<p>As a result of this unit, each child will be able to:</p> <p>Discuss critically the history and evolution of political parties in the United States</p> <p>Examine and justify the role political parties play in the United States</p> <p>Discuss critically the responsibilities of each of the 3 branches of government: (judicial, executive, legislative)</p> <p>Recognize and cite evidence for a system of checks and balances</p> <p>Prove that voting is a privilege and a responsibility</p>
<p><u>Math</u></p> <p>Number System</p> <p>Percent</p>	<p>•Compute electoral college votes and delegate votes</p> <p>Compute portion of the total vote needed to win an election, to be shown in graph or chart form</p> <p>Compute how many people in the voting community voted</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Role playing

Role playing

From election held

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ROLE PLAYING COURTROOM SCENE

II. ACTIVITY FORMAT:

A. Tools and Materials

classroom
jury
judge

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Set up a mock courtroom scene
2. Simulate a court case
3. Role play jobs of people involved in courtrooms including:
 - a) judge
 - b) policeman
 - c) recorder
 - d) lawyer
 - e) clerk
4. Decide case
5. Discuss education needed for each of the above-mentioned jobs

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

VOTING BOOTH

II. ACTIVITY FORMAT:

A. Tools and Materials

string
one freezer crate for 2 voting booths
cardboard cutter
three dowel rods per booth (2 for
voting roll and one for the curtain
curtains
roll paper
rulers and yardsticks
magic markers
oak tag
pipe cleaners

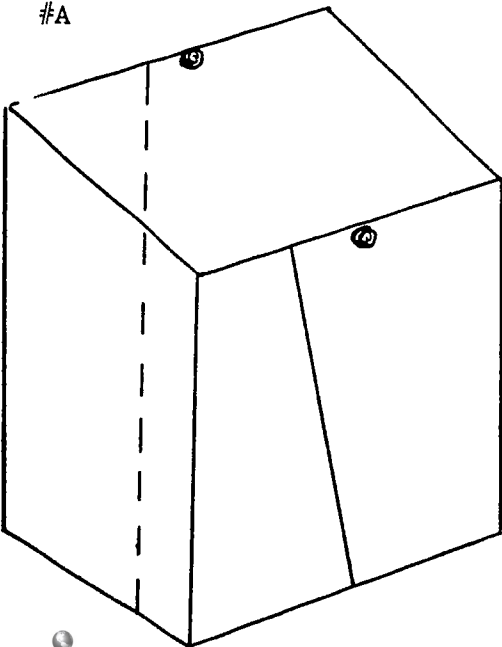
B. Human Aides and Resources

None

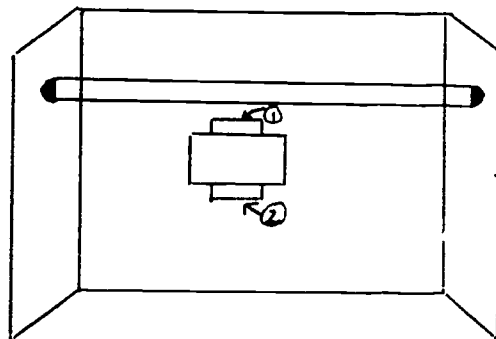
C. Procedures for this activity (with helpful hints)

1. Cut crate in half
2. Make holes for large dowel that will hold curtain
3. Make holes at #1 and #2 in illustration B
4. Mark rolls of shelf paper into two inch sections on one side, and two inch columns on the other (columns for the voters)

#A



#B

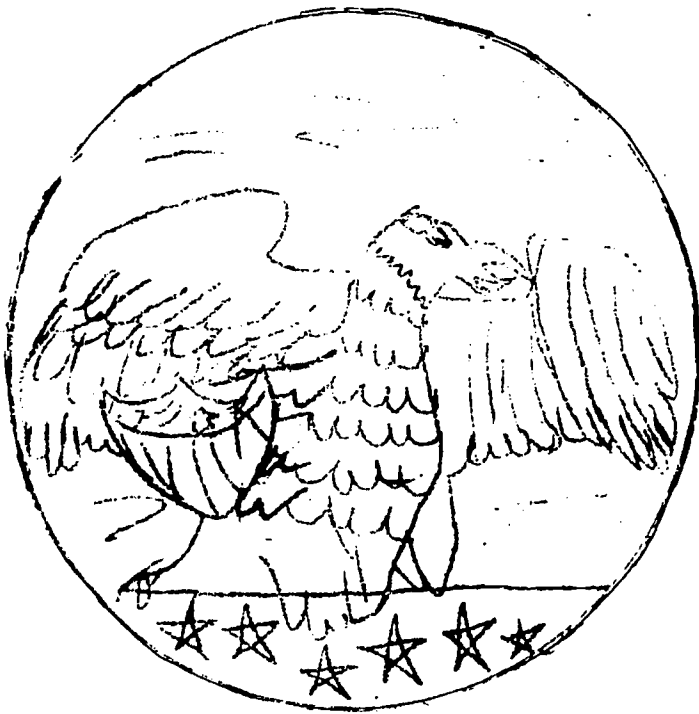


#C

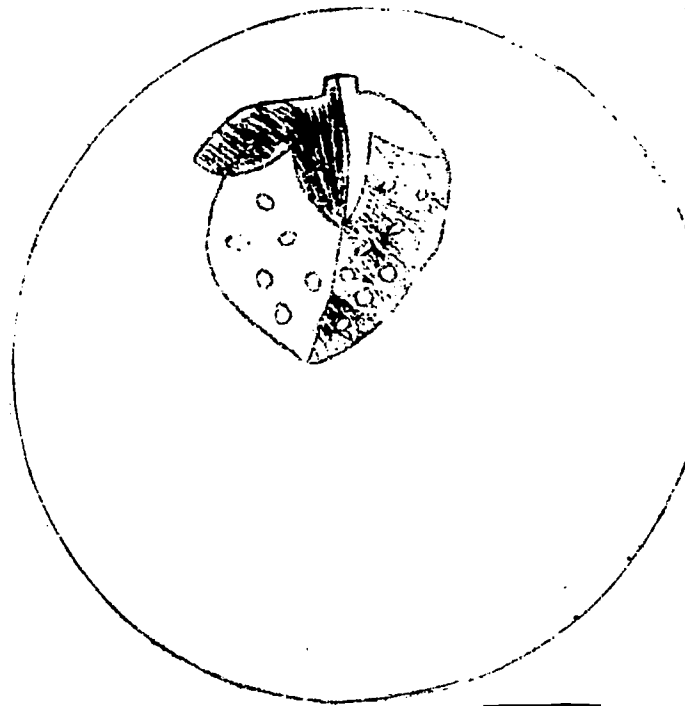


203

FULL ROLL AT BOTTOM



PEANUTS PARTY



POLITICAL PEOPLE



FRANK B. PRESIDENT
 JOANNE G. VICE-PRESIDENT
 CINDY C. SECRETARY

KYLE R. PRESIDENT
 CRISSY L. VICE-PRESIDENT
 LISA D. SECRETARY

INSTRUCTIONS: YOU ARE TO MARK YOUR BALLOT FOR ONE PARTY ONLY. YOU CANNOT DIVIDE YOUR VOTE BETWEEN THE TWO PARTIES. VOTE FOR THE PARTY OF YOUR CHOICE BY MAKING AN X IN THE SQUARE BY THE PARTY NAME. BALLOTS NOT CORRECTLY MARKED WILL BE CONSIDERED VOID AND NOT COUNTED.

THIS IS TO CERTIFY THAT _____
IS A CITIZEN IN GOOD STANDING IN ROOM 122 AND IS ENTITLED TO VOTE IN THE
CLASSROOM ELECTION.

DATE

SIGNATURE

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

CLASSROOM ELECTION

II. ACTIVITY FORMAT:

A. Tools and Materials

None

B. Human Aides and Resources

The secretary, principal and the other fifth grade teacher who helped in voter registration

C. Procedures for this activity (with helpful hints)

Divide the class by random sampling into two political parties. I appointed temporary chairmen. Each group then:

1. Chose a name and official party symbol
2. Selected (in our case by voting) candidates for the offices of president, vice-president and secretary
3. Produced campaign posters with direction that nothing could be said against someone else - everything must be positive in favor of; not negative against
4. Register to vote by proving they were a citizen of Room 122* to the other fifth grade teacher. (Some used their office card, some the C.A.-10 books, some papers that I had written comments on, etc.)
*I had to prove I taught in room 122!
5. The registration certificate had to be produced on election day before a child could receive a ballot. When each child voted their certificate was "voided" by being rubber stamped with a carved eraser stamp
6. Each child voted in a study carral and placed their ballot in a sealed box. (We did this on election day.) Ballots not marked correctly were destroyed. Several children lost their certificates and were unable to vote
7. All campaign posters in the room and hallway (within 100 yards of the polls) were removed before election day
8. The polls closed and opened at official pre-stated times
9. One child voted "absentee" by ballot sent home and returned by mom in a sealed envelope
10. A representative from each party helped me count the votes - one reading the vote aloud and the other confirming it as I tallied it

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MASS PRODUCING CAMPAIGN BUTTONS USING ASSEMBLY LINE TECHNIQUES

II. ACTIVITY FORMAT:

A. Tools and Materials

Oak tag
pins
magic markers
template patterns made by each party

B. Human Aides and Resources

C. Procedures for this activity (with helpful hints)

1. Each party was divided into three assembly lines
2. Children were allowed to choose their jobs, i.e., coloring, cutting, etc.
3. Foremen were volunteers
4. Each "line" made as many buttons as possible in the allotted time
5. Nothing was said about quality until after work period
6. We brainstormed after to find out what we could or should have done differently - the biggest criticism was: "we should have planned more."
7. Quality control inspection eliminated all buttons not symmetrical in shape, with misspelled words and not colored to pre-set specifications

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BRAINSTORMING

II. ACTIVITY FORMAT:

A. Tools and Materials

chalkboard
chalk

B. Human Aides and Resources

A classroom of children
Several students to record ideas

C. Procedures for this activity (with helpful hints)

Listed advantages and disadvantages of being president of the United States kicked off by question, "Why would anyone want to be president of the United States?"

Used many of the ideas as headings for an on-going political bulletin board titled, "The World of Work in Politics."

Included:

- a) Secret Service
- b) Newswriters
- c) Cartoonists
- d) Newscasters
- e) Families
- f) Sales and advertising

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: PRODUCING AND RETAILING

GRADE LEVEL: 5-6

GENERAL OVERVIEW: In this Production and Retailing section, many units have been integrated as a tentative guide for ideas. The following sections are included:
Newspaper Drive
Production and Retailing
UNICEF
Throughout all sections run the following themes: economics, incorporation and operation of a company and product production, utilization and disposal.

TEACHING/LEARNING RESOURCES:

1. Reference materials:

Books: The Social Sciences Concepts and Values, Harcourt Brace Javonovich, Inc.: n.t. 1970
Elementary School Math Book 6, Addison Wesley Publishing Company, 1971
Books on industry, banking, economics
Career Opportunities, American Association of Ad Agencies, Inc., 200 Park Avenue, New York, N. Y. 10017

Films: ABC's of Hand Tools, Part I and II
Our Productive Resources
The Assembly Line in Modern Technology
History of Money

Film-
strips: What One Half Means
Measuring How Long
Introducing Economics Series
Andy and Bank Series
What is Automation

Cards: Tax exemption
Social Security

2. Field Trips:

Cranbrook Science Room
Ford Motor Company - Wixom plant
Wayne Oakland Bank
Burger King
W. T. Grant
Lumber scrap yard
Apple Orchard

Bakery
S.E.O.V.E.C.
Swift Premium Company
Royal Oak Waste Paper and Metal Company

3. Human Resources:

Carpenter
Accountant
Small businessman
Salesman
Payroll clerk
Banker or credit union manager
Person from Department of Weights and Measures
Sales representative from Swift Premium Advertising Company
Art teacher
Manager from W. T. Grant

4. Activities:

Role Playing:

Brainstorming for responsibilities
Select jobs
Produce booklets on an assembly line
Manager
Interviewers
Workers
Secretaries
Supply Clerk
Banker and Accountant
Tax collector
Insurance agent
Medical Personnel
Paymaster

Activities:

Payday
Apply for Job
Construct Wooden Book Shelves
Construct Wooden Book Holders
Bag Holder
Booklets produced via assembly line
Automobile Mass Production
Geoboards
File Boxes
Bulletin Board of Jobs
Silk Screening of Pennants, Banners and Cushions
Boomerang Puzzle
Tic Tac Toe Board
Selling Door to Door
Keeping Up Territory Sales Maps
Develop Sales Vocabulary
Collection and Unloading of Paper at Scrap Yard
Work Study Program at Grant's

Making a Slide-Tape Presentation for Parents
Newspaper Collection

UNICEF Activities:

Advertising
Setting up bookkeeping books for each company formed
Make menu and order food
Shopping
Cooking
Setting up production line
Clean-Up
Collecting labels from commercial products for UNICEF
Trick or Treat for UNICEF

UNIT TITLE: PRODUCING AND RETAILING - NEWSPAPER DRIVE

CONCEPTS

BEHAVIORAL OBJECTIVES

Social Science

Supply and Demand

Cooperation

As a result of this unit, each child will be able to:

Identify the variables that affect the cost when there is an over-supply of a product

Propose reasons and defend them why the whole group will benefit from the project even though some members do not help or participate

Math

Profit

Graphing

Division

Banking

Compute profit each week

Make a bar graph to keep track of weekly totals of money taken in

Compute amount of money which must be taken in each week in order to reach desired goal for the year

Prepare a bank account and apply concepts of banking so that weekly earnings may be deposited

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

When delivery of old newspapers is made at scrap yard the price is posted. It varies from week to week between 40¢-50¢ cwt (cwt = hundredweight)

Volunteers to help collect and do the weekly work of collecting and delivering newspapers. Kids will soon see who does the work

Add new information to bar graph weekly

Divide - Ex.: needed \$100
how much per week?

Observe jobs at a bank

UNIT TITLE: PRODUCING AND RETAILING - NEWSPAPER DRIVE (Continued)

CONCEPTS

BEHAVIORAL OBJECTIVES

Careers

People and their job roles:

Purposes

Servicing

As a result of this unit, each child will be able to:

Discuss critically the various jobs which are required to operate a scrap yard

Recognize and cite evidence for a system of recycling products (i.e., newspapers, scrap metal)

Identify methods of altering used products so that they may be recycled

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Visit scrap yard

Visit scrap yard

Visit scrap yard

UNIT TITLE: PRODUCTION AND RETAILING

CONCEPTS

BEHAVIORAL OBJECTIVES

Social Science

Economics

As a result of this unit, each child will be able to:

Discuss critically the U. S. economic system including (taxes, insurance, salaries, welfare and cost)

Identify the variables in the costs of production (raw materials, labor, property, equipment)

Identify the variables in the costs of distribution and market demands

Compare and contrast the costs involved in handmade products VS automated products

History

Propose and defend reasons for individual construction and assembly line production with regards to the Industrial Revolution

Science

Change (chemical & physical)

Discuss the chemical and physical changes which may occur in the process of making a finished product from a raw material

Machines

Identify and recognize and discuss the application of the 6 basic machines (lever, screw, wheel and axle, wedge, pulley, inclined plane)

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

UNIT TITLE: PRODUCTION AND RETAILING (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Math</u></p> <p>Measurement</p> <p>Cost-profit</p> <p>Percent</p> <p>Banking and Accounting</p> <p>Payroll</p>	<p>As a result of this unit, each child will be able to:</p> <p>Measure and compute materials necessary for a product to be made</p> <p>Compare measures of bushel, one-half bushel, peck, pound in the apple business</p> <p>Identify costs and compute profit for products made</p> <p>Compute the depreciation of a product's buildings and equipment over a given period of time</p> <p>Devise and apply methods of banking and accounting as they relate to a classroom company</p> <p>Use a checkbook</p> <p>Construct payroll plan by which company employees will be paid</p>
<p><u>Language Arts</u></p> <p>Writing and Speaking</p>	<p>Write ads to advertise products</p> <p>Write a sales promotion speech</p> <p>Write orders for products to be made</p> <p>Speak to groups to advertise products</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Make various projects

Buy materials, keep records - compute profits

Role playing

Write advertisements to be given to various other classes

UNIT TITLE: PRODUCTION AND RETAILING (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Art</u></p> <p>Design</p> <p>Lettering</p> <p>Graphic Communication</p>	<p>As a result of this unit, each child will be able to:</p> <p>Design and make posters for the purpose of advertising products</p> <p>Make appropriate lettering for needed projects</p> <p>Manipulate apparatus needed in the process of silk-screening</p>
<p><u>Careers</u></p> <p>People and their job roles:</p> <p>Reasons</p> <p>Functions</p> <p>Locations</p> <p>Managing</p> <p>Planning and Organizing</p> <p>Producing</p> <p>Purchasing Materials</p> <p>Processing</p>	<p>Identify, describe and apply the duties and responsibilities of the managing, financing and production personnel necessary to run a company</p> <p>Gather data, manipulate ideas, organize data and apply findings in the formation of a company</p> <p>Differentiate among materials so as to purchase the most appropriate ones for product produced</p> <p>Apply methods of forming, separating and combining where necessary to produce desired product</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Make posters and put up around school to advertise

Silk-screening

Make products

UNIT TITLE: PRODUCTION AND RETAILING (Continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Careers</u> (Continued)</p> <p>Packaging</p> <p>Servicing</p> <p>Personnel</p> <p>Interviewing</p> <p>Training</p> <p>Working Conditions</p>	<p>Prepare packaging materials for products manufactured</p> <p>Do the following, as it relates to the product:</p> <ul style="list-style-type: none">a) distributeb) advertisec) selld) repair <p>Identify personal qualifications relative to a particular job</p> <p>Identify needed background for a particular job</p> <p>Compare and contrast the economic rewards, physical environments and social environments of various jobs</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Role play interviewing

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING APPLE PIE

II. ACTIVITY FORMAT:

A. Tools and Materials
(Approx. size of class - 15)

15 cups sifted flour	Measuring cups
4, 5 tsp. salt	Rolling pins
4 cups shortening	Mixing bowls
24 tbsp. water	Pastry blender
2 cups white sugar	Pie pans
3 tsp. cinnamon	Paring knives
20 cups apples (sliced thin)	Forks
3 cups brown sugar	Measuring spoons
1-1/3 cups butter	Clean up materials

B. Human Aides and Resources

None

C. Procedures for this activity (with helpful hints)

This activity is in two parts. First, students are placed in assembly line stations and do various duties they are responsible for. Next students take individual ingredients back to their seats and complete their pie.

Before all activity starts, areas and people involved should be inspected for CLEANLINESS.

Stations on assembly line:

WORK AREA I

1. Apple peelers - several
2. Apple corers - several
3. Apple slicers - several
4. Apple mixers - several

WORK AREA II

1. Pie crust makers - several
2. Pie crust rollers - several
3. Dough cutters - several
4. Pie Pan Fitters - several

Routine:

Apples are cleaned, peeled, cored, and sliced, then placed in

containers where an apple mixer mixes necessary ingredients with the apples to make the appropriate pie filling. In a different area the pie crust is made, rolled and fitted into pie pans. At the completion of both work areas, individual students take necessary ingredients from each area and produce their own pie.

WORK AREA I - Apple Mixer's Directions:

Mix in bowl the following ingredients:

2 cups white sugar
3 tsp. cinnamon
1/2 tsp. salt
20 cups thin apple slices

Mix in separate bowl:

3 cups brown sugar
3 cups sifted flour
1-1/3 cups butter

WORK AREA II - Pie Crust Makers' Directions:

12 cups sifted flour
4 tsp. salt
4 cups shortening
24 tbsp. water

Note: This is a large quantity. More would be gained by using smaller recipe and several mixings to allow uniform mixture of ingredients and a more easily mixable dough.

Mix flour, salt and shortening together with pastry blender until mixture holds firmly together. Add water, stirring mixture into a ball, making sure flour is moistened. Divide dough into 5 parts. Roll out dough 2 inches larger than pie plate; fit in pan. Fold up extended 2 inches of pie crust to edge of pan; flute between thumbs and forefingers. Prick crust with fork.

Individual students will then place mixed apples in pie shell, take the blended brown sugar, flour and butter, and sprinkle lightly over the apples. The student has a choice of topping pie with more crust or the brown sugar, flour and butter. The pie will be baked for 35 minutes at 400 degrees.

All left-over ingredients will be frozen and used at a later date to demonstrate how freezing is used to preserve foods.

1. Name _____
2. Age _____
3. Address _____
4. Phone _____
5. What jobs would you like to do? Choose three.

PAYMASTER (1)
INSURANCE AGENT (1)
TAX COLLECTOR (1)
WELFARE AGENT (1)
SECRETARIES (2)
INSPECTORS SUPERVISOR OR FOREMAN (2)
CUSTODIAN (1)
NURSE (1)
SUPPLY CLERKS (2)
MANUAL LABORERS

6. Put this list of words into alphabetical order and number them. Copy the list in your best handwriting.

choose	automobile
water	survey
green	glue
sticks	car
pizza	agent
write	please

- | | |
|----|-----|
| 1. | 7. |
| 2. | 8. |
| 3. | 9. |
| 4. | 10. |
| 5. | 11. |
| 6. | 12. |

7. List five people in your room that you would obey if they are chosen to be your boss.

- 1.
- 2.
- 3.
- 4.
- 5.

AUTOMOBILE MASS PRODUCTION

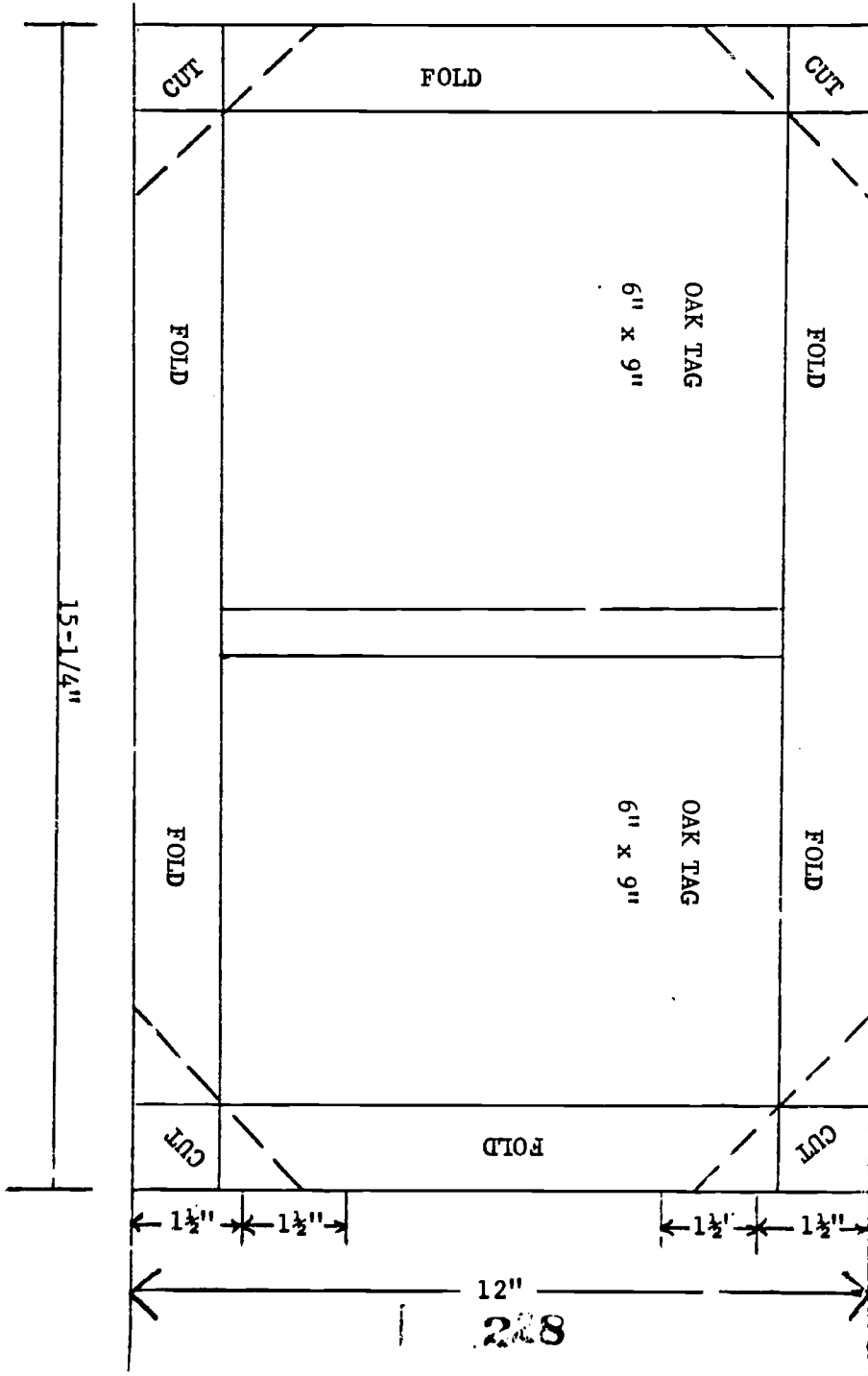
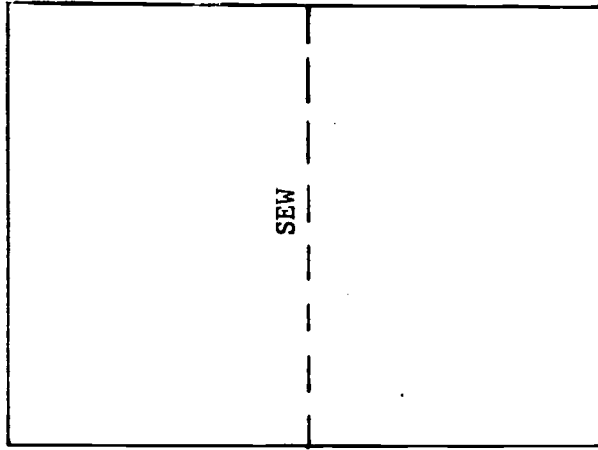
Parts List Per Car (Multiply number of parts of length of wood to determine total material needed per class)

- 4 Wheels
- *2 Coathanger wire, 4-1/2"
- 4 1/2" Staples
- *1 Pine, 3/4" x 1-1/2" x 8"
- *1 Pine, 3/4" x 3-1/2" x 8"
- 4 Brads, 1"
- 4 1/8" I.D. - 3/8" O.D. Steel Washers

*Denotes pieces

- (1) Cut 3-1/2" wide floor board to 8" length
- (2) Mark axle lines 1" from end of floor board
- (3) Cut 3/4" x 1-1/2" blocks to 3-1/2" lengths
- (4) Nail hood to base (2 nails)
- (5) Nail cab to base (from bottom)
- (6) Nail staples to the bottom of the floor boards
- (7) Sand front of truck
- (8) Sand sides of truck
- (9) Inspect
- (10) Attach wheels and axle to staples (use 2 washers)
- (11) Cut axles to 4-1/2" lengths
- (12) Attach one (1) wheel to axle
- (13) Inspect wheel alignment
- (14) Attach headlights
- (15) Final inspection

WRITING PAPER
8-1/2x11"



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ASSEMBLY LINE PRODUCTION OF BOOKLETS

II. ACTIVITY FORMAT:

A. Tools and Materials

construction paper	tape
writing paper	glue
rulers	scissors
needles	thread

B. Human Aides and Resources

Two parents

C. Procedures for this activity (with helpful hints)

1. Lay out construction paper to desired dimensions (see drawing)
2. Cut off excess paper and fold
3. Count out the desired number of writing paper and background paper
4. Sew writing paper together
5. Place oak tag into folded portions of construction paper
6. Tape oak tag
7. Glue writing paper onto oak tag

Student jobs:

- | | |
|------------------------|-------------------------|
| 1. Layout | 5. Sewers |
| 2. Cutters and folders | 6. Tape oak in booklets |
| 3. Oak tag cutters | 7. Final assembly |
| 4. Paper counters | |

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BULLETIN BOARD OF "JOBS"

II. ACTIVITY FORMAT:

A. Tools and Materials

magazines
newspapers

B. Human Aides and Resources

Parents

C. Procedures for this activity (with helpful hints)

1. Youngsters brought pictures, articles, etc. from home
2. Group classified these as to products or services
3. Group classified these then as to type - sports, etc.
4. Group arranged a bulletin board

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

CONSTRUCTING WOODEN BOOK HOLDERS

II. ACTIVITY FORMAT:

A. Tools and Materials

saws (dremel, coping, crosscut)
vises and clamps (bench)
two 8" x 8" plywood (to 1/2" thick)
sandpaper blocks
stain for wood
varnish or shellac
sandpaper
wood files

B. Human Aides and Resources

Teacher's aide
Learning Resource Teacher
(Parents and carpenters also suitable)

C. Procedures for this activity (with helpful hints)

1. Cut 8" x 8" plywood squares from sheet. Dremel saw will cut to 1/2" thickness. Otherwise, coping or crosscut saws required
2. Outline form of book holders onto plywood squares with pencil or crayon
3. With thin blade in dremel saw or with coping saw, cut pattern of book holders from square
4. File edges of book holders with wood file if edges are rough
5. Sand book holders smooth with grain: with coarse or medium and fine (to finish) sandpaper (coarse or medium determined by how rough wood is)
6. Stain or prime book holders. Let dry
7. Shellac, paint or varnish book holders. Let dry

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

CONSTRUCTING WOODEN BOOK SHELVES

II. ACTIVITY FORMAT:

A. Tools and Materials

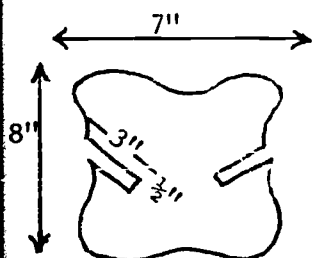
saws (coping, crosscut, dremel)
vises and clamps (bench)
two 8" x 7" plywood (to 1/2" thick)
sandpaper blocks
sandpaper
wood stain
varnish or shellac
wood files

B. Human Aides and Resources

Teacher's Aides
Learning Resource Person (carpenters, parents also suitable)

C. Procedures for this activity (with helpful hints)

1. Cut 7" x 8" plywood squares from sheet. Dremel saw will cut to 1/2" thickness. Otherwise, coping or crosscut saws desirable
2. Outline pattern of book shelves on plywood squares with pencil
3. With thin blade in dremel saw or with coping saw, cut patters from plywood squares
4. File edges of book holders if rough with wood file
5. Sand book holders with grain until very smooth - begin with coarse or medium sandpaper (depending on how rough wood is). Finish with fine sandpaper
6. Stain or prime book shelves. Let dry
7. Paint, shellac or varnish book shelves. Let dry
8. Cut 3" x 3" x 1/2" (two) boards of plywood. Sand, prime and paint. Let dry
9. Insert wood boards into slots of pattern



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

SALESMAN OR DISTRICT MANAGER

II. ACTIVITY FORMAT:

A. Tools and Materials

None

B. Human Aides and Resources

None

C. Procedures for this activity (with helpful hints)

1. Each group met as a territory
2. Criteria to be a manager:
 - a) Have sold door to door
 - b) Volunteer to apply for job
3. Each volunteer had one minute to prepare WHY he would make a good manager
4. Each presented their talk
5. Election was held

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

DISTRICT MANAGERS - JOB

II. ACTIVITY FORMAT:

A. Tools and Materials

Ledger for each salesman

B. Human Aides and Resources

None

C. Procedures for this activity (with helpful hints)

1. Each district manager set up books

- a) Listed each salesman
- b) Number of candy bars taken
- c) Many brought in daily
- d) Help to project future ordering

2. Checks to see that salesmen stayed in own territory

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKE "BOOMERANG" GAME

II. ACTIVITY FORMAT:

A. Tools and Materials

sabre saw	stain and varnish
shaper	marbles
power drill and kits	1 x 2 white pine #2
sandpaper	

B. Human Aides and Resources

Parents to help supervise use of power tools

C. Procedures for this activity (with helpful hints)

Draw pattern (see attached). Trace pattern on wood and punch holes for drilling. Cut wood with sabre saw. Drill holes. Use shaper to smooth out rough cutting. Sandpaper till smooth. Stain varnish. Put finished product plus 8 marbles into "baggy." (Marbles: 4 red, 4 blue)

BOOMERANG PUZZLE

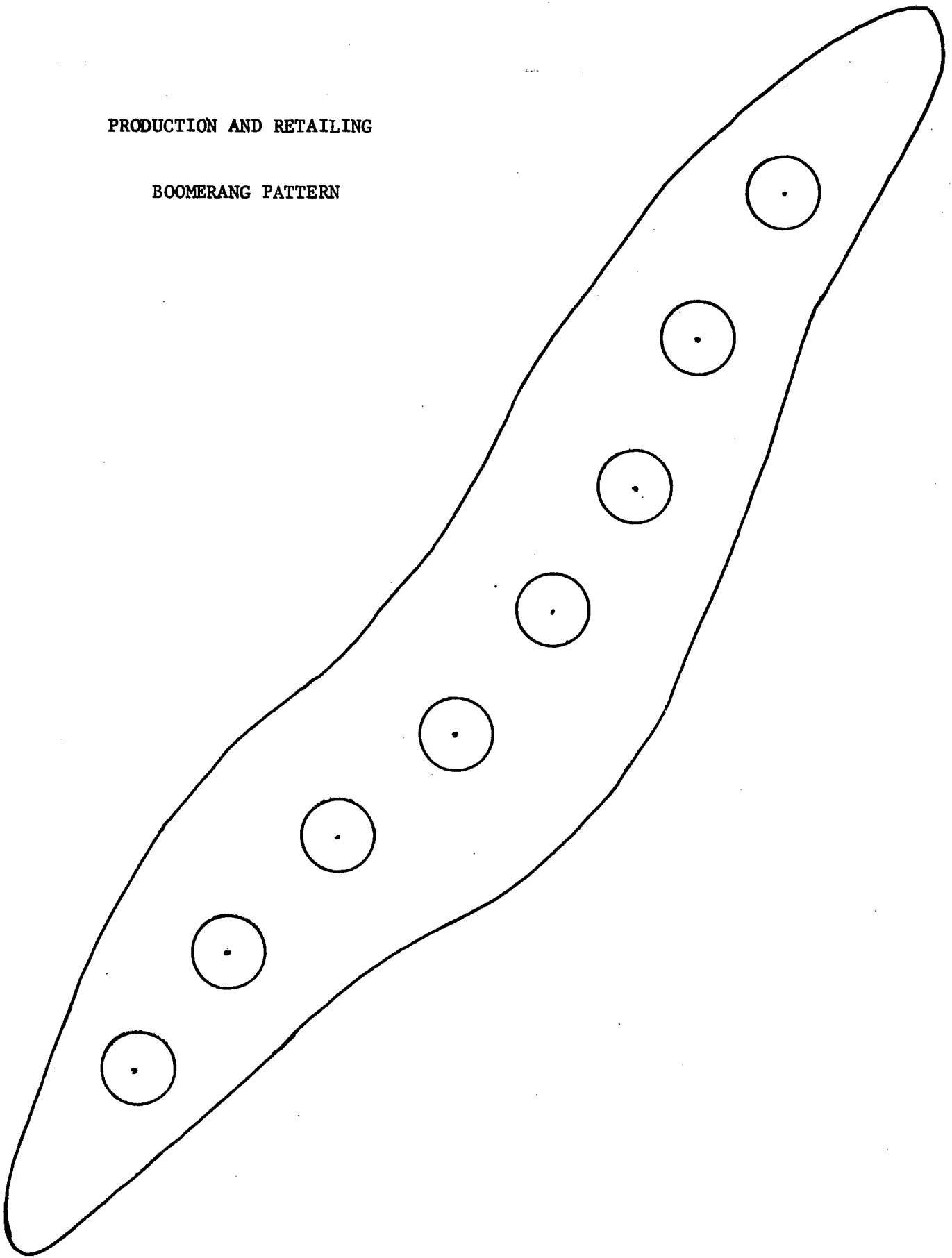


To set up this puzzle, put the marbles in the cups, all of one color on one side and all of the other color on the other side, leaving the center cup vacant.

The purpose of the puzzle is to move or jump the marbles to the opposite sides, one at a time, without moving any piece backwards. Moving or jumping is similar to checkers.

PRODUCTION AND RETAILING

BOOMERANG PATTERN



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ASSEMBLY LINE - MAKING GEOBOARDS GAME

II. ACTIVITY FORMAT:

A. Tools and Materials

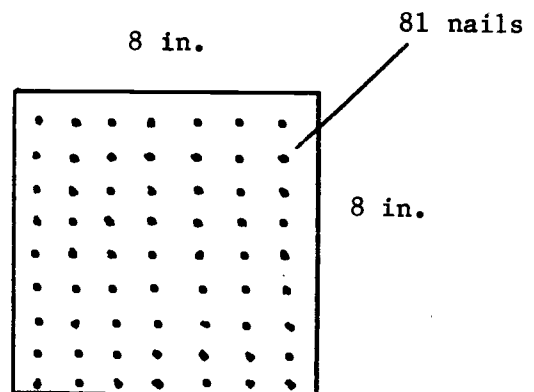
hammers	3/4" 17 finishing nails
saws	4 cans spray paint
C clamps	3/4" graph paper
sanding blocks	masking tape
plywood	newspapers (to cover tables for painting)

B. Students involved

2 - carpenters	2 - remove papers
5 - sanders	2 - painters
2 - cutters	4 - inspectors
2 - tapers	1 - foreman
10 - hammerers	

C. Procedures for this activity (with helpful hints)

1. Cut pieces of plywood into 8 in. square
2. Sand pieces of wood
3. Cut graph paper to fit square of wood
4. Tape graph paper to wood square
5. Hammer nails at intersection of points on graph paper (81 per 8 in. sq.)
6. Remove graph paper
7. Spray paint each geoboard



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

TIC - TAC - TOE GAME

II. ACTIVITY FORMAT:

A. Tools and Materials

saw	sandpaper
ruler	marbles
power drill	1x6 #2 W.P.
special drills	

B. Human Aides and Resources

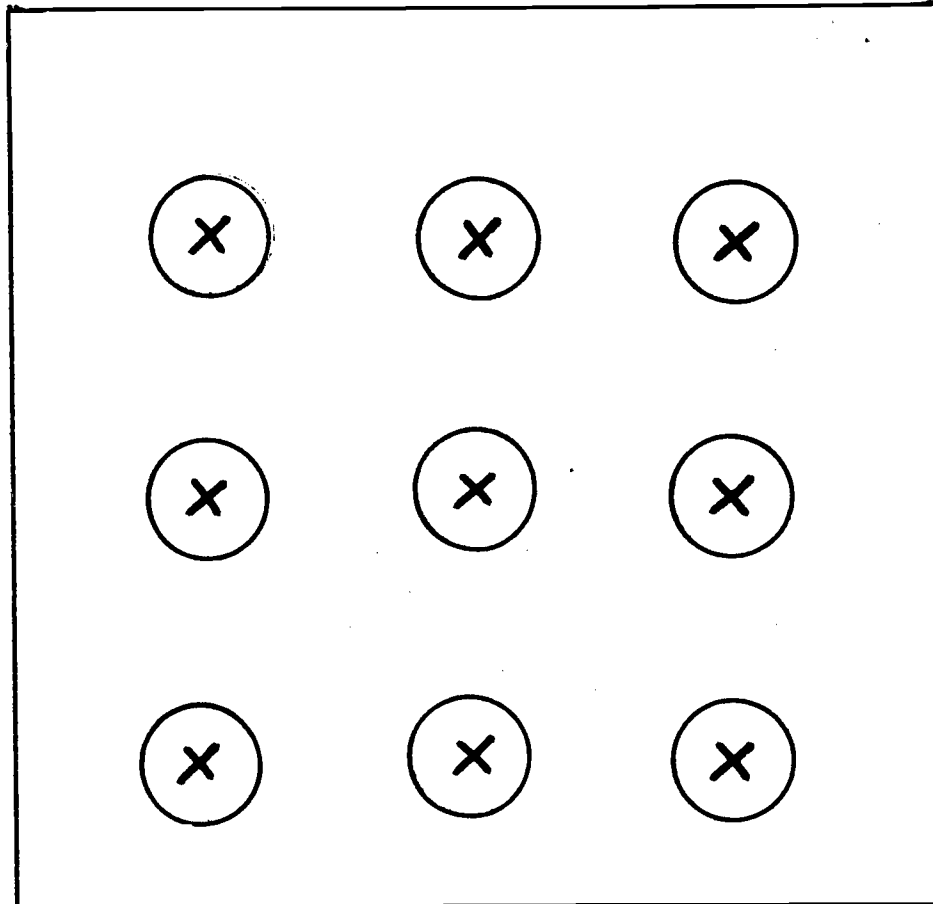
Parents

C. Procedures for this activity (with helpful hints)

Draw a square. Cut board with saw. Trace holes with a pattern. Drill holes. Sand and finish.

238 / 239

TIC - TAC - TOE PATTERN



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

PERSONNEL INTERVIEWING BY SPEECH STUDENTS

II. ACTIVITY FORMAT:

A. Tools and Materials

career reference materials
typewriter
ditto masters
mimeograph machine
tape recorder

B. Human Aides and Resources

Speech therapist
Teacher's Aide
Secretary (verbal instructions)

C. Procedures for this activity (with helpful hints)

1. Researched information on job requirements. Worked up job descriptions
2. Decided on information needed for decisions
3. Prepared application blank and interview form (sample attached)
4. After instruction by secretary and teacher's aide, typed masters and ran off application blanks and interview forms
5. Discussed interview techniques and ethics
6. Practiced with tape recorder
7. Explained application and interview procedures to class
8. Interviewed, discussed results and made job recommendations
9. Formed cadre to continue interviewing as replacements are needed
10. Reviewed tapes of interviews to analyze speech performance

INTERVIEW FORM

1. Do you like math?
2. Are you well organized?
3. Are you good at math?
4. Could you handle money without making mistakes?
5. Are you interested in medicine?
6. Do you get upset when you see blood?
7. Do you feel sorry for people when they are hurt or in trouble?
8. What kind of work do you like best?
9. What are your hobbies?
10. What qualifications do you think an executive should have?

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING BAG HOLDER

II. ACTIVITY FORMAT:

A. Tools and Materials

saw (crosscut)	brush - 2 inch varnish
miter box	sandpaper
drill - 2 bit - counter sink	1x2 hardwood
wire on bolt cutter	steel wire (clothesline)
jigs	varnish
	screws - 2 for mounting

B. Students involved:

2 for step 1
1 for step 2
1 for step 3
1 for step 4
2 for step 5
3 for step 6
3 for step 7
4 for step 8

C. Procedures for this activity (with helpful hints)

1. Cut wood to size (6" lengths)
2. Drill holes for wire (according to size wire)
3. Drill holes for mounting
4. Counter sink mounting - holes (could be combined)
5. Cut wire to length 1 @ 30", 1 @ 24", 1 @ 16". Straighten
6. Bend wire over pegs or forms
7. Insert wires in holes
8. Sand
9. Varnish

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MARKETING BAG HOLDER AT FUN FEST OR WHAT HAVE YOU

II. ACTIVITY FORMAT:

A. Tools and Materials

pencils
rulers
color (paint, crayons, magic marker, glue, etc.)
colored paper
poster board
brushes
scissors
chalk

B. Students involved:

No more than two to a poster from copy to finished product

C. Procedures for this activity (with helpful hints)

1. Write copy for poster
2. Layout of poster (block in main elements)
3. Complete drawing
4. Add color or: cut elements from paper
paste on glue or poster board

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING FILE BOXES

II. ACTIVITY FORMAT:

A. Tools and Materials

boxes
cards
Exacto knives
tape
glue

B. Human Aides and Resources

School secretary
Parents
Custodian

C. Procedures for this activity (with helpful hints)

1. Each was to make or find something to use as a box for cards
2. Cut down kleenex boxes, school boxes, etc.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

PAYDAY

II. ACTIVITY FORMAT:

A. Tools and Materials

mimeo machine (duplicator)
pencils
green paper for money
posters for payroll and deduction counters
master (duplicator) for money design
bank (safe, box, etc.)
payroll time voucher

B. Students involved:

1 collector and 1 secretary for each counter involved on
payday (wages, insurance, welfare, taxes, personal & group
deductions)

C. Procedures for this activity (with helpful hints)

1. Determine days worked
2. Bi-weekly pay distributed
3. Deductions taken out
4. Money kept or banked
5. Classroom materials and bills (electric, heat) paid for

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

PAYDAY

II. ACTIVITY FORMAT:

A. Tools and Materials

fake money
signs for payroll personnel
desks for payroll personnel

B. Human Aides and Resources

Royal Oak Payroll personnel

C. Procedures for this activity (with helpful hints)

Invite guest speakers to the classroom to discuss payday procedures, taxes, insurance and other deductions and why they are paid. Brainstorm with the class about amount of wages, bonuses and deductions they would like to employ in their payday. Through interviewing, employ certain classmates as payday personnel. Set up classroom in feasible manner, denoting each station as "wages," "insurance," "deductions," "taxes," etc. Have students compute their gross wages, personnel employees compute deductions from pay, and banker handle change. Proceed to pay out and collect wages and deductions. Use net pay in classroom later to purchase classroom materials, etc.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BAKING PIZZA (for about 8 people)

II. ACTIVITY FORMAT:

A. Tools and Materials

1 envelope dry yeast	1-1/2 c. drained canned tomatoes
2 T. warm water	1/2 c. chopped onions
1 c. boiling water	1/2 t. basil
1 T. shortening	1/2 t. oregano
1 t. salt	pepper
1/2 t. sugar	1/2 c. spaghetti sauce
3 c. presifted flour	1/2 c. sliced pepperoni
8 oz. shredded pizza cheese	

B. Procedures for this activity (with helpful hints)

1. Preheat oven to 425 degrees F. Grease pizza pan.
2. Soften yeast in warm water in small bowl. Let stand 5 minutes. Stir till dissolved.
3. Pour boiling water over shortening in bowl. Add salt and sugar. Stir until smooth. Cool to lukewarm. Stir in yeast.
4. Gradually add flour beating well to soft dough. Knead on lightly floured board until smooth. Stretch and pull to fit pan. Let rise in warm place for 15 minutes. Sprinkle on cheese. Top with tomatoes. Sprinkle with onions, basil, oregano and pepper. Spread on spaghetti sauce and pepperoni.
5. Bake in preheated oven for 25 minutes or until crust is golden brown. Cut into wedges.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING RULERS

II. ACTIVITY FORMAT:

A. Tools and Materials

saw - straight edge	sandpaper
standard unit of measure	paint
miter box	varnish
drill	paint brushes
wood	magic marker - fine line

B. Students involved:

9 in each line - 3 lines

C. Procedures for this activity (with helpful hints)

1. Make pattern (sample ruler)
2. Cut wood to length (1 ft. 36 in. etc.)
3. Using template (pattern) encircle marks on raw wood
4. Drill 1/8" hole at 1" mark in center of ruler
5. Lightly sand wood
6. Place numbers by appropriate marks, use fine line magic marker
7. Varnish and hang to dry

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

SALES TALKS

II. ACTIVITY FORMAT:

A. Tools and Materials

candy bars we sold

B. Human Aides and Resources

Salesman

C. Procedures for this activity (with helpful hints)

1. Points salesman brought out:

- a) Always apologize for bothering them first
- b) Briefly state your purpose
- c) Would you like to buy two for a \$1.00 or one for 50 cents?
- d) Be sure to SMILE

2. Role playing with several students developing their sales talks

3. He bought from each student that tried - told them to always "know your product" - so we sampled the candy - they were more enthusiastic

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

SALES TERRITORY AND SALESMAN

II. ACTIVITY FORMAT:

A. Tools and Materials

city maps that show house numbers
map tacks (3 colors)
individual territory log

B. Procedures for this activity (with helpful hints)

1. Three territories were set up
2. Each student lives in their territory
3. Each given own sales log (see attached sheet A)
4. Salesmen each put their own tacks on territory map
 - a) Red sales
 - b) White order
 - c) Black - no sales
5. Took future orders
6. Projected future sales to determine ordering second

SALES TERRITORY SHEET

EMERSON ENTERPRISES

Candy Division

District _____ Manager _____

Sales Representative _____

Territory (street) _____

House Numbers	Date	Sales (\$)	No Contact	Order
*Each was listed before given out				
TOTAL		252		

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

DEVELOP SALES VOCABULARY

II. ACTIVITY FORMAT:

A. Tools and Materials

None

B. Human Aides and Resources

None

C. Procedures for this activity (with helpful hints)

The following vocabulary was developed first through group discussion:

Enterprise
Sales log
Territories
Sales representatives
District Managers
Persuasive
Sales projection
Accounts
Graphs
Sales talks

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

SILK SCREENING OF PENNANTS, BANNERS AND CUSHIONS

II. ACTIVITY FORMAT:

A. Tools and Materials

wrapping paper	scissors
1 x 2" wood	yardsticks
nails	brayers
saws, hammers	ink
hinges	material - felt
T-square	broadcloth
thread, needles	sewing machine
foam	screwdrivers
organdy	

B. Human Aides and Resources

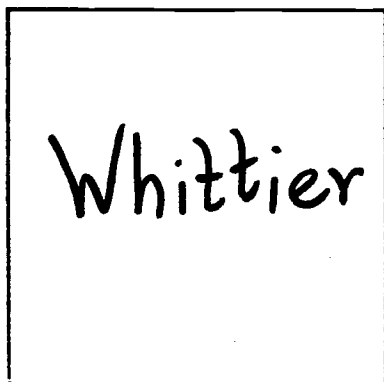
College students
Parents
Art teacher
Professional artist

C. Procedures for this activity (with helpful hints)

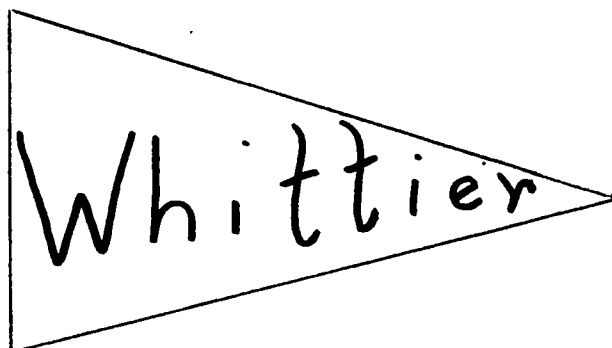
1. Each child submit design, analysis and selection of design.
2. Make frames stretch and attach organdy (this does not work for large screens).
3. Hinge screens to table.
4. Measure and cut fabric, print.
5. Sew cushions together, insert foam, hand stitch fourth edge. Attach streamers to pennants and banners.
6. Package and deliver finished product.
7. Collect money.

PRODUCTION AND RETAILING

SILK SCREENING PATTERNS

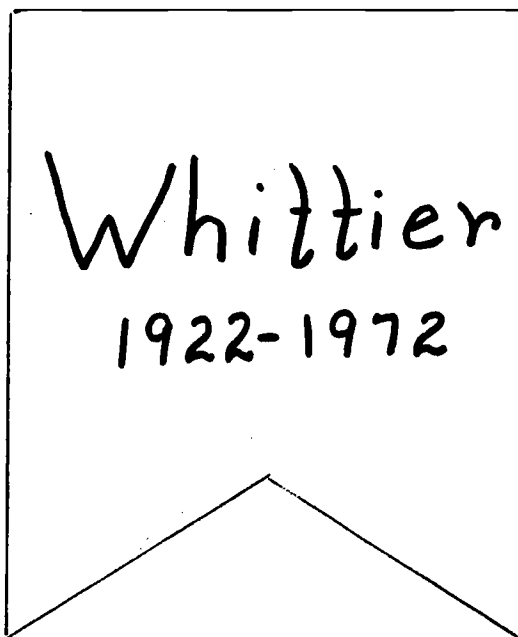


CUSHION 12" 12"



PENNANT

12" 28"



BANNER

18" 24"

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING A SLIDE-TAPE PRESENTATION FOR PARENTS

II. ACTIVITY FORMAT:

A. Tools and Materials

tape recorder
written material
slides
projector
screen

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. Have students view all slides taken from trip to W. T. Grant.
2. Let them each pick a designated number of slides to explain, through writing.
3. Write description of slide.
4. Practice reading description, slowly and distinctly.
5. Tape students' descriptions to go along with slides.
6. Time slides and tape to go together.
7. Present program to parents.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

WORK-STUDY PROGRAM AT W. T. GRANT

II. ACTIVITY FORMAT:

A. Tools and Materials

store
manual from W. T. Grant

B. Human Aides and Resources

Manager of W. T. Grant
Personnel at W. T. Grant
Learning Resource Teacher

C. Procedures for this activity (with helpful hints)

1. Study background information about store including jobs involved and services performed.
2. Invite manager over to the classroom to talk with students about store and jobs.
3. Have students choose what job they would like to have at the store.
4. Make name tags for each student.
5. Go to store, work at designated jobs, with actual worker from store, from 9:00 a.m. to 12:30 p.m.
6. Discuss, once back at school, just what each student did; pros and cons of each job.

UNIT TITLE: UNICEF

CONCEPTS	BEHAVIORAL OBJECTIVES
<u>Language Arts</u>	As a result of this unit, each child will be able to:
Sales vocabulary	Identify and use sales terms
Salesmanship	Develop a self-confidence to sell door to door and communicate effectively with the public
<u>Social Science</u>	
Supply and demand	Estimate the number of candy bars territory will buy
Student organization	Organize a territory and elect a good manager

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Class discussion
Listen to salesman
Role play with him as the buyer

Keeping own territory log as to sales,
orders and project future sales

One minute speech as to why a person would
be a good manager

UNIT TITLE: UNICEF (Continued)

CONCEPTS

BEHAVIORAL OBJECTIVES

Math

Bookkeeping - keeping money and orders

As a result of this unit, each child will be able to:

Devise a method to record sales, orders and money

Classify territorial earnings showing money collected, orders, projected sales

Careers

People and their job roles:

Distribution-sales

Distribute and sell products to clients

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Each salesman was provided with own territory log
Managers must keep daily records of their salesmen

Role play product sales and distribution

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ADVERTISING FOR UNICEF

II. ACTIVITY FORMAT:

A. Tools and Materials

construction paper
large white butcher paper
crayons
magic markers

B. Human Aides and Resources

Material supplied by UNICEF
Tribune reporter

C. Procedures for this activity (with helpful hints)

1. Small posters for halls telling what labels will buy for UNICEF
2. Large (floor to ceiling) thermometers for each type of label (swifts, welch, clark gum, etc.) showing how much has been brought in each day (keep up daily).
3. Lunch was an added activity so we quickly made posters for that.
4. Writeup and picture of lunch in Tribune was excellent.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

COLLECTING LABELS FROM COMMERCIAL PRODUCTS FOR UNICEF FUND

II. ACTIVITY FORMAT:

A. Tools and Materials

boxes for each product to put labels in

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. Each student was a member of a label group.
2. As labels were brought in, they were counted and put in individual boxes.
3. Thermometers in hall, indicating progress, were kept up daily.
4. End of project, all labels were boxes, tallied and sent to UNICEF.

LABELS USED:

1. Clark Gum
2. Royal Pudding
3. Swift Premium Franks
4. Welch's Jelly
5. Willy Wonka Candies
6. Cap't Crunch
7. Kool-Aid

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

FORMING A COMPANY AND SETTING UP SIMPLE BOOKKEEPING ACCOUNTS
FOR UNICEF LUNCH

II. ACTIVITY FORMAT:

A. Tools and Materials

large notebook
notebook paper
rulers

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. Set up UNICEF Lunch Co. with officers
 - a) president
 - b) secretary
 - c) treasurer
2. Subsidiary Companies
 - a) Hot Dog Co.
 - b) Sandwich Co.
 - c) Chips Co.
 - d) Milk Co.
 - e) Kool-Aid Co.
 - f) Jello Co.
 - g) Pudding Co.
 - h) Apple Co.
 - i) Candy Co.

(these companies represent what was served at lunch)
3. Simple accounts were set up. Money for each company was computed by the number of orders, i.e., 200 hot dogs at 15¢ equals \$30.00. All expenses were deducted and profits were sent to UNICEF.
4. UNICEF Lunch Co. wrote all checks for each company and kept master books.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

SHOPPING FOR UNICEF LUNCH

II. ACTIVITY FORMAT:

A. Tools and Materials

shopping list
checks to pay for food
permission slip to go at any time during school hours

B. Human Aides and Resources

Teacher to drive

C. Procedures for this activity (with helpful hints)

1. Each company met and compiled their shopping lists.
2. Teacher took each company on one day to shop.
3. President or treasurer of Lunch Co. had to go to write check each time.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

SELECTING MENU AND TAKING ORDERS FOR UNICEF LUNCH

II. ACTIVITY FORMAT:

A. Tools and Materials

stencils
3 colors of ditto paper

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. Selecting well balanced menu, fair prices for each item, type up stencil and run off on 3 colors (each color represented each of 3 days lunch was served).
2. Collecting orders and money. Each was checked to see if order and money was correct.
3. Compile individual orders for each company for each day.

266

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

COOKING UNICEF LUNCH

II. ACTIVITY FORMAT:

A. Tools and Materials

school kitchen
daily menu amounts to prepare

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. Set up on wall, sheets with amounts needed, i.e., 40 hot dogs, 10 sandwiches, 15 chips.
2. Jello group was always first because of time needed to set.
3. Pudding group made instant pudding.
4. Sandwich Co. made peanut butter and jelly sandwiches.
5. Make up 3 kinds of Kool-Aid.
6. Apples were washed.
7. Chips were put in individual bags.
8. Hot dogs were cooked just before lunch time.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

PRODUCTION LINE FOR UNICEF LUNCH

II. ACTIVITY FORMAT:

A. Tools and Materials

long tables (5) covered with white butcher paper in
gym by kitchen
lunch tables in gym
waste paper baskets
trays from Kimball

B. Human Aides and Resources

Extra adults to supervise hot dog cooking

C. Procedures for this activity (with helpful hints)

1. Tables set up.
2. Chart for each person's job for the day. (For example: one person would serve one day, act as waitress second day, and third clean-up.)
3. Set up food in order of menu backwards (starting with desserts and ending with hot dogs to keep them hot!!!)
4. Classes were given back their order and brought to line.
5. Order and tray followed down line and food put on.
6. End of line, order was checked and waitress took tray to seat.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

CLEAN-UP FOR UNICEF LUNCH

II. ACTIVITY FORMAT:

A. Tools and Materials

sponges
pails of water
mop

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. As this was to be like a restaurant, students just left their tables when finished.
2. Food was put away first.
3. Tables were washed and put away.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

TRICK OR TREAT FOR UNICEF

II. ACTIVITY FORMAT:

A. Tools and Materials

UNICEF boxes
money rolls from bank

B. Human Aides and Resources

Teacher

C. Procedures for this activity (with helpful hints)

1. A tentative order was taken for each room as to the number of boxes needed.
2. Obtained boxes from local supplier (Bloomfield Hills Volunteer).
3. Boxes handed out on Halloween (lists with names were kept for each room)
4. Collection of boxes the next few days
5. Counting and rolling up money for banking

III. RESULTS OF THIS ACTIVITY

More money was collected this year than ever before and the class felt it was because of the successful lunch.

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: SCIENTIFIC REASONING

GRADE LEVEL: 5-6

GENERAL OVERVIEW: Guiding students to hypothesize about the outcome of science experiments and to be able to check and revise their ideas in terms of results.

TEACHING/LEARNING RESOURCES:

1. Reference Materials:

Show as introduction to unit:

Film - Study Skills - 11 minutes

Film - Simple Demonstrations with Water - 14 minutes

UNIT TITLE: SCIENTIFIC REASONING

CONCEPTS

BEHAVIORAL OBJECTIVES

Science

Liquids

As a result of this unit, each child will be able to:

Be able to follow directions
Organize their work
Follow a planned procedure
Write observations
List comparisons
Collect materials
Draw sketches
Discuss causes
Discuss results

Language Arts

Organization

Be able to organize into groups, to set up experiments, do each experiment and write up the worksheet

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Experiments with liquids

Experiments with liquids

UNIT TITLE: SCIENTIFIC REASONING (continued)

CONCEPTS

BEHAVIORAL OBJECTIVES

Careers

People and their job roles:

Managing

Research and
Evaluation

As a result of this unit, each child will be able to:

Deduce how the concept of management (planning, organizing and controlling) is an important part of the process of scientific reasoning

List the 6 steps to researching a problem

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Experiments with liquids

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

EXPERIMENTS WITH LIQUIDS

II. ACTIVITY FORMAT:

See attached sheet for experiments to follow this procedure:

Procedures for this activity (with helpful hints)

1. Follow each experiment with this procedure
 - a. State objective
 - b. Hypothesize results
 - c. Plan procedure
 - d. Plan record keeping
 - e. Prepare to make drawings
 - f. Assemble all materials
 - g. Perform experiment
 - h. Discuss observations
 - i. Discuss several possible causes
 - j. Repeat experiment if necessary
 - k. Discuss modification of experiment
 - l. Discuss results
 - m. Discuss relationship to life situations

III. RESULTS OF THIS ACTIVITY (AFTER IMPLEMENTATION)

This is an excellent opportunity to become acquainted with your class in the fall. It is suggested you have students work in pairs or groups of three to five.

References:

Kitchen Physics developed by the Elementary Science Study and published by Webster Division, McGraw Hill Book Company.

Drops and Heaping

Trays	Paper plates
Plastic medicine cups	Refuse bucket
Bucket of water	Soapy water solution
Medicine droppers	Cooking oil w/dropper
Waxed paper	Alcohol
Plastic wrap	Paper towels
Aluminum foil	Newspapers
Paint dishes	Drawing paper
Small pieces of wood and cork	

- I.
 1. What does a drop of liquid look like?
Place a few drops of water on wax paper and observe.
 2. How small a drop can you make? How does a tiny drop differ in appearance from a "blob" made of several regular-size drops?
 3. Can two small drops be made to form a single larger drop on the wax paper?
 4. Do water drops leave "tracks" as they move across the wax paper?
 5. How does newsprint look when observed through a drop of water resting on wax paper? On plastic wrap?
 6. Do water drops on wax paper differ from drops on plastic, or aluminum foil, or paper toweling?
 7. Do drops of alcohol or oil or soapy water differ from drops of tap water when placed on wax paper? Draw pictures of each; be sure to label your pictures.
 8. How does newsprint look when observed through a drop of soapy water? Compare the soapy water drop with the drop of plain water.

- II. How much water can you put in a paint dish?
Fill a plastic cup with water without letting it overflow. Place the dry cup on a paper towel so that you will notice if it overflows later. HOW MANY DROPS OF WATER DO YOU THINK YOU CAN ADD TO THE WATER IN THE CUP BEFORE IT WILL OVERFLOW? Begin adding drops of water to the cup with a medicine dropper. Count the drops that you add until the cup overflows. Observe the water surface as you add the drops. DRAW A PICTURE OF THE CUP WITH A LOT OF WATER IN IT.

- III.
 1. Can you get an oil drop to stay on top of a water pool? Can you get a water drop to stay on top of an oil pool?

2. If an oil drop, water drop, and soapy-water drop are rolled down a slanted surface (paper plate) which wins the race? What happens if you run the race a second time using the same tracks?
3. What happens to a small sliver of aluminum foil that has been placed on the top of the "heaped-up" water in a plastic cup? Try a small drop of oil the same way.
4. What happens if you place a small piece of cork or wood on top of the heaped-up water? Place a piece of wood near the edge of the water and observe.

Tugs-of-War and the Skin-Like-Effect

Lightweight thread	8 or 9 inch aluminum pie plate
Liquid soap	Plastic cups
Medicine droppers	Food coloring
Soap solutions	Talcum powder
Shallow dish 6" in diam. or more	Cooking oil
Flat tray	Paper clips

- IV. Soap in a floating loop of thread.
 Make a loop out of a piece of lightweight thread about a foot long. Float the loop on the surface of water in a shallow paint dish. Be sure the dish is clean and free of soap contamination. Carefully place a single drop of soap solution inside the loop on the water surface. **NOTICE THE EFFECT ON THE LOOP OF THREAD.** If at first you do not succeed with this one, try, try again. It is worth the trouble.

REPEAT WITH VARIATIONS:

1. What would happen if the soap solution drop was added to the water outside the loop. Try this with a fresh dish of water.
2. Would a drop of plain water have the same effect as the drop of soap solution?
3. After you have added a drop of soap solution to the water, is there any additional effect from adding other drops of soap solution?

- V. Alcohol versus water.
 Place a thin layer of colored water on a shallow paint dish. Spread the layer of colored water as thinly as possible across the dish. **WHAT WILL HAPPEN WHEN A DROP OF ALCOHOL IS ADDED TO THE WATER?** Place the alcohol on the water and observe the effect.

- VI. The talcum powder Tug-of-War.
 Sprinkle talcum powder on the surface of water in a pie plate. When the water is motionless, **PLACE A SINGLE DROP OF SOAP SOLUTION NEAR THE CENTER OF THE POWDERED WATER SURFACE.**

REPEAT WITH VARIATIONS

1. Start over with fresh water and talcum powder. Place single drop of plain water near the center and observe. Compare this effect with that of the soap-water drop.
2. Place a drop of soap water near the edge of the dish.
3. Try the same thing using alcohol instead of soap-water.

VII.

A Delayed Tug-of-War

Estimate a 1/2 teaspoon of cooking oil and place it near the center of a shallow dish of colored water. WHAT DO YOU THINK WILL HAPPEN IF YOU PLACE A DROP OF SOAP ON TOP OF THE OIL?...IF YOU THEN TOUCH THE WATER NEAR ONE SIDE OF THE OIL WITH A DROP OF SOAP SOLUTION?

Repeat the process using alcohol instead of soap solution.

Wait for the effect! Remember, this is a delayed tug-of-war.

VIII.

Floating on "Skin"

Partially fill a container with water. A large surface (pie plate) with shallow water is best. Be sure the water is free of soap. TRY TO FLOAT A PAPER CLIP ON THE WATER SURFACE. Practice until you are able to do this. You may want to fashion a tool to help you do this. Use a second paper clip to make this tool.

When you have a paper clip floating, OBSERVE THE WATER SURFACE NEAR THE PAPER CLIP. Add a drop of plain water to the surface near the clip to see if it has any effect. Add a drop of soap solution in the same way. Note the effect of soap.

Float a toothpick on water. See if there is any effect on it when soap is added to the water.

The Rise of Water in Blotter Strips

(12-16" blotter strips
1/2", 1", 2", 1 1/2" wide
Shallow dish for ends of blotter
Masking tape
Shallow dish for ends of strips
Support for blotter strips

IX.

The Rise of Water in Blotter Strips

Arrange long (12 to 18 inches) blotter strips of various widths (1/2 in., 1 in., 2 in., etc.) in an upright position so that the lower ends may be submerged in a tray of colored water. Observe the rise of liquid in the blotter strips over a 24-hour period.

Repeat the above activity, but this time cover the new blotter strips with plastic-wrap so that water cannot evaporate from the blotter strips. Observe the climbing water over a 24-hour period.

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: SEASONAL PROJECTS

GRADE LEVEL: 5-6

GENERAL OVERVIEW: In this Seasonal Projects section, the following integrated teaching units have been combined and/or presented as a tentative guide for ideas in, application to or relevance to the upper elementary classroom.

TEACHING/LEARNING RESOURCES:

1. Reference Materials:

Books:

McCall's Book of Paper, Wood and Paint Crafts

Magazines:

Instructor's Magazine - December, 1972

McCall's Magazine - December, 1972

Films:

Tools and Their Uses - Instructional Materials Center

2. Field Trips:

Bavarian Village - Frankenmuth, Michigan

Birmingham Lumber

Fabric Center

Frank's Trims

J. C. Penney

John R. Lumber

Lawson Lumber

3. Human Resources:

Macomb Community College students

4. Activities Listed:

Brainstorming on format of unit activities (what to do, etc.)

Construction of Keyboards

Cookie-type decorations

Ball ornaments

4. Activities Listed: (continued)

Felt decorations

Paint by number

Popcorn and cranberry strings

Macaroni decorations

Make a tie

Make an apron

Do creative stitchery

Make a picture frame

Design a picture

Sale of decorations

Role playing:

Purchasing agent, semi-skilled worker constructing decorations

Banker - cost accountant - paying bills for materials, save profit for contribution to school

Quality control - save number stubs, keep track of which children selling how many decorations

Writing reports on history of Christmas decorations

Construct charts on the history of tools

Discussions on the history of Christmas decorations

UNIT TITLE: SEASONAL PROJECTS

CONCEPTS

BEHAVIORAL OBJECTIVES

Social Sciences

Economics

As a result of this unit, each child will be able to:

Compute profit and loss in selling
Devise a means to raise money as a contribution to school library's purchase of carpeting

History

Recognize and identify old and new Christmas decorations
Relate the history of old Christmas ornaments and decorations

Sociology

Recognize cooperation as a desirable quality in production

Science

Heat

Discover the best method of cooking ingredients in recipe

Plants

Identify organic raw materials used in creative stitchery (popcorn, macaroni, etc.)

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Selling ties, aprons, creative stitchery,
picture frames

Write a report on or discuss the history
of Christmas decorations

Construct a chart illustrating early
man's tools
Write a report on early man's tools

Baking pizza, cookies

Creative stitchery

UNIT TITLE: SEASONAL PROJECTS (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Math</u></p> <p>Measurement</p> <p>Quantity</p> <p>Time</p> <p>Distance</p> <p>Money</p>	<p>As a result of this unit, each child will be able to:</p> <p>Measure ingredients in recipes Measure length and width of wood and cloth with a ruler Space hooks and pegs on finished keyboards</p> <p>Compute amount of materials needed for production of Christmas ornaments</p> <p>Compute time in obtaining materials for unit</p> <p>Compute distance involved in obtaining materials for unit</p> <p>Compute cost of materials to be used in unit</p>
<p><u>Language Arts</u></p> <p>Writing</p> <p>Research</p> <p>Speaking</p> <p>Sequence</p>	<p>Write a thank-you letter to guest speakers - answer questions on a worksheet for making picture frames - identify old and new Christmas decorations</p> <p>Discover information on the history of tools and Christmas decorations</p> <p>Relate the relevance of a field trip to the unit under study</p> <p>Identify products chronologically</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Baking cookies, pizza
Making picture frames and keyboards
Making keyboards

Plan for making Christmas ornaments and decorations

Plan for making ties, aprons, creative stitchery, picture frames

Plan for making ties, aprons, creative stitchery, picture frames

Making picture frames

Write a report on old and new Christmas decorations

Write a report on the history of tools or Christmas decorations

UNIT TITLE: SEASONAL PROJECTS (continued)

CONCEPTS	BEHAVIORAL OBJECTIVES
<p><u>Art</u></p> <p>Designing</p> <p>Decorating</p>	<p>As a result of this unit, each child will be able to:</p> <p>Devise a design for unit products</p> <p>Devise a decoration for unit products</p>
<p><u>Careers</u></p> <p>People and their job roles:</p> <p>Research</p> <p>Purchasing</p> <p>Producing</p>	<p>Prepare steps for producing, changing raw materials to finished product</p> <p>Estimate the cost of needed materials for unit project</p> <p>Differentiate skilled, semi-skilled and unskilled jobs in unit activity</p> <p>Manipulate tools to produce products</p> <p>Construct a product by combing materials</p> <p>Identify raw materials used in producing a unit product</p> <p>Recognize the conditions needed to store and preserve raw materials needed for unit activities</p> <p>Identify personal feeling of accomplishment upon completion of product</p> <p>Differentiate personal feelings of working individually and on assembly line</p>

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Making Christmas decorations
Baking cookies
Making felt decorations
Making popcorn and cranberry strings
Making macaroni decorations
Doing creative stitchery
Designing decorations

Brainstorming

Role playing: purchasing agent

Constructing keyboards
Baking pizza, cookies
Making Christmas decorations, ties,
aprons, popcorn and cranberry strings,
felt decorations, macaroni decorations
Do creative stitchery
Paint by number
Making picture frames

UNIT TITLE: SEASONAL PROJECTS (continued)

CONCEPTS

BEHAVIORAL OBJECTIVES

Careers (continued)

Managing

Retailing

As a result of this unit, each child will be able to:

Manipulate workers and materials in an efficient manner

Predict cost of packaging materials
Suggest places and prices for selling finished products

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Role playing: quality control manager,
foreman

Selling unit products

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

COOKIE TYPE DECORATIONS

II. ACTIVITY FORMAT:

A. Tools and Materials

4 cups flour	Acrylic spray
1 cup salt	Plastic wrap
1 7/8 cup water	Paint
Ornament hooks	Mixing bowls
Rolling pins	Spoons
Cookie cutters	Cookie sheets
Extra flour for flouring boards and hands	Measuring cups

B. Procedures for this activity (with helpful hints)

Mix together: flour, salt, water. (Note: for smaller portions, use these proportions - 1/2 cup flour, 1/8 cup salt, 1/4 cup water.) Finish mixing with your hands if necessary. Knead dough on a generously floured board until it's very smooth and has a good consistency with which to work (this will become easier to determine the more you work with the dough; it is easier to knead flour into dough that is too moist than it is to knead water into dough that is too dry). Be sure to keep unused portions covered with plastic wrap. If dough becomes too sticky before you are through with it, knead more flour into it. **Put ornament hooks in before baking. Roll out, cut figures with cookie cutters. Place figures on cookie sheet and bake at oven set at 275 - 300 degrees (had mothers take them home to bake). Bake about 3 hours. Never leave figures unbaked for more than 2 hours. Cool. Paint. Spray.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

CHRISTMAS DECORATIONS

II. ACTIVITY FORMAT:

A. Tools and Materials

Rulers	Paper cutter
Scissors	Dremel saw or coping saw
Stapler	

Oak tag or cardboard rolls for rings, pencil for marking measurements, colored aluminum foil for ring covers. Alligator or plastic bags to bag finished product. Construction paper lid for decoration package.

B. Procedures for this activity (with helpful hints)

1. a. Cut with paper cutter or other cutting instrument 1 1/2" roll from cardboard rolls or
b. Measure and cut 3 1/4" by 6" rectangles from oak tag, staple into 3 1/4" by 5 1/2" circles.
2. Cover rolls with aluminum foil (inside and out), staple 12 rolls into triangle of 10 with base of 2 rolls, decorate inside of or outside of rolls with miniature decorations or cotton or construction paper.
3. Package
4. Staple shut with construction paper top
5. Label

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

CREATIVE STITCHERY

II. ACTIVITY FORMAT:

A. Tools and Materials

Burlap
Yarn
Needles

B. Procedures for this activity (with helpful hints)

1. With help of art teacher, children designed a picture on paper.
2. They cut out their picture and traced it with pencil on burlap.
3. Embroider with various stitches around picture. Use different colored yarns.
*Mothers taught special stitches to the children:
French knot, running stitch, chain stitch, etc.
4. Hem edges on machine.
5. Cut dowels of wood and insert at top to hang up.
6. Add braided yarn tie at top.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

TIE MAKING

II. ACTIVITY FORMAT:

A. Tools and Materials

Tie making kit with all materials in it
Sewing machines
Irons
Ironing Boards

B. Procedures for this activity (with helpful hints)

Follow the instructions (read and interpreted by the mother assistant), that are included in the tie kit. These kits are available at most fabric stores.

Iron the finished product. Fold and wrap.

(Kits purchased at Gwynn's Fabric Shop, Merrill Rd.,
Birmingham, Michigan)

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MAKING AN APRON

II. ACTIVITY FORMAT:

A. Tools and Materials

1 yard of cloth	Sewing machine
Needles	Thread
Iron	Ironing board

B. Procedures for this activity (with helpful hints)

1. Cut large pattern out of newspaper
2. Have children pin pattern on cloth and cut it out
3. Use machine to turn under hem and to add tie at the top
4. Add pockets if desired
5. Iron the apron
6. Fold and wrap

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

CONSTRUCTION OF KEYBOARDS (OR MITTEN TREES)
(See following sheet)

II. ACTIVITY FORMAT:

A. Tools and Materials

Wood stain	Miter box and saw
Clip clothespins	Brace and bit
Cup hooks	Hammers
White glue	Nails
Wood putty	9 paint brushes
Turpentine	Cardboard box for "spray paint booth"
Soft rags	Fine and medium sandpaper
Dowel rod	Colored enamel
Black spray paint	
Sheet of 4' x 8' plywood	

B. Human Aides and Resources

Student - Macomb Community College

C. Procedures for this activity (with helpful hints)

Have plywood pre-cut to 8" x 10" size
Use a miter box to cut pegs to correct length
Apply stain with wide brush and wipe off with soft cloth
Have plenty of turpentine!

PEG KEY BOARDS

2 brushes

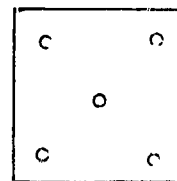
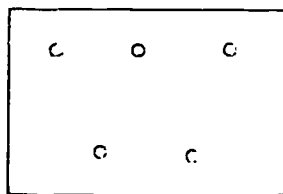
Boards

Place block underneath.
Drill hole completely
through board in five
places

Glue pegs into holes with white glue.
Fill area around hole with wood putty.
Wipe all sawdust from board.
Stain board with wood stain.

Pegs

(Use five pieces)
Measure 2" for each peg.
Cut carefully where you have marked.
Dip pegs in stain (end you are
holding onto will be glued in
hole so does not have to be
stained).



6 brushes

PIANO KEY BOARDS

Boards

Wipe sawdust from board.
Discuss proper painting technique
with enamel.
Spread out newspaper.
Paint board white.
Clean brushes!

Clothespin Keys

Tie seven pins to strings.
Hang inside carton
Discuss techniques for spray
painting.
Spray pins black.

Assembling

Mark location for keys (measured real keyboard)
Take clothespins apart
Drill hole in one-half of pin.
Nail through hole into board.
Re-assemble clothespin.

1 brush

CUPBOOK KEY BOARDS

Wipe sawdust from board.
Discuss painting technique with enamel.
Spread out newspaper.
Paint board a light color.
Paint design with small brushes and colored enamel.
Screw in cupbooks.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MACARONI DECORATIONS

II. ACTIVITY FORMAT:

A. Tools and Materials

Tag board	Macaroni
Paint	Glue
Scissors	Acrylic Spray

B. Procedures for this activity (with helpful hints)

1. Cut a Christmas shape out of tag board. **
2. Glue macaroni on shape.
3. Paint
4. Spray

**Large figures could be made for door decorations

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

PICTURE FRAMES AND PICTURES

II. ACTIVITY FORMAT:

A. Tools and Materials

Wood	Scissors	Saws	Rulers
Glue	Furniture stain	Poster board	
Miter box			

B. Procedures for this activity (with helpful hints)

1. Measure amount of wood for a frame (perimeter)
2. Cut wood into desired lengths
3. Miter the corners
4. Cut poster board to desired length and width
5. Stain the wood
6. Glue wood onto poster board
7. Cut pieces of felt to form the picture
8. Glue felt

(Stain the picture frame wood before glueing)

See following sheet

HANDS ON ACTIVITY

PICTURE FRAMES

Name _____ Date _____ PROJECT LET ACTIVITY

1. Write the name of the students in your group _____

2. Write the names of the adults that helped you _____

3. The distance around a rectangle, square, or triangle is called its perimeter.
Show 2 different ways to find the perimeter of your picture frame.

(1)

(2)

4. How long is the piece of wood you need for your picture frame? _____

5. How long is the piece of wood that was purchased? _____

6. How many picture frames can we cut from this piece of wood? _____

7. List the materials you used for this project _____

8. What tools did you use for this project? _____

9. What tool is used to cut the corners for the picture frame? _____

10. What kind of saw is used with a miter box? _____

11. What time did you start this activity? _____

12. What time did you stop working on this activity? _____

13. How much time did you spend on this activity? _____

14. If you were doing this activity (making picture frames) on an assembly line, what kind of jobs would there be?

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

BALL ORNAMENTS

II. ACTIVITY FORMAT:

A. Tools and Materials

Satin balls (2 colors)

Rickrack scraps

Lace scraps

Felt scraps

Ribbon scraps

Ornament hooks

Glue

Beads

Sequins

Pins

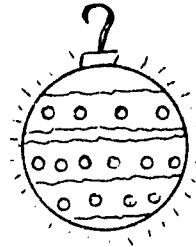
Material scraps

Cups for items

Scissors

B. Procedures for this activity (with helpful hints)

1. Organize materials for small groups
2. Work at creating own design on ball



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

FELT DECORATIONS (SANTA MOBILE)

II. ACTIVITY FORMAT:

A. Tools and Materials

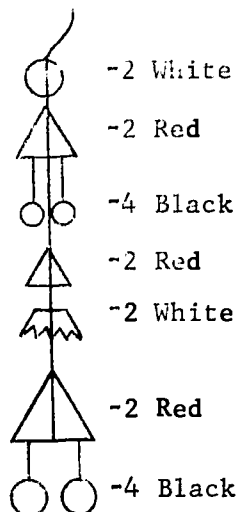
Black, red, white felt
Red string
Scissors
Glue

B. Procedures for this activity (with helpful hints)

1. Demonstrate making of "Santa"
2. Cut according to diagram
3. Begin construction with one piece of each, run string from top to bottom, leaving about 2 inches of string at top. Glue string to material. Insert eyes and feet (double) at this time.
4. Cover each piece with second piece.

III. RESULTS OF THIS ACTIVITY (after implementation)

The finished item is a mobile that can decorate a tree or window for years to come. This is a good example of a homemade item. Project takes about 45 minutes.



HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

PAINT BY NUMBER

II. ACTIVITY FORMAT:

A. Tools and Materials

Paint by number kit - Frank's Trims

Extra brushes

Acrylic spray or hair spray

B. Procedures for this activity (with helpful hints)

1. Explanation and demonstration of painting small areas and following directions for the colors.
2. Spray with acrylic to prevent paint from chipping.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

POPCORN AND CRANBERRY STRINGS

II. ACTIVITY FORMAT:

A. Tools and Materials

Popcorn

String

Popcorn poppers

Cranberries

Needles

B. Procedures for this activity (with helpful hints)

1. Pop corn

2. String chains of popcorn

3. String chains of cranberries

4. String chains of alternate popcorn and cranberries

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: THEATRE

GRADE LEVEL: 5-6

GENERAL OVERVIEW: This unit encompasses a musical production, prop construction and stage make-up.

TEACHING/LEARNING RESOURCES:

1. Reference materials:

Books: Concepts for Social Science Behavior - Grade 6

Movie: My Fair Lady

Record: My Fair Lady - theme

2. Field Trips:

See movie My Fair Lady

3. Human Resources:

Musical composer
Movie Director or Play Director
Stage Director
Singer
Dancer

4. Activities:

Rehearsal for play
Stage props constructed
Play performance
Stage make-up

UNIT TITLE: THEATER

CONCEPTS

BEHAVIORAL OBJECTIVES

Social Sciences

World problems

As a result of this unit, each child will be able to:

Recognize and cite evidence for wars on our planet
Recognize and cite evidence for the inability of certain groups of people to live in harmony with other peoples

Social status

Examine the value of higher status in our society

Science

Weather

Identify the unpleasant variables of weather
Recognize and cite evidence for the need of variables in weather on our planet

Language Arts

Satire

Apply satire to daily or accepted situations or events

Music

Apply an original paly or poem to a familiar song or melody

Art

Set decoration

Devise an appropriate stage prop for a theatrical performance

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Write words to play

Write words to play

Write words to play

Write words to play

Set play to music

Make a rocket

UNIT TITLE:

CONCEPTS

BEHAVIORAL OBJECTIVES

Careers

People and their job roles:
Production of music and
sets in the theater

As a result of this unit, each child
will be able to:

Apply the words of a play to existing
music (musical arrangers)

Construct wooden props for the
theatrical production

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Set a play to music

Make wooden rocket

Write a play

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

STAGE MAKE-UP DEMONSTRATION

II. ACTIVITY FORMAT:

A. Tools and Materials

Volunteer
Theater Make-up

B. Human Aides and Resources

Student from Macomb Community College

C. Procedures for this activity (with helpful hints)

1. We picked the main elf to be made up.
2. Talked about importance of using proper base.
3. Stage uses a grease paint, but told us how to use cosmetics.
4. Demonstrator showed us how not to have make-up patchy - how to make a person old or young, and highlight features.
5. Must be able to see features in last row.

III. RESULTS OF THIS ACTIVITY (AFTER IMPLEMENTATION)

Children were very interested and really listened. All were sorry afterwards that they did not volunteer.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

APPLYING OWN MAKE-UP FOR PLAY

II. ACTIVITY FORMAT

A. Tools and Materials

Cold cream for base
All kinds of cosmetics

B. Procedures for this activity (with helpful hints)

1. Each applied own make-up as closely as they could to earlier demonstration.
2. Floodlights must be used in play in order to make this effective.

III. RESULTS OF THIS ACTIVITY (AFTER IMPLEMENTATION):

Everyone enjoyed doing this - even the boy that spoke one line was excited about his putting on make-up. I think this really brought everyone together.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

MUSICAL PRODUCTION

II. ACTIVITY FORMAT:

A. Tools and Materials

T-shirts

B. Human Aides and Resources

Singer
Musical composer
Play director

C. Procedures for this activity (with helpful hints)

1. Write words to songs.
2. Practice singing.
3. Go over movements associated with songs.
4. Dress rehearsal.
5. Final performance.

See following sheets for play.

T-shirts may be sprayed with paint to identify groups of children in play.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

ROCKET PROP

II. ACTIVITY FORMAT:

A. Tools and Materials

Tool panel compliment
10 pieces 3/4" x 1" x 6' firing strips
50 1" nails
25 1 1/2" nails

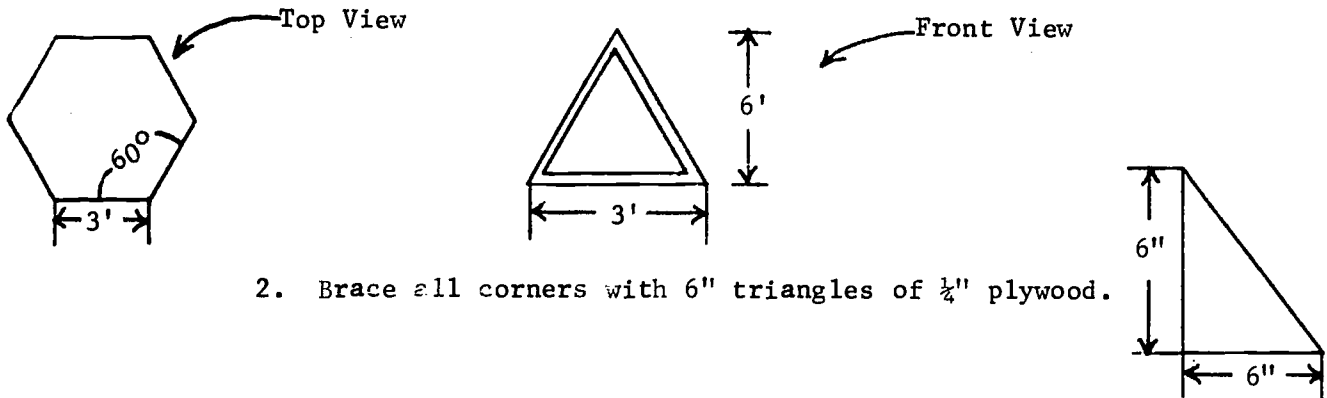
12" x 4' corrugated cardboard
Scrap 1/4" plywood
4 1" paint brushes
Tempra paint
Kraft paper (30', 3' wide)

B. Human Aides and Resources

College student or carpenter

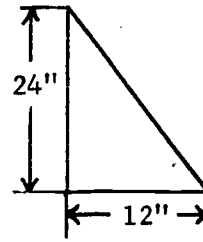
C. Procedures for this activity (with helpful hints)

1. Construct a frame appropriate to the following sketch using 3/4" x 1" x 6' firing strips.



2. Brace all corners with 6" triangles of 1/4" plywood.
3. Cove. 5 of the 6 sides with Kraft paper; staple this to the firing strips. One side should be left open to enter the rocket.

4. Construct 3 fins out of cardboard and fasten to sides of rocket.



5. Paint appropriately using tempra paints.

MUSICAL - "At This Rate It May Soon Be Too Late"

Tune: "Hernando Hideaway"

We've just arrived from outer space, to gaze upon the human race.

We've landed here so we can see, what's happened to humanity, you see.

Your escapades have brought us here to see your sorry state, radioactivity should not be your fate.

In to our rocket ships we've jumped, we hope we're not too late, we're not too late.

We've landed here from far away. We look quite odd to you this day.

So lend an ear and don't dismay, the truth you cannot hide away, away.

Oh, we're feeling mightly blue, cause the world is in a stew.

They're rioting in Africa, Bump Bump Bump Bump Bump Bump Bump

They're starving in Span, Bump Bump Bump Bump Bump Bump Bump

There's hurricanes in Florida, Bump Bump Bump Bump Bump Bump Bump

And Texas needs rain, Bump Bump Bump Bump Bump Bump Bump

The whole world is festering with unhappy souls, the French hate the German, the Germans hate the Poles, Italians hate the Yugoslavs, South Africans hate the Dutch, and no one likes anybody very much, Bump Bump Bump Bump Bump Bump Bump

But we can be thankful, and tranquil, and proud for man's been endowed with a mushroom shaped cloud, and we know for certain that some lucky day, someone will set the spark off, and they will all be blown away, Bump Bump Bump Bump Bump Bump Bump

(Tune: Take Me Out To The Ball Game)

It seems that their future is not too secure, at least a million conflicts they will have to endure.

With Mao in China, and Cuba's Castro too, satellites in orbit and in Asia there's flu, achoo.

A country can develop a war, a person can develop a cold, cold war.

Take us out to the arms race, Take us out to the war.

You've bought some missiles and submarines, you'll blow the whole world to smithereens.

We will root, root, root, for the good guys, if they don't win it's a shame.

For it's one, two, third war, you're out, at the cold war game. Achoo.

Oh, what's the matter Mr. Jones, what's troubling Mr. Lee

They're too identical to have their own identity.

The Joneses, the Joneses, you've got to keep up with the Joneses.

Oh, Mr. Jones just bought a car, he's happy as can be. And now guess who just bought a car, his neighbor Mr. Lee.

The Joneses, the Joneses, you've got to keep up with the Joneses.

They're stuck like everybody else in their society. They're stuck with each other, stuck with each other, stuck with each other, ca ca ca you see.

Click, click, I'm a wheel, Click, click I'm a wheel. Click, round and round I'm going, click precision always showing.

A gear is what I am, I do the work of man. A gear is what I am, I do the work of man.

I'm just a little lever, and I may not be so clever, but I do the country's work

Work piston work. Work piston work. Don't stop or jerk. Don't stop or jerk.

Piston work, piston work, piston work WORK.

So go home to the Joneses, the Goldbergs, and the Browns, let them know what it's all about

If you're feeling dejected go out and make it over, hurry up, hurry up you must go

That's the answer, That's the answer, try to make up a new set of rules.

So go home to the Joneses, the Goldbergs, and the Browns, let them know what it's all about.

You must shake them, and wake them, you've simply got to make them face the fact, at

this rate it may soon be too late. Bump Bump Bump Bump Bump Bump Bump

At this rate, it may soon be too late.

THE END

SCHOOL DISTRICT OF THE CITY OF ROYAL OAK

PROJECT LET

INTEGRATED TEACHING UNIT
PLANSHEET

TITLE: WRITING MUSIC

GRADE LEVEL: 5-6

GENERAL OVERVIEW: A cooperative unit between the classroom teacher and the special teachers in teaching the children to compose their own music and lyrics.

TEACHING/LEARNING RESOURCES:

1. Reference Materials:

Books:

Tall Tale America

(Many tall tale books on American folk heroes)

Filmstrip and Record Sets:

Songs of the Revolution

Songs of the Old South

Songs of the Civil War

Songs of the Railroad

2. Human Resources:

Music teacher

Speech correctionists

3. Activities Listed:

Composing Folk Songs

Writing Lyrics for Folk Songs

UNIT TITLE: WRITING MUSIC

CONCEPTS

BEHAVIORAL OBJECTIVES

Social Sciences

American History

As a result of this unit, each child will be able to:

Of a list of 10 historical figures in which only 5 are American folk heroes, identify the 5 American folk heroes

Of a list of 10 historical events in which only 5 are American historical events, identify the 5 American historical events

Describe the character of one American folk hero

Infer the importance of one American historical event

Language Arts

Reading
Listening

Writing

Forms of Tales

Relate stories and songs presented in class in preparing his own story and song

Compose an original tall tale

Of a list of four kinds of tales (epic, fairy, tall and folk) choose the tall tale as the one which exaggerates human achievement

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Writing lyrics for folk songs

Writing lyrics for folk songs

UNIT TITLE: WRITING MUSIC (continued)

CONCEPTS

BEHAVIORAL OBJECTIVES

Music

Listening

Composing

Arranging

As a result of this unit, each child will be able to:

Recognize a folk song when heard

Compose a musical stanza

Apply the lyrics to music

Careers

People and their job roles:

Research

Producing

Gather data on American history or American historical figures

Use data gathered on American history or American historical events in composing a song

METHOD OF IMPLEMENTATION

RESOURCE PEOPLE & MATERIALS

Composing music for folk songs

Writing lyrics for folk songs
Composing music for folk songs
Setting lyrics to music

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

WRITING LYRICS FOR A FOLK SONG

II. ACTIVITY FORMAT:

A. Tools and Materials

Paper
Pencil

B. Human Aides and Resources

Speech correctionist
Music teacher

C. Procedures for this activity (with helpful hints)

Have pupils write, in poem form (to be set to music), an original folk tale about an American hero or event (factual or fictitious) after listening to and/or reading about them in various books, and listening to and watching filmstrip and record set on American historical folk songs.

HANDS ON ACTIVITY (STUDENT PERFORMED)

I. NAME OF ACTIVITY

COMPOSING FOLK SONGS

II. ACTIVITY FORMAT:

A. Tools and Materials

Staff paper
Pencils

B. Human Aides and Resources

Speech correctionist
Music teacher

C. Procedures for this activity (with helpful hints)

1. Students are to decide upon a time signature
2. They will write a stanza of music
3. Incorporate lyrics from previous activity
and music written from this activity

ACTIVITIES - GRADES 5-6

	<u>UNIT NO.</u>
Anthropological Observations	1
Archaeological Dig	1
Bird Feeders (Making)	5
Books (Assembling-line Production of Hardbound)	7
Books (Individual Construction of Hardbound)	7
Book (Making)	7
Books (Making)	7
Books (Making)	7
Boxes (Making Boxes to Show Various Soil Practices)	5
Bread (Home-Made)	8
Bread Making From Starter	8
Bricks (Making)	5
Bulbs (Planting)	5
Butter Making	8
Campaign Buttons (Mass Producing Using Assembly Line Techniques)	11
Candle (Dipping)	3
Candle-Making (Molding)	3
Candle-Making (Sand Casting)	3
Christmas (Apron Making)	14
Christmas (Ball Ornaments)	14
Christmas (Construction of Keyboards)	14
Christmas (Cookie Decorations)	14
Christmas (Creative Stitchery)	14
Christmas (Decorations)	14
Christmas (Felt Decorations - Santa Mobile)	14
Christmas (Macaroni Decorations)	14
Christmas (Paint by Number Kit)	14
Christmas (Popcorn and Cranberry Strings)	14
Christmas (Tie Making)	14
Court Room Scene (Role-Playing)	11
Crystals (Growing)	4
Election Ballot	11
Election (Brainstorming)	11
Election (Classroom)	11
Election Registration	11
Electrical Occupations (Bulletin Board of)	10
Electromagnet Construction	10
Embossing with Aluminum Foil	3
Family (The Making of)	1
Fossils (Making)	4
Fossils (Making Examples of)	1

ACTIVITIES - GRADES 5-6

	<u>UNIT NO.</u>
Hearts (Dissect)	9
Kachina Dolls (Making)	1
Liquids (Experiments with)	13
Lungs (Making a Model)	9
Mummies (Making)	1
Mural - Painting Murals of Development of Tools	1
Music (Writing Folk Songs)	16
Music (Writing of)	16
Occupations (Reports on)	1
Pancake Supper	8 & 12
Paper (Making)	7
Paper (Note, Cards, Envelopes)	7
Paper (Making from Papyrus)	7
Paper (Making from Pulp)	7
Paper (Making from Rabbit Pelts)	7
Pizza (Baking)	8 & 12
Pizza Lunch (A)	8 & 12
Planting and Growing Seeds	5
Planter Boxes (Construction of)	5
Plays (Writing of Original)	6
Popcorn Balls (Making)	8
Pre-Historic Working Model Tools (Making)	1
Printing (Relief)	3
Puppets (Make)	6
Production and Retailing - Apple Pie	12
Production and Retailing - Application Blank	12
Production and Retailing - Automobile Mass Production	12
Production and Retailing - Booklets	12
Production and Retailing - Booklets (Assembly Line)	12
Production and Retailing - Bulletin Board of Jobs	12
Production and Retailing - Constructing Wooden Book Holders	12
Production and Retailing - Constructing Wooden Book Shelves	12
Production and Retailing - District Manager	12
Production and Retailing - District Manager's Job	12
Production and Retailing - Game, Boomerang	12
Production and Retailing - Game, Boomerang Pattern	12
Production and Retailing - Game - Geoboards	12
Production and Retailing - Game, Tic-Tac-Toe	12
Production and Retailing - Game, Tic-Tac-Toe Pattern	12
Production and Retailing - Interviewing	12
Production and Retailing - Interview Form	12
Production and Retailing - Making Bag Holder	12
Production and Retailing - Marketing Bag Holder	12

ACTIVITIES - GRADES 5-6

	<u>UNIT NO.</u>
Production and Retailing - Making File Boxes	12
Production and Retailing - Payday	12
Production and Retailing - Payday	12
Production and Retailing - Pizza	12
Production and Retailing - Rulers	12
Production and Retailing - Sales Talks	12
Production and Retailing - Sales Territory	12
Production and Retailing - Sales Territory Sheet	12
Production and Retailing - Sales Vocabulary	12
Production and Retailing - Silk Screening Directions	12
Production and Retailing - Silk Screening Pattern	12
Production and Retailing - Slide Presentation	12
Production and Retailing - Work-Study Program at Grant's	12
Refinishing Wooden Top Desks	5
Research Reports (Mountains, Earthquakes, Volcanoes, Glaciers, Geysers, and Faults)	4
Rock Collection	4
Rock (Making a Sedimentary - Sandstone)	4
Rolls (Baking)	8 & 12
Sea Lab (Building A)	4
Sewing Owl Case for Glasses	8
Shields (Making and Designing)	3
Soap (Making)	3
Spirometer (Making A)	9
Stage (Applying Own Make-Up for Play)	9
Stage Make-Up Demonstration	9
Stage (Make For Puppets)	3
Stathascope (Make a Model of)	9
Tapestries (Making)	3
Theatre (Applying Own Make-Up)	15
Theatre (Construction of Rocket Prop)	15
Theatre (Stage Make-Up Demonstration)	15
Theatre (Writing a Musical Production)	15
UNICEF Advertising	12
UNICEF Collecting Labels	12
UNICEF Company Formation	12
UNICEF Lunch Clean-up	12
UNICEF Lunch (Cooking)	12
UNICEF Lunch Menu	12
UNICEF Lunch Production Line	12
UNICEF Lunch (Shopping for)	12
UNICEF Trick or Treat	12
Volcano (Making A)	4
Voting Booth	2

ACTIVITIES - GRADES 5-6

	<u>UNIT NO.</u>
Wall Hangings (Making)	3
Water (Experimenting with Beans Showing Necessity of Water)	4
Water Pressure	4
Water Wheel (Construct A)	4
Weather Information - Card File	4
Weather Instrument - Anemometer	4
Weather Instrument - Barometer	4
Weather Instrument - Hair Hygrometer	4
Weather Instrument - Wind Vane	4
Weaving (Looper-Weaving Loom)	3
Weaving (Making an Inkle Loom)	3
Weaving (Making a Waffle Weave)	3
Wood Objects (Making Keychains, Pencil Holders, ETC.)	3