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ABSTRACT

A teacher's guide to six career education units--one for each of the elementary grades--has been compiled from a series of complete guides for each grade. Each of the six representative units includes step-by-step instructions for teacher activities in preparing and carrying out a simulated career experience; related curriculum concepts in math, science, social studies, and language arts are developed in addition to concepts which are specifically career-related. The units are: an aircraft simulation, a toy factory, pollution control, multiplication bingo, sewing and metal shop, and electrical shop. The table of contents from each complete guide is included to give an overview of the units which are not in this collection. (AJ)

PHASE IV

TAOSCORE TEACHER'S
GUIDES

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
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(Taos Municipal Schools,
Taos, N. Mexico)

1-6 CAREER EDUCATIONCONCEPT DEVELOPMENT MATRIX

	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5	GRADE 6
UNIT ONE	Why People Work	People Earn A Living in Different Ways	How to Find Information About Occupations. (Hotels & Restaurants)	Occupational Prospects for The Future	Government Occupations	Introduction To Career Education
UNIT TWO	Building Electric Circuits	Beginning The Mini-Park (On-going)	Sewing Factory Simulation	Photography and Film Development (On-going)	Typing and Office Skills (On-going)	Woodworking Simulation (On-going)
UNIT THREE	Playing Store (On-going)	Making Pottery	Puzzle Factory	Leathercraft Shop Simulation (On-going)	Communication & Newspaper Simulation (On-going)	Applying For A Job and Store Simulation (On-going)
UNIT FOUR	Some Different Kinds of Occupations	Indoor Gardening (On-going)	Treat Factory Simulation (On-going)	Researching Local Water System	Panorama Snowball Factory	Glass Products Simulation
SPECIAL UNIT	Peer Tutoring (On-going)	Peer Tutoring (On-going)	Peer Tutoring (On-going)	Peer Tutoring (On-going)	Peer Tutoring (On-going)	Peer Tutoring (On-going)

	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5	GRADE 6
UNIT FIVE	Woodworking With Hand Tools	Transportation Models Assembly Plant	Ceramic Company Simulation and Salesmanship	Dramatics Company Simulation	Perfume Manufacturing Simulation	Tin Can Enterprises
UNIT SIX	Post Office Simulation (On-going)	School Bus & Taxi Company Simulation	Floral Design & Arrangement	Plastic Dip Creations	Art Gallery & Frame Making Simulation	Appearance Counts (On-going)
UNIT SEVEN	Weaving, Braiding and Sewing	Trucking Company Simulation	Dam Simulation	Restaurant Simulation (On-going)	Cribbage Tournament (On-going)	Jewelry Manufacturing Corporation
UNIT EIGHT	Construction Company Simulation	Airline Company Simulation	Forest Simulation	Easter Egg Manufacturing Simulation	Health Occupations	Working Toward Your Future
UNIT NINE	Bank Simulation	Making Bottled Snow Scenes	Pollution Control (On-going)	Multiplication Bingo Tournament	Mass Communications Simulations	Electrical Shop Simulation
UNIT TEN	Popsicle Sales Simulation	Plant Nursery Simulation	Manufacturing Magnetic Postal Scales	The Craft of Making Ojos	Sewing and Metal Shop Simulations	Your Attitudes Are Showing
UNIT ELEVEN	Aircraft Simulation	Egg Hatchery Simulation				

TAOSCORE - CAREER EDUCATION CONCEPT DEVELOPMENT MATRIX

	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5	GRADE 6
UNIT TWELVE	Self-Understanding	Toy Factory Simulation				
UNIT THIRTEEN	Pinata Party	Soap Carving Hobby and A Party				

UNIT ELEVEN: AIRCRAFT SIMULATION

(4 sessions)

EXPECTED STUDENT PERFORMANCE:

The Student will be able to:

- follow verbal directions to make a paper helicopter
- make and fly a paper bag kite
- design and fly paper airplanes in a test flight contest
- make a parachute and test it
- verbally list at least two occupations in the aircraft industry.

CURRICULUM RELATED CONCEPTS:

SCIENCE: gravity; wind energy; lightning is an electrical force; story of Benjamin Franklin and his kite

READING & WRITING: identifying letters in following directions

SOCIAL STUDIES: importance of aircraft to society; uses of different kinds of aircraft

MATH: weight of aircraft affects its performance; timing paper models with stop watch--seconds

MATERIALS NEEDED:

Paper

Paper clips

Paper lunch bags (one per student)

String

Old plastic bags (bread wrappers)

TEACHING ACTIVITIES

FIRST GRADE RESOURCES

Lesson 1 --MAKING HELICOPTERS

- EXPLAIN: one of the big and important industries in our country today is the aircraft industry.
- ASK: What do you think this industry does? (Designs and builds different kinds of airplanes, helicopters, space ships)
- SAY: We are going to start our own aircraft company. What shall we Name it?
- HAVE students select a company manager and a training director.
- PROVIDE each student with a helicopter pattern, Supplement A, Page 67. Have them decorate their helicopters with crayons. INSTRUCT them to not cut anything yet.
- IN THE MEANTIME, work with the Training Director so he can read the directions and demonstrate how to construct a helicopter.
- HAVE training director train workers on how to make their helicopters by giving them the directions step by step and demonstrating as he goes.

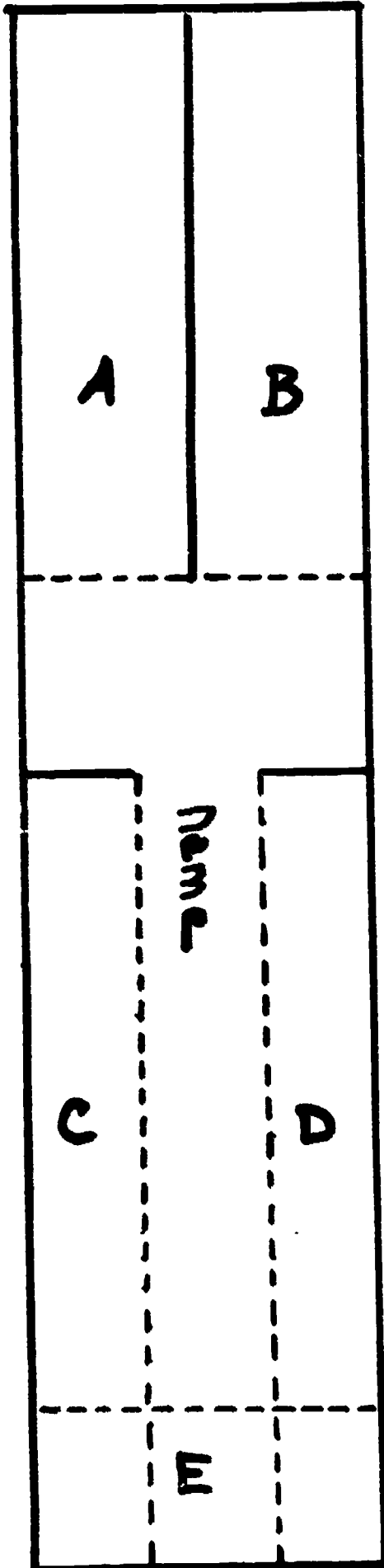
- STEP 1. Cut pattern on dark lines only.
- STEP 2. Fold "A" toward you.
- STEP 3. Fold "B" away from you.
- STEP 4. Fold "C" to the back.
- STEP 5. Fold "D" back over "C".
(Model now should look like the letter "T")
- STEP 6. Fold bottom "E" up toward front.

SUPPLEMENT A, pg. 67

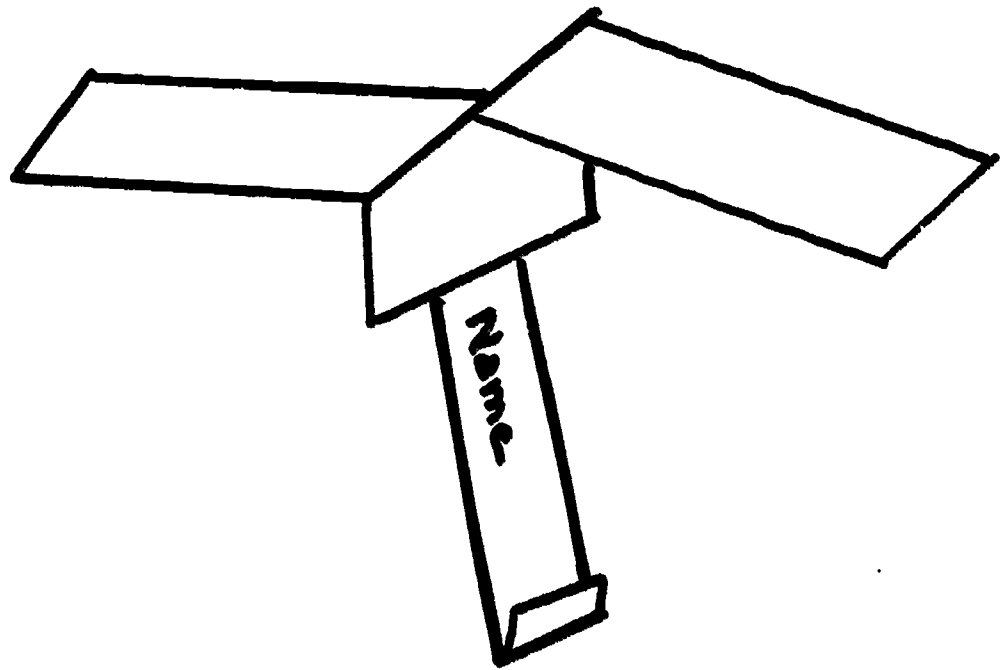
READING

SUPPLEMENT A

HELICOPTER



Your helicopter will look like this:



TEACHING ACTIVITIES

--HAVE Manager tell workers that now that the new helicopters have been constructed, they will have to be tested. Each student will act as a test pilot for his copter.

--HAVE Manager instruct test pilots as follows:

STEP 1. Stand up (on chair if possible)

STEP 2. Hold model in hand. Hold arm up in air as high as you can reach.

STEP 3. Let go of copter and watch it.

--HAVE students test their copters several times.

--ASK: Why do the copters twirl to the ground instead of flying up to the ceiling?
(gravity pulls them to earth)

--ASK: Why do the copters twirl slowly down instead of just falling straight down?
(Air catches under the two blades and slows the fall and makes it twirl.)

--ASK: What are helicopters used for?
(Police and traffic patrol; shuttle service between airports; crop dusting; electric power company uses them for patrolling the electric lines; military uses for them for patrols.....)

--LET STUDENTS TAKE THEIR HELICOPTERS HOME.

ion 2 - MAKING PAPER BAG KITES

--ASK: What do you suppose were the first objects that man ever flew? (kites)

How many of you have ever flown a kite?

Do you think kites are used for anything besides fun? (yes--for weather forecasting, for building bridges; for photography-- they can attach cameras to kites to get air pictures; to put radio antenna in air from life boats)

SCIENCE: gravity

Wind energy can help keep things in the air.

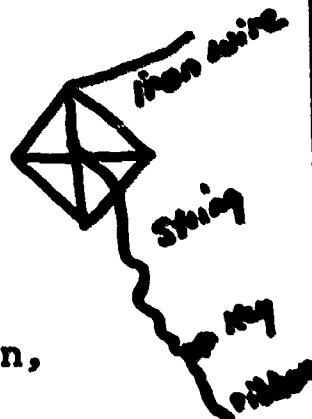
TEACHING ACTIVITIES

TELL story about Benjamin Franklin's famous experiment:

Benjamin Franklin suspected that lightning in thunder storms is the same thing as the sparks of electricity that scientists of his day were producing in the laboratories.

To prove this, he wanted to bring electricity out of the sky with a kite, a string and a key.

He made a kite like this and attached an iron wire to the top. To fly the kite, he tied on a string, and at the end of the string he tied a silk ribbon to hold on to. Near the place where he tied the ribbon on, he attached a metal key.



Franklin waited for a stormy day. He let his kite rise up into a dark cloud. Soon, he saw that the kite string began to bristle with electricity. As the rain wet the string, it carried even more electricity.

Benjamin Franklin stood in the shelter of a shed, keeping the silk ribbon in his hand dry. Carefully, he reached out his knuckle and touched the key. Sparks jumped from the key to his finger.

--ASK: What did this experiment prove?
(lightning is electricity)

What if Franklin had grabbed the key tightly instead of barely touching it? (the electricity could have killed him)

Can string carry electricity? (Yes)
(Especially if wet because water can carry electricity)

SCIENCE: storms

SCIENCE: electricity

Conductors of
electricity

TEACHING ACTIVITIES

--ASK: How did electricity from lightning get to the kite string? (It was picked up by the iron wire on the kite)

Could Franklin's experiment have been dangerous? (Yes-)

--ASK: Can you think of some safety rules for kite flying?

1. Don't fly kites during storms.
2. Never use wire for string.
3. Don't put any metal on a kite.
4. Stay away from electric and phone wire when flying kites.
5. Don't use wet string to fly a kite.

WRITING & READING

--PRESENT each student with a paper bag, lunch size.

--HAVE students decorate bags with the story about Franklin's kite flying experiment.

ART

--SAY: The next project for our aircraft company is to make a paper bag kite.

--HAVE students measure a piece of string 6 feet long.

MATH: measuring feet

--Have students punch one hole in one side of the bag near the open end and attach his piece of string through the hole.



--OUTSIDE have students test fly their kites by running with them behind them to see what happens.

(the bag should open in the wind and rise up a few feet off the ground. As soon as they stop running, the kite will fall)

--ASK: Can you figure out why the kites lifted up off the ground? Why did they fall back down again.

(Discuss motion as a means of keeping an object in the air--ex. planes)

**SCIENCE: motion
in the air**

TEACHING ACTIVITIES

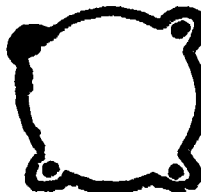
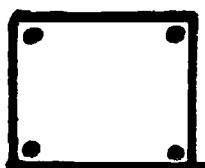
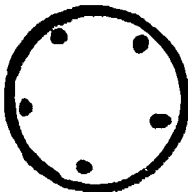
FIRST GRADE RESOURCES

--**ASSIGNMENT:** bring to class a plastic bag like a bread wrapper. Also, bring a small weight like a plastic soldier. **EXPLAIN** that the aircraft company is going to make parachutes in the next session.

--**LET STUDENTS TAKE THEIR PAPER BAG KITES HOME.**

Lesson 3 - PARACHUTE EXPERIMENTS

--**Have students design and cut parachutes from their plastic bags.** They may be round, square, or other shapes as shown:



--**Punch holes near edges as shown above.** Attach one string about 12" long through each hole.

MATH: measuring 12"
or 1 foot

--**BRING** loose ends of strings together and tie to a light weight. (plastic man, eraser, or crayon)



--**ASK:** What are parachutes used for? (escaping from planes, sport, armed forces attacks, dropping food and emergency supplies to places where planes can't land)

--**APPOINT** timekeepers for experiments.

--**OUTSIDE** have students test fly their designs by standing on something higher than the ground such as steps, climbing towers, swings, etc. **TEST** them one at a time and time each flight or descent.

MATH: timing

Vocabulary:
descent

--**HAVE** timekeepers record time for each flight.

TEACHING ACTIVITIES

- SEE if any parachutes descend more slowly than others. IF so, have students try to figure out why? (longer strings, heavier weight?)
- ASK: Why do parachutes fall to the ground? (gravity)
- ASK: What do you think would happen if your parachutes had slits in them?
- HAVE STUDENTS cut small slits in chute as shown.



- RERUN test flights and time them to see if there is any difference in time with slits.
- LET STUDENTS TAKE PARACHUTES HOME.

SCIENCE: gravity

MATH: timing

Unit 4 - DESIGNING PAPER PLANES

- DISPLAY pictures of planes of different shapes.
- EXPLAIN: aircraft companies are always looking for new designs of planes that go faster.
- HAVE students act as design engineers to design paper models like the gliders they like to make, only suggest that they might try different wing shapes and different nose shapes. They might want to cut and paste, or they might want to use paper clips as weights on the nose.
- HAVE design engineers test flight all models outside.
- HAVE timekeepers time models to see which stay in the air longest and go the farthest.
- HAVE races between the planes for distance and time in air.
- DISCUSS why some models travel farther or stay in flight longer.
- HAVE students verbally list at least two occupations in the aircraft field.

Timekeeping

UNIT TWELVE: SELF UNDERSTANDING
(5 Sessions)

EXPECTED STUDENT PERFORMANCE:

The Student will be able to:

- verbalize the feelings he has
- draw a picture that shows something he fears
- verbalize something he likes about himself
- role play fear and anger producing situations

CURRICULUM RELATED CONCEPTS:

SCIENCE: Animals and their traits or characteristics

SOCIAL STUDIES: People affect each other

LANGUAGE ARTS: Improving verbal skills

TEACHING ACTIVITIES

Session 1 - WHAT ANIMAL ARE YOU LIKE?

- SAY: Think about what kind of animal you are most like.
- GIVE students an option of either drawing a picture of the animal they think they are most like, or of getting up and acting out the animal.
- ONE at a time have students show their pictures or do their pantomimes.
- HAVE other class members guess the animal.
- ASK STUDENT: Why do you think you are most like this animal?
 (Student may answer because of physical characteristics...example--"I picked a giraff because I have a long neck".
TRY TO GET STUDENTS TO RELATE ACCORDING TO PERSONALITY TRAITS OR BEHAVIORS. Ex.
 "I picked giraff because he's quiet too".

RESOURCES

SCIENCE: animals

TEACHING ACTIVITIES

--ASK CLASS: Do you think (child) is a little like a (name animal)? Why?

NOTE: TRY NOT TO HAVE DISCUSSION IMPLY THAT CERTAIN TRAITS ARE GOOD OR BAD--JUST THAT THEY ARE PRESENT AND SIMILAR. For example, a child may be aggressive like a tiger.

--POINT OUT how animals behave differently and people also behave differently.

--ASK: Can you say that any one animal is the best? (no)

Can you say that one animal is better than another? (no)

What can you say about differences in animals? (only that they are different)

Lesson 2 - ANGER

--ASK EACH CHILD: What makes you angry?

How do you act when you are angry?
(fighting physically?
fighting with words?
silently brooding?)

--HAVE students team up and act out the three ways of showing anger. They can make up their own situations.

--ASK: Does anger use energy? Much? (yes)

--ASK: Does everybody get angry? (yes)

--ASK: How do you feel after you have been angry? (tired, sometimes sorry)

--ASK: Is it bad to be angry? (Yes, if it hurts someone else.)

TEACHING ACTIVITIES

--ASK: Can words hurt others? (Yes)

How do you feel when someone is
angry at you?

--ASK: How can you get rid of anger without
hurting someone else?
(By letting out your feelings in a
non-harmful way to get rid of the
energy-- by telling someone calmly
that you are angry about something--
by physically working off energy,
scrub floors, take a walk, hit a
pillow or a punching bag--play
football)

--ASK: Do you feel like doing school work
when you are burning with anger?
(No. Anger robs us of our energy)

--EXPLAIN: It is not wrong to feel anger--
everyone does. But the way we express
our anger can be wrong.

--HAVE STUDENTS roll play situations below to
show how they might express anger without
hurting someone.

- 1) A family is at the dinner table. The
younger son keeps trying to tell something
about his day, but the older brother keeps
interrupting so he can't talk.
- 2) A girl throws a rock at a boy during recess.
Just as the boy threatens to get her back,
a teacher sees him. She bawls him out for
trying to hit a girl.
- 3) A store manager yells at one of the clerks
because he gave a customer the wrong change.
He scolds him right in front of other
employees and customers.

--HAVE class discuss the role plays and talk
about how people affect other people.

SOCIAL STUDIES

TEACHING ACTIVITIES

Session 3 - FEAR

--ASK: What was the feeling we talked about before? (anger)

--SAY: Now we're going to talk about another feeling--fear.

ASK: Has everybody here been afraid sometime? (probably yes)

--HAVE students draw a picture to show something that makes them afraid.

--DISCUSS the pictures. Talk about the things that students fear.

DISCUSS fears that are not real--(boggy man)
DISCUSS fears that arise from real danger.
(getting hit by car when crossing street--
fears about physical danger--
fears about having our feelings hurt--
such as being laughed at, shamed,
scoulded or of being wrong.
fears about losing something or someone
we love)

--ASK: Does fear make people act differently than if they were not afraid?
(Yes. Fear can stop people from doing things.)

--ROLE PLAY the following situations each twice
Play it the first time to show the worst thing that could happen.. The second time, to show the best thing that could happen.

- 1) A girl who has to go see the school Principal because she was tardy again.
- 2) A boy walking home from school is afraid of bigger boys across the street who have snowballs.
- 3) A boy in a reading circle who is afraid to read for fear the other kids will laugh if he makes a mistake.

TEACHING ACTIVITIES

- 4) A girl in a class who thinks she knows the answer to the question the teacher asked, but is afraid to answer in case she's wrong.

--DISCUSS each playing of each role play.

--ASK: Can fear ever be good? (Yes, if it makes us cautious--like knowing and observing rules for kite flying)

--ASK: Do you see that both anger and fear are feeling that can hurt your work at school? How?

Can fear hurt a man in h.'s job?
How?

--ASK: Do you have a lot of fears? Ask yourself what is the worst thing that could happen from them--what is the best?

Are you often angry? What can you learn to do about it?

Session 4 - LOVE AND REJECTION

--ASK: Do you know how it feels to be rejected or unwanted? (cold, lonely, unloved, no good, bad, like something is wrong with me)

--ASK: Do you ever feel rejected by your parents? (Children of divorced parents may wish to express feelings about this is particular because they may feel that parents don't love them if they get divorced.

Also, most kids are inclined to feel when parents hush them, or send them to bed that they are being excluded or rejected.)

--ASK: How do kids reject other kids? (send them away, won't play with them, ridicule and taunt)

Why do you think kids reject other kids?

TEACHING ACTIVITIES

- SUGGEST that sometimes kids reject other kids in order to feel big--
having the power to love or to reject
can make someone feel big.
- ASK: If some kid tries to make you feel you aren't as good as he is, is he right? Is he better than you are? Can anyone be better than anyone else?
- DISCUSS another kind of non-love--physical hurting and meanness.
- SAY: Suppose somebody kicks a dog. What happens to the dog? (He gets mean and bites)
- Do people react the same way to meanness? (They are apt to get angry either at the kicker or at themselves). Then the person who was kicked may turn around and be mean to someone weaker than himself.
- ASK: What do we call someone who picks on somebody weaker than himself? (bully)
- If a bully is someone who has been hurt and is angry, how can he be helped to stop being a bully? (love and kindness are strong forces that may help. If the bully understands why he does what he does that may help. Sometimes we keep doing things we don't really like to do because we don't understand why we do them.)
- ASK: How does it feel to be loved?
Is it better than being rejected?
- HAVE students color a paper to show the feelings of love -- not draw a picture-- just colors. THEN have students color a paper to show the feelings of being rejected
- COMPARE color pictures.

TEACHING ACTIVITIES

FIRST GRADE
RESOURCES

--ASK: Do all people need love?
(yes)

Do your parents need love?

Can you think of someone you might help if you show them you care?

--ASK: Do you love yourself? (or are you angry with yourself and feel like you are no good?)

If you cannot love yourself even though you know you have faults and weaknesses, how can you love anyone else?

--HAVE each student make and decorate a poster that says "Love Yourself".

WRITING & ART

DISPLAY the posters in the classroom.

--ASSIGNMENT: Ask friends and grown ups to tell you something nice about yourself so that you can list at least three things about yourself that you like.

Session 5 - DISCOVERY OF SELF

--THINK about three things that you have proved to yourself this year that you can do well. (These may be skills you demonstrated in simulations--like making change, sawing wood, weaving...etc.)

--HAVE students draw a picture to show three things they can do well.

--HAVE students write three nice things that people have said about them as a person. (Spelling need not be perfect)

WRITING

--HAVE students write or draw one thing they would like to do better.

UNIT THIRTEEN: PINATA PARTY
(More than 4 Sessions)

EXPECTED STUDENT PERFORMANCE:

The student will be able to:

- plan an carry out a class party that includes:
 - student entertainment
 - planning and preparation of refreshments
 - making pinatas for the party

CURRICULUM RELATED CONCEPTS:

MATH: planning amounts needed for refreshments; measuring

SOCIAL STUDIES: pinatas--a custom of Mexico

FINE ARTS: Performing in music, dramatics; reciting poetry;
designing and decorating pinatas

MATERIALS NEEDED:

- Stacks of newspapers
- flour
- balloons
- masking tape
- tissue paper
- glue
- Kool-aid
- paper cups
- popcorn

TEACHING ACTIVITIES

FIRST GRADE RESOURCES

Session 1 - PLANNING THE PARTY

--ASK: Do you know what pinatas are?

From what country did the pinata custom come? (Mexico)

What do you do with pinatas at a party? (Children are blindfolded, one at a time, the pinata is hung in some high place, like a tree branch. The pinata is filled with candy. The blindfolded child tries to hit the pinata with a wooden bat until it breaks open and spills candy out for all the children.)

--ASK: What shapes are pinatas made in?

(Animals, stars, Santa Clauses, birds)

--ASK: Would you like to have a pinata party to celebrate the end of the school year?

--ASK: What else could we do for the party?

(Have students entertain with special talents--musical, dramatic, or recite a short poem. Serve refreshments such as popcorn and Kool-aid--which are inexpensive and can be prepared by the students)

--SELECT a chairman for the entertainment and for refreshments and for pinata making.

(Choose students who have not been leaders yet)

SOCIAL STUDIES:
MEXICO, locate on map.

TEACHING ACTIVITIES

--HAVE Refreshment and Entertainment Chairman chose committee members and hold a meeting.

REFRESHMENT COMMITTEE:

SUGGEST that they plan to serve Kool-Aid and popcorn, as well as the candy that will be in the pinatas.

Committee will need to figure out how many cups of Kool-Aid they will get from one package, and how many packages they will need to get.

MATH

ENTERTAINMENT COMMITTEE:

They will need to talk to each student in the classroom and encourage him to prepare a short bit of entertainment such as singing a song, acting out a skit, playing some musical instrument, whistling, or reading a poem. Committee should schedule presentations and prepare to introduce each act.

PERFORMING ARTS

--HAVE class decide how many pinatas to make--
They may make about 6 (so that 5 students can work on each pinata), or they might make one large one for the party, and each student can make one for himself to take home.

--EXPLAIN that the pinatas will be made by layering paper mache on top of inflated balloons. Then the paper mache will be decorated with paper ruffles and trims. The balloons will be broken, leaving a cavity in the pinatas, into which wrapped candy will be placed.

--HAVE students think about the shape they would like to make their pinatas. (Directions are given for star shapes and for bunnies.)

ion 2 - MAKING PINATAS

eral
sions
--HAVE pinata chairman select foreman for each group of pinata makers. He will help with instructions, and oversea cleanup.

TEACHING ACTIVITIES

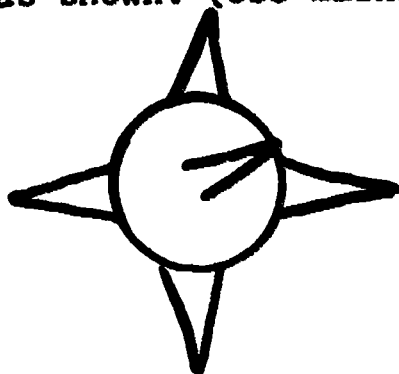
--HAVE STUDENTS follow these directions:

STEP 1. Make paper mache paste.

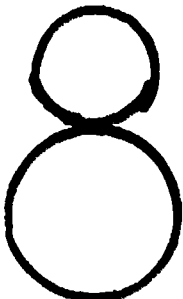
Mix one part flour to two parts water. (For example, one cup of flour to two cups of water.)

STEP 2. Make the body of the pinata.

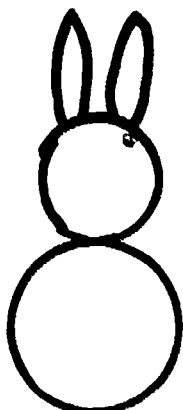
For Star: Blow up one round balloon. Make 5 cones of rolled newspaper to be points of the same size. Tape cones to balloon-- four spaced evenly around the balloon and one in the middle as shown: (Use masking tape)



For Bunny: Blow up two balloons-- one small round one for the head, and a larger round one for the body. Tape balloons together with masking tape as shown:



Make ears with rolled and flattened newspapers and tape to head balloon.



MATH: MEASURING
by cups

TEACHING ACTIVITIES

STEP 3. Covering balloons with paper mache.

Tear or cut strips of newspaper. Dip strips into paste. Remove excess by running fingers down the length of the strip.

Put strips on balloons to cover them. Fasten with masking tape.

Cover cones of stars and ears of bunny also with paper mache.

Apply several layers of strips. Then coat with a thin layer of paste.
LET DRY SEVERAL DAYS.

Repeat the above step two or three times until a good core of paper mache has been built up. Let each layer dry thoroughly.

STEP. 4. Break Balloons

Poke a needle through the paper mache to break all the balloons.

Cut a small hole in top of body of star to leave a place to put the candy in.

Cut a small hole in back and top of head of bunny to put candy in.

STEP 5. Attach Hanging String

Tie a string around the body and neck of bunny and around the body and points of star. Leave enough string to hang the pinata from a tree branch.

STEP 6. Making Paper ruffles

Cut 3-inch strips across the width of tissue paper.

Fold each strip lengthwise.



MATH: measuring inches

TEACHING ACTIVITIES

Make cuts with scissors along folded edge of ruffle about $1/4$ inch apart and $3/4$ inch deep.



STEP 7. Glueing ruffles

Spread white glue on uneut edges of the ruffle. Glue lengths of ruffles onto the paper mache, working around the balloons.

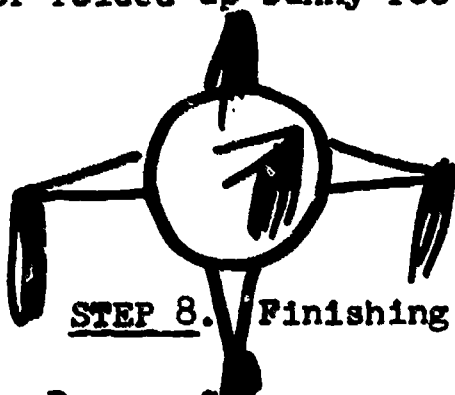
For Bunny: Glue ruffles onto ears first, starting at the tip of the ears, using white and pink ruffles. Then do head and body.

For Star: Wrap points first with foil paper. Then glue ruffles to the body.

Ruffles should completely cover the paper mache, and should overlap across the opening so that the opening is not noticeable.

If making animals with legs, start glueing ruffles onto foot of legs and work up toward the body, spacing ruffles so that they overlap each other. (Animal legs can be made of rolled newspapers).

You may wish to use brown colored ruffles for folded up bunny feet.



For Bunny: Glue on construction paper eyes, nose, mouth, and whiskers. Glue dab of cotton on for tail. Put wrapped candy in cavity and hang pinata in the room.

For Star: Cut a number of 24 inch streamers of tissue paper, double the streamers over and attach to the end of each point for tassels. Fill pinata with candy and hang up.

FIRST GRADE RESOURCES

MATH: measuring $1/4$ and $3/4$ in.

Measuring

TEACHING ACTIVITIES

FIRST GRADE
RESOURCES

Session 3 - TAOSCORE POST TEST

--IF you have not already administered THE POST TEST to students, do so now.

--COMPLETE the Teacher's Tabulation Form and the Teacher's Final Evaluation Form and submit them to the Career Education Project office before the deadline date.

TAOSCORE PRE-POST TEST

TEACHER'S TABULATION FORM
TEACHER'S FINAL EVALUATION
FORM

Session 4 - THE PARTY

--HAVE students prepare refreshments.

--HAVE entertainment committee introduce entertainers.

--PLAY "What is My Job".

--BREAK pinatas outside in the Mexican traditional manner. Have students share the candy.

--HAVE refreshment committee serve refreshments as planned.

INDEX

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All of the TAOSCORE TEACHER'S
GUIDES, Grades 1 - 6 were
developed by and in consultation
with:

Lois W. Harmeson,
Educational Writer/Consultant
5204 Simon Drive N.W.
Albuquerque, New Mexico 87114

UNIT TWELVE: TOY FACTORY SIMULATION
(5 Sessions or more)

EXPECTED STUDENT PERFORMANCE:

The student will be able to:

- use woodworking tools to build toys and doll furniture to give to the kindergarten or a nursery.
- knit squares to make doll blankets
- work cooperatively to share tools and materials
- make books

CURRICULUM RELATED CONCEPTS:

READING: Using printed pictorial directions as patterns to make toys; making alphabet books

MATH: Measuring

MATERIALS NEEDED:

- | | |
|---------------------------|--------------------|
| scrap lumber | round dowels |
| hammers | or |
| saws--crosscut and coping | wood thread spools |
| C-clamp | yarn |
| nails | knitting needles |
| sandpaper | |
| enamel paints | |
| glue | |

TEACHING ACTIVITIES

RESOURCES

Session 1 - FIELD TRIP TO KINDERGARTEN

- HAVE students take field trip to a kindergarten class (or nursery) to visit students and interview teacher about her occupation.

Field Trip

TEACHING ACTIVITIES

- HAVE students find out what is different about being a kindergarten teacher and a second grade teacher.
- FIND out what kindergarten students are learning.
- ASK if the kindergarten would welcome some toys if the second grade students were to make some in a toy factory simulation.

Session 2 -ORGANIZING THE TOY FACTORY

- SELECT a Manager for the woodworking factory.
- MANAGER then selects foremen who supervise safety with hand tools and clean-up.
- DISCUSS kinds of toys kindergarteners might like. (boats, trains, planes, doll furniture, play house, books)

NOTE: STUDENTS MAY ELECT TO MAKE WOOD TOYS, KNIT DOLL BLANKETS, OR MAKE BOOKS, OR THEY MAY WORK IN SEVERAL DIFFERENT ACTIVITIES. ENCOURAGE BOTH BOYS AND GIRLS TO DO WOOD WORKING AND KNITTING WITHOUT REGARD TO SEX.

- SELECT Manager for each group--knitting, book publication.
- TEACHER may wish to call on a parent who can knit to coach the knitting group.
- DISCUSS how students will feel to be making things for someone else. Example: Is it a good feeling to do something for someone else? Why? What feeling does it show? (love)

Session 3 - WOODWORKING

- HAVE foreman remind students of safety rules and clean-up rules.
- MANAGER should post directions as shown on supplement sheets in woodworking area for employees to follow.

SUPPLEMENTS
A, B, C, D
pp.59,60,61, 58

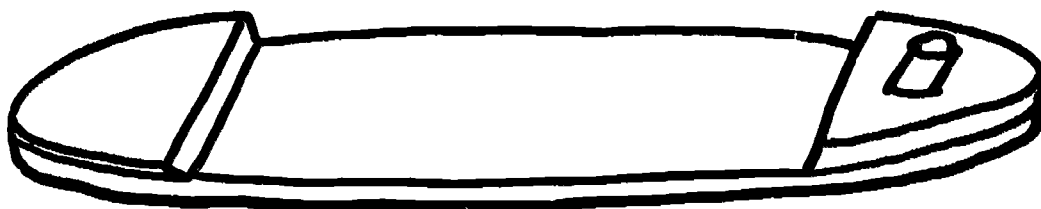
Kinds of Ships



Tugboat

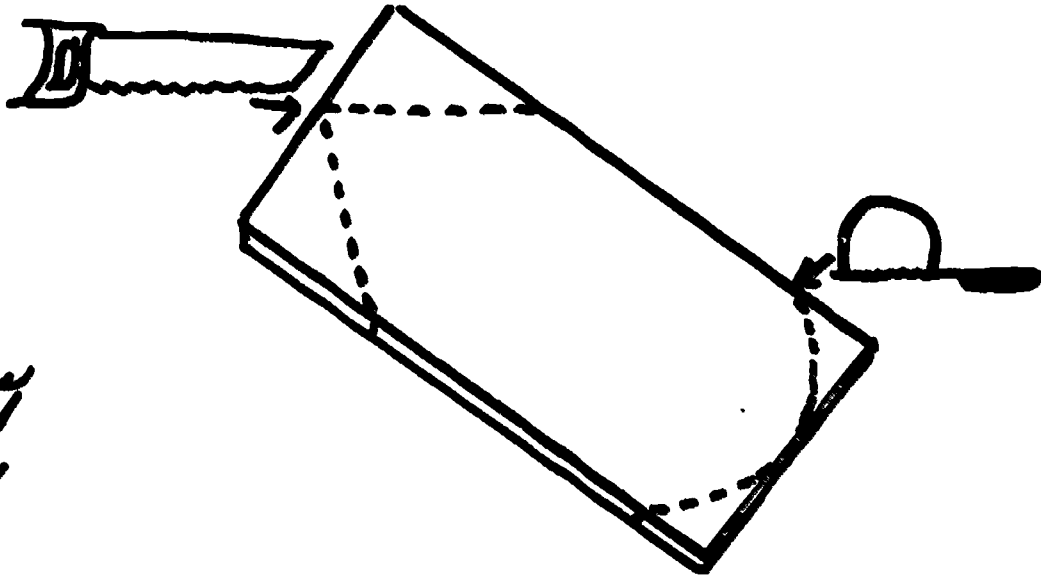


ocean liner

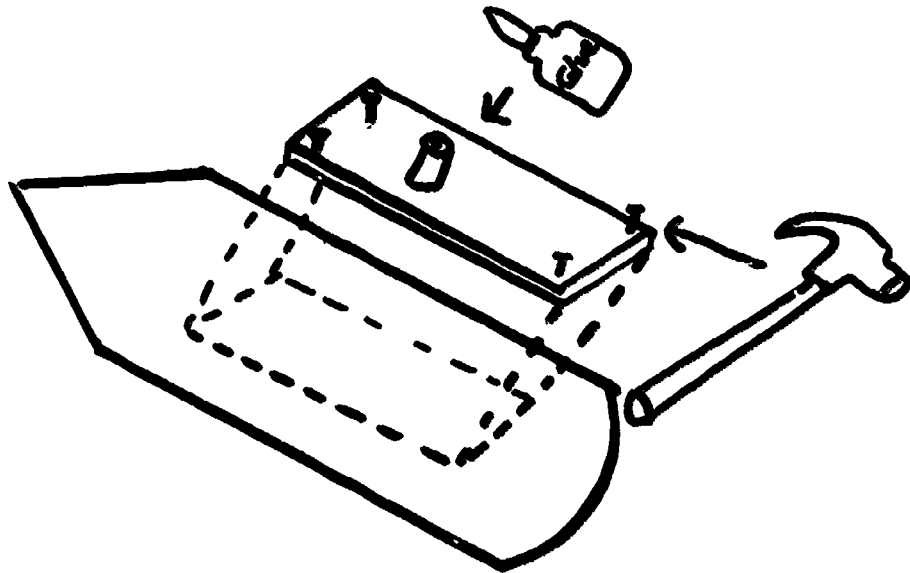


row boat

Ships



1. draw
and
saw



2. glue
and
nail

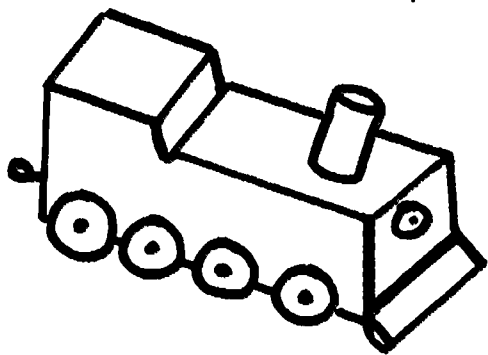
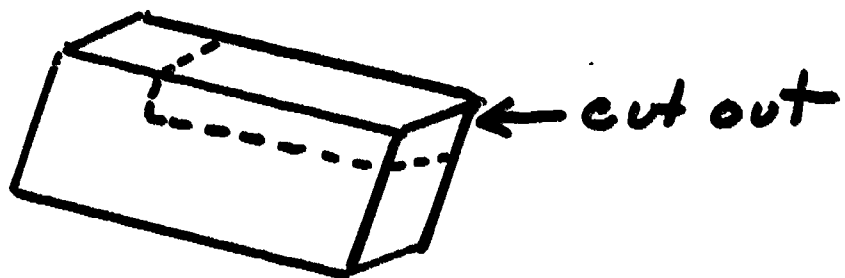
3. sand with sandpaper

4. paint

Making a Train

1. Use wood strips 2" x 4"
2. Cut into 6" pieces for each car

Engine

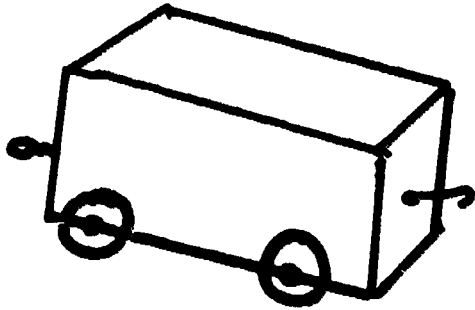


nail on wheels
nail or glue smoke stack
nail on Cowcatcher

Put screw eye in back of engine

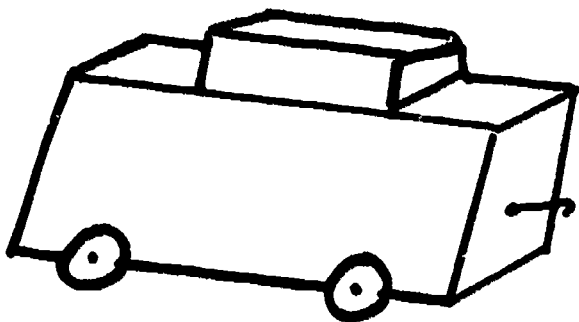
Sandpaper and paint

Baggage Cars



nail on wheels
 put screw hook nose
 in front
 put screw eye nose in
 back
 Sandpaper and paint

Caboose



nail on wheels
 nail on crows nest
 put screw hook in
 front
 Sandpaper and paint

TEACHING ACTIVITIES

MAKING DOLL FURNITURE

--HAVE students use their own ideas to construct doll furniture from fruit crates, sand and paint.

MAKING A PLAYHOUSE

--SECURE a large appliance box from a washing machine or larger.

--TURN opening to the side for a door.

--CUT windows and paint with tempera.

KNITTING

--HAVE knitting coach demonstrate and instruct students on the basic knitting stitch. Let students help each other.

--PRACTICE

--THEN cast on 50 stitches, and knit until you have a square about 7" square.

--HAVE students take 8 finished squares and sew them together with an overhand stitch to make doll blankets 2 squares wide and 4 squares long.

--BLANKETS may be decorated with a ribbon sewn around the outside.

MATH: measuring

Session 4 - MAKING BOOKS

--HAVE publishing company decide whether they want to make books for learning or books for fun, or both.

BOOKS FOR LEARNING

--DISCUSS what kindergarteners learn--colors, letters, shapes, animals, numbers

--ASK: How could we make books that teach these things?

TEACHING ACTIVITIES

SECOND GRADE
RESOURCES

SUGGESTIONS FOR TEACHING BOOKS:

Colors: on one page, there would be a circle, or square, or triangle of a particular color. Beside the shape the color would be written. Example, a red circle -- "red"

Letters: One letter could be put on each page, along with a picture of an occupation that begins with the same sound. Example: "a" -- astronaut

Pictures could be drawn or cut out of magazines and pasted on page.

--HAVE editor and staff decide how covers will be made. (Cardboard covered with a picture, for example). Also decide how books will be bound. (An easy way would be to punch holes through cover and pages and tie with ribbons.)

BOOKS FOR FUN

--STUDENTS could write and illustrate simple stories about the toy train and boats or about animals etc.

READING & WRITING

CREATIVE WRITING
AND ART

Session 5 - GIFT PRESENTATION

--ARRANGE a time and a date to have class take toys and books to present to the kindergarten.

--LATER, discuss how the kindergarten kids reacted to the gifts and how this made the givers feel.

--TAKE a few minutes to discuss the many different activities the second grade has done during the year--the mini-park, indoor garden, nursery, trucking, company, etc.

--HAVE EACH STUDENT WRITE A LIST of 3 things he has learned how to do during the year. WRITING

UNIT THIRTEEN: SOAP CARVING HOBBY AND A PARTY
(5 Sessions)

EXPECTED STUDENT PERFORMANCE:

The student will be able to:

- make a sailboat out of soap as an example of
one kind of hobby
- list 3 kinds of recreation that adults enjoy
(besides TV)
- plan and execute a class party to be held
near the mini-park and to include:
 - refreshments, games, and a boat sailing
contest

CURRICULUM RELATED CONCEPTS:

MATH: Measuring for refreshments; keeping score in games

SCIENCE: Sailboats run on wind energy; parafin keeps
soap boat from melting in water

MATERIALS NEEDED:

- 1 bar Ivory soap for each student (small size)
- 1 paring knife per student
- parafin wax
- double boiler
- hot plate
- popsicle sticks
- 1 large slotted spoon
- wax paper

TEACHING ACTIVITIES.

RESOURCES

Session 1 --INTRODUCTION TO RECREATION

- ASK: Why do adults need to work?
(for money for food, clothing,
shelter, transportation)

TEACHING ACTIVITIES

- SAY: There is another very good reason adults work--to keep busy doing something satisfying.
- TELL about Prisoners of War who find that the worst part of being prisoners is that they have nothing to keep them busy all day and night. People need to have meaningful activity.
- ASK: But can adults work all the time? Or do they need time to play? (need time to play)
- SAY: Another word that adults use for play is "recreation".
- ASK: What are some things adults do for recreation? LIST ON BOARD.
(TV, sports, hobbies)
(skiing, golf, swimming, hunting, fishing, camping, boating, mountain climbing, gardening, photography, cooking, collecting things)
- ASK: Which of these are hobbies, and which are sports?
- Do people have to learn things in order to enjoy their hobbies?
(yes--learn knitting, etc)
- Does school teach things (skills) that adults need for recreation?
(yes)
- Can you say that school only teaches things you need to work on a job? (no)
- ASK: Do you think kids need recreation?
- SAY: let's plan a party for fun to celebrate the end of the school year.

BLACKBOARD list

TEACHING ACTIVITIES

--SELECT committee chairmen who have not had much leadership opportunity during the year and have them choose their committees.

You will need:

- Refreshment Committee Chairman
- Games Committee Chairman
- Contest Chairman (sailboat contest)

Session 2 - COMMITTEE MEETINGS

REFRESHMENTS:

--These should be simple and inexpensive to make, example--kool-aid and popcorn, or cookies.

--HAVE committee figure out how much of each item they will need to get and to prepare.

--DETERMINE who will take responsibility for what items. DECIDE who will make refreshments, where, and when.

GAMES:

--HAVE committee decide what outdoor games the class would enjoy and whether they will be team games or individual games. If team games, how will teams be selected?

--WRITE up a schedule of games that can be played.

--DECIDE if prizes will be awarded, and if so, what they will be. (Ribbons?)

--SELECT scorekeepers and referees.

--PLAN to include the game "What is My job?"

CONTEST COMMITTEE:

--DECIDE where they can get a large tub to fill with water to race the soap boats that each student will make.

--PLAN how race will be conducted and what awards might be given to winners.

MATH: figuring amounts

TEACHING ACTIVITIES

--ASSIGNMENT: Bring to class 1 small bar of Ivory soap, 1 popsicle stick (or long sucker stick) and 1 small paring knife.

DISCUSS safe ways to pad the knife in newspaper to bring it to school, in a paper bag. Explain that any student who does not bring his knife to school and take it home again in this manner will not be allowed to do soap carving.

SESSION 3 - CARVING SOAP BOATS

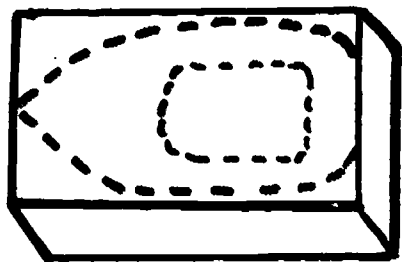
--HAVE students follow these safety rules and have certain safety foreman designated to enforce the rules:

- 1) The knife is to be used for carving soap only. (Not for threatening others, carving desks, etc.)
- 2) In carving, always carve away from body not toward it.
- 3) Carve by chipping off small slivers of soap at one time--not big hunks. If you chop off big hunks, the soap may break and your boat is ruined. Also, you are more apt to get cut.

ANY STUDENT WHO DOES NOT FOLLOW THESE RULES WILL BE DISQUALIFIED FROM THE CONTEST AND WILL NOT BE ALLOWED TO FINISH CARVING HIS BOAT.

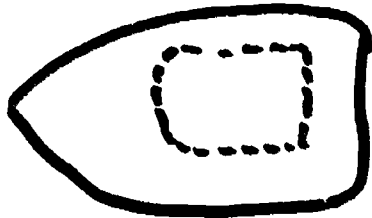
CARVING THE BOAT:

- 1) Gently scrape the lettering off the top of the soap bar to make a flat surface.
- 2) With a pencil, draw lightly, the shape of a boat on the top of the soap bar.

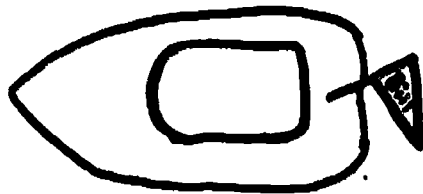


TEACHING ACTIVITIES

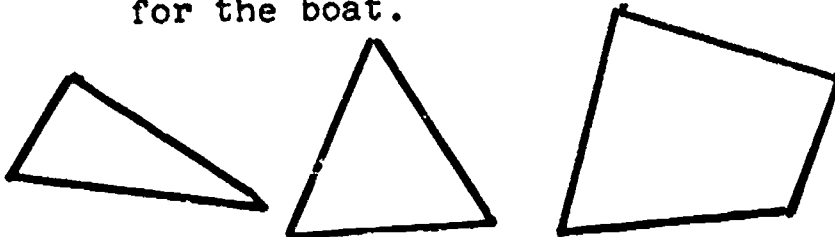
- 3) Begin slicing slivers on outside of soap bar a little at a time until soap is the shape drawn on the top. KEEP SOAP SHAVINGS ON NEWSPAPER THAT YOU ARE WORKING ON, SO THAT SOAP SCRAPS DON'T GET ON THE FLOOR.



- 4) Then, gently carve out the inside on the drawn lines. Do not carve all the way through to the sides or bottom of the soap bar.
- 5) Smooth all carved surfaces by lightly wetting finger and running it over cut edges.
- 6) Make a flag for back of boat to put your name on. Cut a piece of paper in a triangle shape and glue it on a tooth pick. Stick it into the back part of the boat.



- 7) Make a paper sail such as these below, not too big or too small for the boat.



SCIENCE: DISCUSS
WIND POWER OR ENERGY
MAKES SAILBOATS GO

- 8) Carefully put popsicle stick through the sail twice by cutting small slits in sail. Stick the mast with sail into front part of boat.



TEACHING ACTIVITIES

COATING THE BOATS WITH WAX:

- ASK: What will happen to our boats now if we put them in water? (they will melt)
 - SAY: That is why we will coat them with melted wax--they they will not melt in water.
 - EXPLAIN: Paraffin wax can explode if it is heated directly over fire. So we will melt it over boiling water in a double boiler. HAVE students read the "CAUTION" on the wax label.
 - WHEN wax is melted, have one student at a time come up and dip his boat in the melted wax. THE TEACHER WILL NEED TO ASSIST by seeing that all sides of the boat are coated, and then remove the boat quickly with a slotted spoon. Hold it over the pan until dripping stops. Then lift it on to a sheet of waxed paper to dry.
 - DISCUSS soap carving as a hobby that even adults might enjoy. ASK: What other things can you carve from soap?
 - EXPLAIN: we used Ivory soap because it will float in water. Not all soap floats. Also, it is soft and easy to work with.
-

SCIENCE

Session 4- TAOSCORE POST TEST

- IF YOU HAVE NOT ALREADY DONE SO, administer the Taoscore Pre-Post Test to students.
- ALSO, COMPLETE THE Teacher's Tabulation Form and the Teacher's Final Evaluation Form and submit them to the Career Education Project Office before the deadline date.
- HAVE students write 3 kinds of recreation that adults enjoy.

CAREER EDUCATION
PRE-POST TEST

Teacher's
Tabulation Form
Teacher's
Final Evalu-
ation Form

TEACHING ACTIVITIES

SECOND GRADE
RESOURCES

Lesson 5 --THE PARTY

- HAVE refreshment committee prepare the refreshments ahead of time.
 - GAMES committee conducts the games and gives awards as planned.
 - HAVE party near the mini-park so students may enjoy the beauty of their work.
 - SERVE refreshments.
 - HAVE BOAT RACES conducted by committee.
 - LET students take boats home with them to float in their bathtubs.
-

MATH: scoring

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All of the TAOSCORE TEACHER'S
GUIDES, Grades 1 - 6 were developed
by and in consultation with:

Lois W. Harmeson,
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Albuquerque, New Mexico 87114

UNIT NINE: POLLUTION CONTROL
(Ongoing Project)

EXPECTED STUDENT PERFORMANCE:

The student will be able to:

- organize and implement a program for pollution control and beautification on the school grounds
- name at least two occupations related to pollution control in communities

CURRICULUM RELATED CONCEPTS:

SCIENCE: Harmful and unhealthy insects and rodents

SOCIAL STUDIES: Protecting our natural resources;
pollution that is unhealthy and unsightly in communities

MATH: addition

READING & Writing: Researching about insects and rodents;
developing campaign materials

TEACHING ACTIVITIES

RESOURCES

Session 1--IDENTIFYING THE PROBLEMS OF POLLUTION

--SHOW two pictures:

- 1) of a trash filled street or school yard
- 2) of an unpolluted, neat and clean street or school yard

--TAKE a vote to find out how many students would prefer to live in the first picture--in the second?

ASK: Why did you vote for that picture?
(It looks prettier.)

Do you think it would be healthy to live in the other picture? Why not?
(Disease carrying insects and rodents are attracted to debris and would be found in the polluted situation)

TEACHING ACTIVITIES

THIRD GRADE
RESOURCES

--HAVE students research harmful insects such as roaches, and also rodents.

HAVE students make posters with pictures about these harmful insects and rodents.
OR write reports on subject.

READING

POSTERS
OR
WRITING REPORTS

Lesson 2- PLANNING PROJECT

--EXPLAIN: that one of the second grade class projects is trying to improve the beauty of the school yard by making a Mini-park that everyone can enjoy.

--ASK: Does it matter how our school yard looks? Why?

--DRAW a large circle on the board. EXPLAIN: this circle stands for all the hours in one day. ASK: How many hours does this circle stand for? (24)

MATH: hours in a day

--ASK: How many of these hours do you spend sleeping? (about 8)

--SHADE in a portion of the circle to show time spent in sleep.

--ASK: How many hours do we spend awake in a 24 hour period? (about 16)

SUBTRACTION

How many of these waking hours do we spend at school? (about 6)

--SHADE with X's to indicate how much of the 24 hours in a day is spent in school.

--ASK: What fraction of the hours of a day do you spend in school? (1/4)

FRACTIONS

If 1/4 of your day is spent in school, is it important that you be in clean, neat and attractive surroundings?

--ASK: What could our class do to improve the environment of our school grounds?

TEACHING ACTIVITIES

NOTE: If possible, let students make their own suggestions for pollution control on the schoolgrounds. Have them plan a program and carry it out. If they need some ideas, some suggestions follow:

--(1) Form a pollution patrol with teams of students scheduled for different days of the week to patrol the grounds and pick up debris.

--(2) Start a clean-up campaign school wide with posters and speeches.

--(3) Provide outdoor tables for students on the grounds.

Secure large reels used for electric and telephone cable (from phone company or electric company)

Paint and decorate and locate on grounds.

Find small barrels or similar object for chairs. Paint.



--(4) Paint and decorate trash cans to locate on school grounds.

NOTE: project may expand to take in the whole community.

Session 3- OCCUPATIONS RELATED TO SANITATION AND ECOLOGY IN THE COMMUNITY

--SPEAKER from city to talk of occupations related to city ecology and beautification, such as:

Street cleaners
Park personnel
Garbage & trash collectors
City health inspector

UNIT TEST

Name two occupations related to control of pollution.

UNIT TEN: MANUFACTURING MAGNETIC POSTAL SCALES
(8 Sessions)

EXPECTED STUDENT PERFORMANCE:

The student will be able to:

- construct a magnetic postal scale
- calibrate the scale to weigh letters up to 2 ounces
- write and weight letters to pen pals and determine
the amount of postage needed
- list 3 favorite occupations experienced or
studied during the year
- list 3 new skills learned during the year

CURRICULUM RELATED CONCEPTS:

SCIENCE: Magnetism; like poles repel

MATH: Weights and measures--0 - 2 ounces; measuring inches;
figuring postage

READING AND WRITING: Vocabulary "calibrate"; Writing
letters; letter composition; practice with cursive
writing

SOCIAL STUDIES: Map study locating homes of pen pals

MATERIALS NEEDED:

For each scale:
scrap lumber - 1" thick
saw
drill - 1/4" bit
1/4 " dowel - 6 " long
5 small ring magnets #P41292 (Pack of 25 for \$1.00)
Order from: Edmund Scientific
Barrington, N.J. o8007

(Materials Continued)

1/4 inch diameter plastic (see through) straw
 dark wood stain
 enamel - several colors
 black plastic tape
 green plastic tape
 red plastic tape
 blue plastic tape
 2" X 1" square of cardboard

Will also need:

8¢ stamps
 10¢ air mail stamps
 envelopes

To Use as Weights to Calibrate Scales:

ten "new" nickels
 three "new" pennies

NOTE: IF AT ALL POSSIBLE, PROVIDE ENOUGH MATERIALS
 SO THAT EACH STUDENT CAN MAKE HIS OWN SCALE,
 OTHERWISE, HAVE STUDENTS WORK IN GROUPS OF
 3 OR 4 TO MAKE COMMUNITY SCALES.

TEACHING ACTIVITIES

RESOURCES

Session 1 - INTRODUCTION-

--HAVE students recall all the different occupations they have experienced and/or studied during the year, including those related to tourism, manufacturing, dam and forestry, florist, pollution control.

--SAY: Be thinking about which are your 3 favorite occupations or careers that we have studied this year. Later on, I will ask you to write them down.

--EXPLAIN: No matter what career you choose when you grow up, you will probably use the U. S. postal service.

--ASK: How do people pay to mail a letter? (stamps)

How much does it cost for a star? (8¢ for most regular mail--unless it is heavy. Air mail costs more.)

TEACHING ACTIVITIES

--ASK: How can you tell how much postage a letter will need? (Weigh it on a postal scale)

--ASK: Do you have a postal scale at home that you can weigh letters on? (no?)

Where can you go to get a letter weighed? (post office)

--SAY: Wouldn't it be a lot easier if you had your own scale at home or in your office?

We will make our own postal scales.

--DISPLAY a scale you have made ahead of time.
INVITE students to carefully examine it to see what it is made of.

--ASK: What do you think the round disks on the scale are? (magnets)

What holds them apart on the straw? (magnetic forces)

Why don't the magnets pull together? (like poles are facing each other and they repel instead of attract, this keeps them separated.)

--SELECT a manager and safety foreman for the woodshop in which students will make the base for their scales.

--SELECT a committee to find out from the post office: How many ounces of regular mail can be sent for 8¢, for 16¢, for 24¢? Also weights and rates for air mail.

--HAVE committee make a weight postage poster to show:

Weight	Regular Mail	Air Mail
Up to 1/2 oz.	8¢	10¢
1/2 to 1 oz.	8¢	
1 oz. to 2 oz.		

SCIENCE: magnets

like poles repel

TEACHING ACTIVITIES

THIRD GRADE RESOURCES

Session 2 - MAKING THE BASE


- HAVE foreman post Supplement "A" in woodwork area. It shows two shapes that might be used for the base, and gives their dimensions.
- HAVE students measure and mark wood for cutting; use wood 1 inch thick.
- CUT pattern with saw as marked.
- Drill $1/4$ inch hole as marked on pattern. Drill between $1/2$ and $3/4$ " deep. DO NOT GO THROUGH THE BASE.
- SAND base smooth with sandpaper.
- Paint with enamel. Let dry.
- DECORATE with name and designs using different color of enamel.

SUPPLEMENT A,
Page 65

MATH: measuring inches

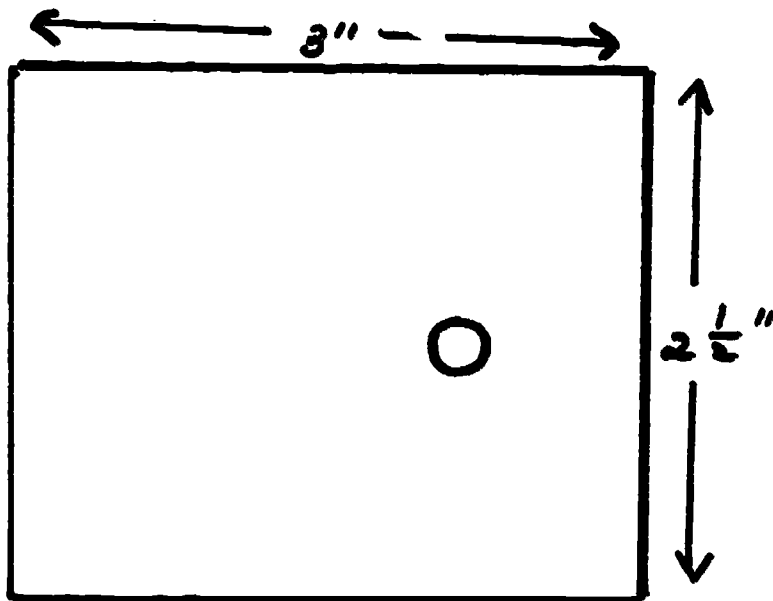
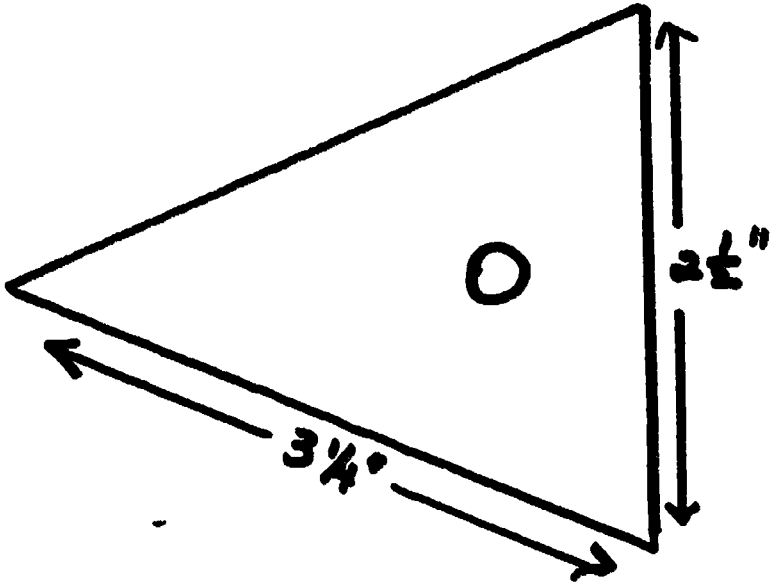
Measuring fractions

Session 3 - PREPARING THE DOWEL

- SAND a $1/4$ inch dowel that is 6 inches long. This is important so magnets will slide easily on the stick.
- SAW $1/2$ inch piece of dowel from one end. Sand rough edges.
- MEASURE and cut a piece of cardboard about 2 inches by 1 inch for the weighing platform. (It may be square)
- PAINT or color cardboard.
- GLUE one end of the $1/2$ -inch piece of dowel to the center of the bottom side of the cardboard. (When cardboard is right-side-up and flat, the dowel sticks downward.) Let glue dry. 
- COVER long dowel piece with dark wood stain. Let Dry.

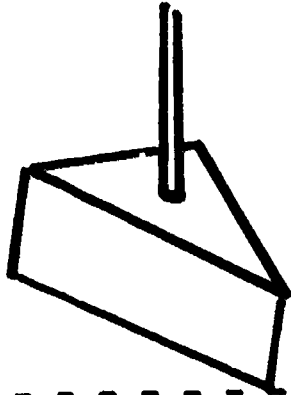
MATH: measuring inches

BASE PATTERNS



TEACHING ACTIVITIES

PUT a drop of glue on one end of long
dowel and tap it into the hole drilled
in the base, with a hammer.



Session 4 - ASSEMBLING POSTAL SCALE

1. Slip 5 ring magnets over the dowel with like poles facing each other.

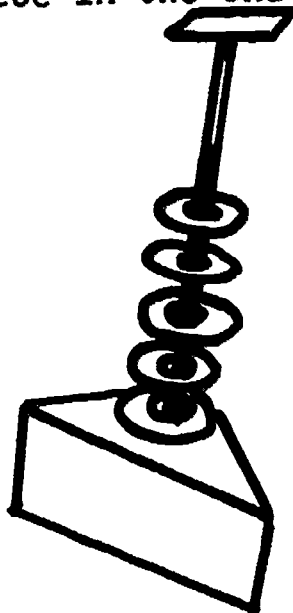
--ASK: What happens to the bottom magnet?
(It rests on the base.)

What happens to the other four
magnets? (They float on the
dowel--they do not touch each other.)

2. Measure and cut the straw down to 5 inches.

3. Slip the straw over the end of the
dowel. (The straw should ride freely
resting on the top magnet and extending
several inches above the top of the
dowel.)

4. Install the weighing platform on top of
the straw by slipping the short dowel
piece in the end of the top of the straw.



SCIENCE: magnetism

MATH: measure

TEACHING ACTIVITIES

ion 5 - CALIBRATING THE SCALE

--HAVE students fold several pages of paper and put them on their scales. WHEN WEIGHING LETTERS PUT THE LETTER ON THE WEIGHING PLATFORM AND GIVE THE LETTER A SLIGHT SPIN. This cuts friction between the straw and dowel.

--ASK: When we put weight on the scale, what part of the scale moves?
(The straw moves down)

Why does the straw move down?
(Weight of paper pushes it down against the top magnet. This pushes magnets down and squeezes them closer together!)

What would happen if you weighed a heavier envelope?
(Straw pushes down further)

--EXPLAIN: We want to know how much weight is pushing down. We will need to know how much a letter weighs. Does it weigh less than 1/2 ounce? less than 1 ounce? less than two ounces?

--DISPLAY postage-weight chart to class.

--SAY: Notice that without any weight on the weighing platform, the line where the wood dowel shows through is the line that shows no weight--zero.

--HAVE students cut a sliver about 1/32 " of black tape and wrap it around the straw at the point where the dowel ends without any weight on scale. This black stripe means "0" ounces.

TEACHING ACTIVITIES

--SAY: Now we want to put a stripe above the "0" mark to show the $\frac{1}{2}$ ounce mark. To do this, we will put something on the scale that we know weighs $\frac{1}{2}$ ounce. That will depress the straw.

--SAY: One new nickel and 3 new pennies are coins that weigh $\frac{1}{2}$ ounce.

--WRITE ON THE BOARD: 1 nickel plus 3 pennies equal $\frac{1}{2}$ ounce.

BE SURE STUDENTS UNDERSTAND WE ARE NOT TALKING ABOUT THE MONEY VALUE--JUST THE WEIGHT OF THE METAL IN THE COINS.

--HAVE students place 3 pennies and 1 nickel on their scale.

OBSERVE the line where the end of the dowel shows through the straw now.

CUT NARROW sliver of green tape and wrap it around the line.

--ASK: How many ounces does the black line mean? (0)

. How many ounces does the green line mean? ($\frac{1}{2}$)

--EXPLAIN that 5 new nickels and 1 new penny weigh 1 ounce.

--WRITE ON BOARD: 5 nickels + 1 penny = 1 ounce.

--HAVE students put 5 nickels and 1 penny on their scales and put a thin stripe of red tape on the straw at the line where the end of the dowel shows thru.

--ASK: What does the red line mean? (1 oz)

TEACHING ACTIVITIES

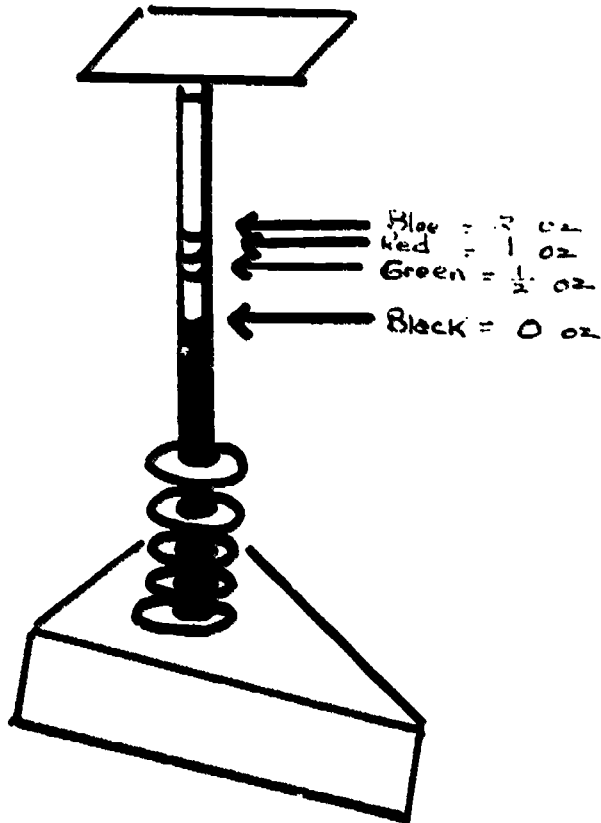
--SAY: The last mark on the postal scale will be for 2 ounces.

10 new nickels and 3 new pennies will equal 2 ounces.

--WRITE ON BOARD: 10 nickels + 3 pennies =
2 ounces

--HAVE students place 10 nickels and 3 pennies on their scales and make the two ounce mark on the straw with a sliver of blue tape.

--SCALE will now be marked as shown:



TEACHING ACTIVITIES

THIRD GRADE
RESOURCES

Session 6- WEIGHING LETTERS

--TEACHER should make up 5 or more sealed envelopes which shall be numbered and contain the following different weights:

- 1) Regular mail - with 1 sheet of paper in envelope
- 2) Regular mail - 6 sheets of paper
- 3) Air Mail - 5 sheets of paper
- 4) Regular Mail - 4 sheets of paper
- 5) Air Mail - 1 thin sheet of paper

--ALSO make up an ANSWER SHEET listing the number of each envelope and the amount of postage needed to mail each according to its weight.

Example:

- 1) -- 8¢
- 2) -- ?

--REMIND students to twirl letter on scale. DISCUSS reading the lines on scale-- if a letter goes over a line, it requires the amount of postage needed for the next line.

--HAVE students weigh each numbered envelope, and consult the postal chart to find out how much postage he will need. Have him record this.

--THEN have students check their answers with the answer sheet. IF ANY STUDENT HAS DIFFICULTY, have another student assist him.

--HAVE students look through copies of children's magazines that list "pen pals" (or have teacher supply list of names). Each student shall choose a "pen pal" to write to.

--DISCUSS letter writing form. Have students write a letter to pen pals.

--LOCATE on map where each pen pal lives by city and state.

--DISCUSS how to address letters. Address envelopes.

--WEIGH and stamp letters for mailing.

- - - - -

READING scale marks

READING chart

READING

WRITING LETTERS

SOCIAL STUDIES: maps

WEIGHING LETTERS
STAMPING LETTERS

TEACHING ACTIVITIES

NOTE TO TEACHERS:

For one reason or another, you may wish additional or alternative simulation experiences for your students. In this event, here are three suggestions:

1) Micro-Biology Simulation

--collect pond water and study plant and animal life in it with magnifying glass and microscope. Such creatures as hydra, planarian, and horsehair worm would most likely be found and this is in keeping particularly with science concepts at your level.

2) Crafts simulation (tourism trade)

--collect discarded aluminum cans and decorate by punching designs in them with nails, screwdrivers, awls, etc. Can must be put over wood arm when punching to prevent it from collapsing. Cans make nice candle holders for the thick candles or are good for pencil holders. Ecology study.
--learn the craft of Japanese paper folding--
Orgami. This can tie in with animal study.

3) Checkers tournament

--competition is a vital part of life. It is important for children to learn how to meet it in a healthy way. The game of checkers also helps develop mental processes and decision making abilities.

Do not hesitate to attempt a simulation in some subject within your knowledge that you can relate to curriculum concepts. It is hoped, however, that when particular units of this material are skipped, that attitude concepts within the unit will be included at some other point during the year.

Session 7 - POST TEST

- LIST your 3 favorite occupations studied or experienced this year.
- LIST 3 new skills you have learned to do this year.



ACTIVITIES

THIRD GRADE
RESOURCES

Session 8 - TAOSCORE EVALUATION

--IF you have not already done so,
administer the TAOSCORE PRE-POST TEST
to students.

TAOSCORE PRE-POST TEST

--Also, complete the Teacher's Tabulation Form,
and the Teacher's Final Evaluation Form
and submit these to the Career Education
Project Office before the deadline date.

Teacher's Tabulation Form
Teacher's Final Evaluation

LET STUDENTS TAKE THE POSTAL SCALES
HOME AND ENCOURAGE THEM TO CONTINUE
THEIR CORRESPONDENCE WITH PEN PALS
DURING THE SUMMER.

READING AND WRITING
USING POSTAL SCALE

INDEX

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All of the TAOSCORE TEACHER'S
GUIDES, Grades 1 - 6 were developed
by and in consultation with:

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UNIT NINE: MULTIPLICATION BINGO

(7 Formal Sessions - Ongoing Project)

NOTE: THIS IS AN IMPORTANT SELF AWARENESS UNIT WHICH PROVIDES
INVALUABLE PRACTICE WITH MULTIPLICATION FACTS.

EXPECTED STUDENT PERFORMANCE:

The student will be able to:

- participate in non-athletic competition
- demonstrate improvement in recalling multiplication facts quickly
- be less afraid to compete and be more willing to try to win in a long term sustained effort.

CURRICULUM RELATED CONCEPTS:

MATH: Multiplication facts

TEACHING ACTIVITIES

RESOURCES

Lesson 1- COMPETITION

--SHOW SRA filmstrip "Number One" with sound track.

SRA FOCUS, Stage 2
Unit Q
Sound-Side 6 of
filmstrip records

--HAVE students complete in writing these sentences:

What I like about competing is _____

What I don't like about competing is _____

I am not good at competing in _____

I could be better at competing if _____

--DISCUSS the completion sentences and the students feelings about competition.
(Is it always good? Is it bad?)

WRITING

TEACHING ACTIVITIES

--DISCUSS special talents that some people have that make them better at some things. (art talent, athletic ability, music talent, etc.)

--ASK: But what makes a great artist really great? Even if someone has talent, what does he have to do to become one of the best of anything? (practice, study, and practice some more)

--ASK: Even if you are not very good at something (like painting pictures or playing baseball) do you think you could improve in that? How? (practice)

--EXPLAIN: We are going to have a class competition or tournament. Anyone in the class who is willing to TRY and to PRACTICE can become the best--he can be a winner. Everyone has a good chance to be a winner if he wants to be.

For our tournament, we will play a lot of games of Multiplication Bingo.

--ASK: What do you think you will want to practice in order to be a winner? (multiplication table)

--SAY: Some students might think, "I can't win; I'm not good at math."

ASK: Do you think that is true?
Or do you think anyone who really tries has a chance to win?

--EXPLAIN: Trying to win is important not only in school but in all of life. You will always be competing if you work when you grow up.

ASK: How do you think people have to compete in work? (getting a job; doing a good job; getting promotions)

ASK: Then, do you think it is important to learn to try--to learn to compete in our Bingo tournament?

TEACHING ACTIVITIES

FOURTH GRADE RESOURCES

--HAVE students decide (if possible) on what awards or privileges might be given to winners of the tournament. (Prizes, ribbons, privileges of special kinds etc.)

--ASSIGN some students to make a poster to show awards for 1st, 2nd, and 3rd prize.

ART WORK

--HAVE some students make a chart which includes the name of each class member and has a lot of space after the name to put up a star for each Bingo game the student wins or ties.

NOTE: At the end of the tournament, students having the greatest number of stars will be awarded prizes in a special ceremony. Winners may have their pictures taken for the local newspaper, or placed on posters in the school.

ion 2--PREPARING THE BINGO GAME

--PROVIDE students with a copy of Bingo Card A or have them each make their own on paper with a ruler and felt pen.

--HAVE two students make a set of the multiplication fact cards for Bingo Game A. These cards should each one multiplication fact such as $2 \times 2 = 4$ written with a felt pen.

NOTE: BINGO GAME A IS PLAYED BY USING MULTIPLICATION FACTS 1×1 through 5×5 . FACTS FOR GAME A ARE LISTED ON SUPPLEMENT 2.

--HAVE students collect bottle caps (may be painted) or make other kinds of cardboard markers to use in the game. (Can use corn or similar item)

ion 3--PLAYING BINGO GAME "A"

--EXPLAIN how to play the game. The caller will shuffle the index cards with facts on them, then place them in a stack fact down on the table before him. (TEACHER SHOULD BE CALLER FOR THE FIRST GAME)

TEACHING ACTIVITIES

--NEXT the caller picks up the top card and reads the facts, but not the answer, clearly and loudly--example: 2 times 3.

Then the caller puts that card in a second stack, face down on the table.

--The players upon hearing "2 times 3" will quickly put a marker on the square of their Bingo Card A which gives the right answer to "2 times 3". They can cover any square that says 6 on their card. NOTE: SOME NUMBERS APPEAR TWICE ON BINGO CARDS.

--WITHOUT waiting very long, the caller then picks up the next card and calls it. PLAYERS respond by covering a number which is the correct answer to the facts called.

--THE FIRST PLAYER or players to cover 5 squares in a row--sideways, up and down, or from corner to corner--calls "BINGO". If several students call Bingo at the same time, each is a winner.

--WINNERS must then verify that they have put markers on the right answers. The player reads his covered answer and the "caller" verifies he has a factor that was called which has that answer.

--EACH winner places a star after his name on the chart. ONE of the winners may then be selected as the next "caller".

NOTE: REPEAT BINGO GAME "A" UNTIL ALL STUDENTS HAVE WON AT LEAST ONCE, AND ALL ARE FAMILIAR WITH THESE FACTS. YOU MAY REPEAT THE GAME FOR A NUMBER OF DAYS UNTIL THIS HAS BEEN ACCOMPLISHED.

--SUGGEST that students who are slow to win, remember that competition requires practice. The more they practice, the better chance they will have of being a winner.

FOURTH GRADE RESOURCES

MULTIPLICATION FACTS
1 X 1 thru 5 X 5

TEACHING ACTIVITIES

FOURTH GRADE
RESOURCES

ion 4- BINGO GAME "B"

--HAVE students prepare Bingo Card B so that each student has a copy. (Supplement 3)

--HAVE students make index cards for Game B facts as listed on Supplement 4.

--PLAY Bingo Game "B" in the same manner as Game "A". REPEAT GAME UNTIL STUDENTS SHOW CONSIDERABLE GAIN IN BEING ABLE TO QUICKLY COVER THE RIGHT ANSWERS.

MULTIPLICATION FACTS
6 X 1 thru 10 X 5

ion 5- BINGO GAME "C"

--HAVE students prepare Bingo Card C and index cards according to Supplement 5 and 6.

--PLAY game as before repeating 10-15 times.

MULTIPLICATION FACTS
4 X 6 thru 9 X 10

ion 6- BINGO GAME "D"

--HAVE students prepare Bingo Card "D" and index cards with facts. (Supplements 7 and 8)

--NOTE: TO WIN GAME "D" STUDENTS MUST HAVE 6 numbers covered in a row (instead of 5).

--HAVE students play Bingo, repeating as necessary.

MULTIPLICATION FACTS
Review of difficult facts & higher facts

ion 7 - WINNERS CEREMONY

--HAVE students count stars on chart to see who are the winners.

--HAVE students plan and carry out the award presentation ceremony (taking pictures of winners if desired)

UNIT TEST

. Present a written test on all the multiplication facts.

BINGO GAME CARD "A"

1	2	3	4	5
2	4	6	8	10
3	6	9	12	15
4	8	12	16	20
5	10	15	20	25

COVER 5 numbers in a row, or across, or corner to corner

Facts for Bingo Game "A"

WRITE ONE OF THESE FACTS ON EACH INDEX CARD

1 X 1 : 1
1 X 2 : 2
1 X 3 : 3
1 X 4 : 4
1 X 5 : 5

2 X 1 : 2
2 X 2 : 4
2 X 3 : 6
2 X 4 : 8
2 X 5 : 10

3 X 1 : 3
3 X 2 : 6
3 X 3 : 9
3 X 4 : 12
3 X 5 : 15

4 X 1 : 4
4 X 2 : 8
4 X 3 : 12
4 X 4 : 16
4 X 5 : 20

5 X 1 : 5
5 X 2 : 10
5 X 3 : 15
5 X 4 : 20
5 X 5 : 25

BINGO GAME CARD "B"

6	12	18	24	30
7	14	21	28	35
8	16	24	32	40
9	18	27	36	45
10	20	30	40	50

COVER 5 NUMBERS IN A ROW--ANY DIRECTION

SUPPLEMENT #4

MAKE INDEX CARDS FOR THESE FACTS FOR BINGO GAME "B"

6 X 1: 6
6 X 2: 12
6 X 3: 18
6 X 4: 24
6 X 5: 30

7 X 1: 7
7 X 2: 14
7 X 3: 21
7 X 4: 28
7 X 5: 35

8 X 1: 8
8 X 2: 16
8 X 3: 24
8 X 4: 32
8 X 5: 40

9 X 1: 9
9 X 2: 18
9 X 3: 27
9 X 4: 36
9 X 5: 45

10 X 1: 10
10 X 2: 20
10 X 3: 30
10 X 4: 40
10 X 5: 50

SUPPLEMENT #5

BINGO GAME CARD "C"

24	28	32	36	40
30	35	40	45	50
36	42	48	54	60
42	49	56	63	70
48	56	64	72	80
54	63	72	81	90

COVER 5 NUMBERS IN A ROW--ACROSS or 6 NUMBERS IN A ROW UP AND
DOWN

SUPPLEMENT # 6

MAKE INDEX CARDS FOR THESE FACTS FOR BINGO GAME "C"

4 X 6: 24
4 X 7: 28
4 X 8: 32
4 X 9: 36
4 X 10: 40

5 X 6: 30
5 X 7: 35
5 X 8: 40
5 X 9: 45
5 X 10: 50

6 X 6: 36
6 X 7: 42
6 X 8: 48
6 X 9: 54
6 X 10: 60

7 X 6: 42
7 X 7: 49
7 X 8: 56
7 X 9: 63
7 X 10: 70

8 X 6: 48
8 X 7: 56
8 X 8: 64
8 X 9: 72
8 X 10: 80

9 X 6: 54
9 X 7: 63
9 X 8: 72
9 X 9: 81
9 X 10: 90

SUPPLEMENT # 7

BINGO GAME CARD "D"

15	18	21	24	27	30
25	30	35	40	45	50
24	30	36	42	48	54
28	35	42	49	56	63
32	40	48	56	64	72
36	45	54	63	72	81

COVER 6 NUMBERS --ANY DIRECTION

SUPPLEMENT #8

MAKE INDEX CARDS FOR THESE FACTS FOR BINGO GAME "D"

3 X 5: 15
3 X 6: 18
3 X 7: 21
3 X 8: 24
3 X 9: 27
3 X 10: 30

5 X 5: 25
5 X 6: 30
5 X 7: 35
5 X 8: 40
5 X 9: 45
5 X 10: 50

6 X 4: 24
6 X 5: 30
6 X 6: 36
6 X 7: 42
6 X 8: 48
6 X 9: 54

7 X 4: 28
7 X 5: 35
7 X 6: 42
7 X 7: 49
7 X 8: 56
7 X 9: 63

8 X 4: 32
8 X 5: 40
8 X 6: 48
8 X 7: 56
8 X 8: 64
8 X 9: 72

9 X 4: 36
9 X 5: 45
9 X 6: 54
9 X 7: 63
9 X 8: 72
9 X 9: 81

UNIT TEN: THE CRAFT OF MAKING OJOS
(More than 7 Sessions)

EXPECTED STUDENT PERFORMANCE:

The student will be able to:

- prepare wood dowels for ojo sticks
- make an 18" Ojo De Dios (God's Eye)
by following written directions
- arrange and display a poster which has a mounted
collection of the year's activities in photographs
or illustrations
- provide appropriate captions for photos or
illustrations on the poster
- explain his favorite activity of the year and tell
why it is his favorite

CURRICULUM RELATED CONCEPTS:

SOCIAL STUDIES: Customs of Mexican Indians

READING AND WRITING: Directions for making ojos; writing
captions; writing explanation of favorite activity

MATH: Counting rows of yarn windings; division concepts
for preparing ojo sticks

MATERIALS NEEDED:

For each Ojo--

- white glue and scissors
- 3 colors of 4-ply yarn (less than 2 oz. of each color)
- 1 36-inch dowel (wood) 1/2 inch thick

Tools Needed:

- coping saw
 - sandpaper
 - ruler
 - sharp knife
-

TEACHING ACTIVITIES

FOURTH GRADE
RESOURCES

ion 1 - INTRODUCTION TO UNIT

--ASK: Have you ever seen an Ojo De Dios
or Eye of God or God's Eye?

Where have you seen them?
(Hanging on walls as decorations
in homes, offices, business and
in local craft shops for sale.)

Do you know the special meaning of
ojos? (They supposedly drive away
evil and bring goodness.)

Where did this belief come from?
(The first people who made ojos--
the Indians in Mexico, many years
ago.)

Is Mexico close to our state or
far away from it? (close--that is
probably why ojos are very popular
in our state--but other states far
from us do not use them much. There
many people do not even know what
ojos are.)

Why do you suppose that tribe of
Indians made ojos? Were they just
for decoration? (No. They were a
religious item--a prayer offering
to their God)

--EXPLAIN: We are going to make ojos because
they are fun to make, and they are
beautiful. Also, because many people
make a living or make extra money by
selling their ojos in craft shops to
tourists from other states who cannot
get them where they live. Also ojos
are nice to make for gifts. If you
find you like to make ojos, you can
make them for a hobby.

--ASK: Why do people have hobbies?
(because they like to do things for
fun when they are not working. People
need to relax and do fun things, but
people don't usually like to just sit--
they like to be busy.)

SOCIAL STUDIES:
locate Mexico on
the map

SOCIAL STUDIES:
Indian religious
customs

TEACHING ACTIVITIES

--SAY: The first step in making ojos is to prepare wood dowel sticks. This means each of you will be working in the wood shop, and so we will need some people to assist, and a safety foreman to see that workers observe safety and clean-up rules in the shop.

--SELECT Shop supervisor and foremen.

--NOTE: THIS UNIT HAS TWO SEPARATE ACTIVITIES--OJO MAKING--AND MAKING ACTIVITY POSTERS. THE TWO ACTIVITIES CAN BE CONDUCTED IN SEQUENCE OR SIMULTANEOUSLY. SEE SESSION 5 TO BEGIN POSTERS.

Session 2 - PREPARING WOOD DOWELS FOR OJOS

--IF the dowel pieces come in 36" lengths, tell students they will need to cut the 36" length into two 18" pieces.

--ASK: If we divide 36" in half--right down the middle, how long would each cut piece be? (18")

How can you figure this out?
(by dividing 36" by 2)

--HAVE students measure and mark the center point of their 36" dowel.

--HAVE students use coping saw to cut their dowels on the marked center line. (Then each student will have two 18" pieces.)

--EXPLAIN: Now we need to find the exact center of each stick.

--ASK: If your sticks are 18" long, how can we find the center point?
(Divide 18 by 2 to get 9")

MATH: dividing
36 by 2

MATH: measuring 18"

MATH: dividing
18 by 2

TEACHING ACTIVITIES

- HAVE students mark the center of each stick by measuring 9" from either end.
- HAVE students measure $1/4$ inch on either side of the center point and mark these with lines.



- SAY: The space between the two outer marked lines should measure $1/2$ inch. (HAVE students check this) This $1/2$ inch will be grooved out so that the two sticks will fit together in the center. If the groove is too small the other stick wouldn't fit in it. If it is too large, the sticks will wobble.
- HAVE students saw cuts halfway through the dowels at the two marked lines.
- WITH chisel or sharp knife, carefully have students cut out the groove between the two sawed cuts on each dowel.



- SMOOTH grooves and ends of sticks with sandpaper.
- PLACE a drop of glue in the notches and fit the sticks together matching grooves. The sticks will form a cross at right angles.
- LET sticks dry completely.

FOURTH GRADE RESOURCES

MATH: measuring 9"

MATH: measuring $1/4$ "

Session 3 --THE BASIC STITCH

NOTE: The best way to attach yarn is to glue cut ends to the back of a stick and let it dry a few minutes. This is neater than tying yarn. Do this to start and to change colors, and at end of colors.

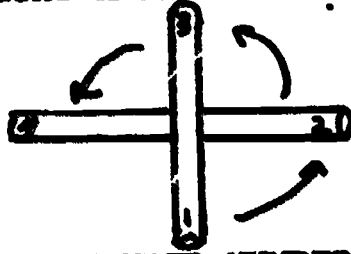
TEACHING ACTIVITIES

--TEACHER or adult coach should demonstrate and instruct students on how to attach yarn and do the basic wrapping stitch (described below). Then have students continue their ojos according to directions on Supplement A. (Provide a copy for each student). Let students help each other if necessary.

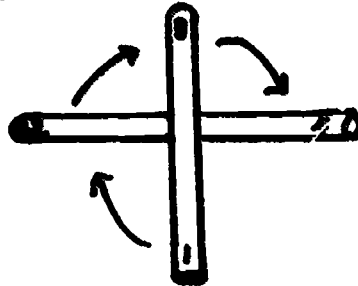
MAKING AN X IN CENTER

- 1) Write a number (1-4) near the end of each stick as shown with #1 on the bottom stick.

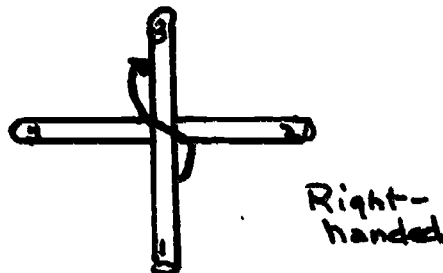
IF YOU ARE RIGHT-HANDED NUMBER THIS WAY:



IF YOU ARE LEFT-HANDED NUMBER THIS WAY:



- 2) Glue main color yarn to back center of frame. Let dry.
- 3) Bring yarn to front between stick #1 and #2.
- 4) Wrap yarn diagonally across center front and under stick #3.

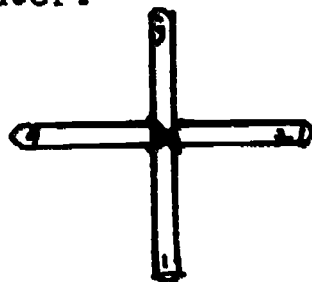


- 5) Bring yarn up to front between stick #2 and #3.

TEACHING ACTIVITIES

NOTE: Left-handed students follow the same directions, but they will be weaving toward the left instead of toward the right.

- 6) Wrap yarn across center front and pull it down between sticks #4 and #1. This makes an X mark across the center of the sticks and is the way ojos are begun. This covers the wood at the center.



MAKING THE EYE

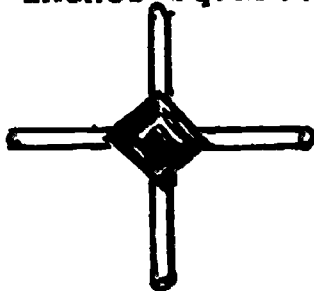
The eye is made with the basic wrapping stitch that will be used for the remainder of the ojo--although for some stripes, the student will turn the ojo to the back and do the basic wrapping stitch from the back.

--SAY: Tension--how tight you pull the yarn is very important. If you pull it too tight, the sticks will bend. If you leave yarn too loose it will sag and the ojo will not be pretty. If you have to stop work on your ojo any time, use a piece of tape to hold the end of the yarn so tension will not loosen.

- 1) (Yarn is now on back between sticks #4 and #1) Bring yarn under stick #1 and up between sticks #1 and 2.
- 2) Stretch yarn over to stick #2. Pull tight.
- 3) Wrap yarn over and around stick #2.
- 4) Stretch yarn over to stick #3. Pull tight.

TEACHING ACTIVITIES

- 5) Wrap yarn over and around stick #3.
- 6) Go on to stick #4 and continue-- repeating the stitch around the four sticks until the eye of the ojo measures 2 inches square.



- 7) Then follow directions in Supplement A - beginning on page 83. When ojo is fully wrapped, go on to session 4.

FOURTH GRADE RESOURCES

MATH: measuring 2"

SUPPLEMENT A

Session 4 - MAKING TASSELS

--TEACHER may train several students in this procedure and have them teach the others as they finish wrapping their ojos.

--FOLLOW these instructions:

- 1) Cut a cardboard square about 3 inches.
- 2) Using three strands of yarn, from the three colors in your ojo, wrap the tripple strand around the cardboard about 30 times.
- 3) Tie the beginning ends and ending ends together at the top to make a knot. Bury ends in the tassel.
- 4) Cut through the yarn strands at the bottom of the cardboard and remove yarn from cardboard.

MATH: measuring

- 5) Cut a 4" piece of yarn. Tie it tightly around the tassel about 1" from the top.

(Tassels continued page 85.)



MAKING THE OJO DESIGN

NOTE: Mark a check mark in front of each direction after you finish it. That way you will know where you are.

FIRST STRIPE:

- 1) After you finish the eye, cut the yarn. Glue the cut end to the back of the stick.
- 2) Glue the end of a new color to the back of stick #1. Let dry a few minutes.
- 3) Turn the ojo upside down to the back side.
(You will use the same stitch that you used for the eye. But you will wrap the yarn around each stick twice instead of one time.)
- 4) Wind yarn two times around stick #1.
- 5) Pull yarn over to stick #4.
- 6) Wrap yarn over and around stick #4 two times.
- 7) Pull yarn over to stick #3.
- 8) Wrap yarn over and around stick #3 two times.
- 9) Pull yarn over to stick #2.
- 10) Wrap yarn over and around stick #2 two times.
- 11) Continue going around the sticks this way. Stop when there are 15 strands of this color yarn in the stripe.
- 12) Cut yarn. Glue end to back of stick #1.

SECOND STRIPE:

- 1) Turn ojo to front side to work this stripe.
- 2) Glue a new color to back of stick #1.
- 3) Wind yarn around stick #1 two times.

- 4) Pull yarn over to stick #2.
- 5) Wrap yarn over and around stick #2 two times.
- 6) Keep going around the sticks until there are 15 strands of yarn in this colored stripe.
- 7) Cut yarn. Glue to the back of stick #1.

THIRD STRIPE:

- 1) Glue main color (like the eye) to the back of stick #1. Let dry.
- 2) Turn ojo to back side.
- 3) Wrap yarn around stick #1 two times.
- 4) Pull yarn over to stick #4.
- 5) Wrap yarn around stick #4 two times.
- 6) Keep going around the sticks until there are 15 strands of yarn in this colored stripe.
- 7) Cut yarn and glue to back of stick #1.

FOURTH STRIPE:

- 1) Use second color--the one you used right after the eye. Work on the front side in the stitch you have been using.
- 2) Continue around the sticks until there are 15 strands in the stripe. Cut and glue.

FIFTH STRIPE:

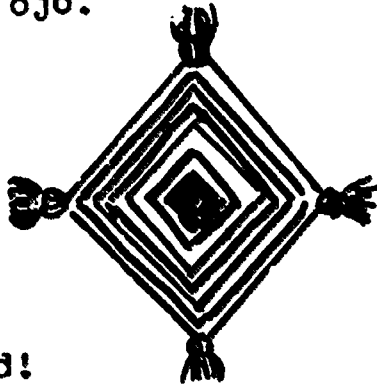
- 1) Use third color. Work on the back side in the same stitch until there are 15 strands in the stripe. Cut and glue.

SIXTH STRIPE:

- 1) Use main color. Work on front until the sticks are nearly covered. You can leave 1/2 inch bare.

TEACHING ACTIVITIES

- 6) Make 3 more tassels like the first one.
- 7) Cut a 3-inch piece of yarn.
Double it over and tie loose ends together.
Glue knotted end of loop to the back of the top stick on your ojo.
(This is a loop to hang the ojo with)
- 8) Tie or glue tassels to ends of the 4 sticks of the ojo.



Your ojo is finished!

--DISPLAY finished ojos in the room before they are taken home.

Session 5 - OCCUPATIONAL PHOTO POSTERS

--ASSIGNMENT: Make a poster by mounting pictures you have taken (or drawn) on a posterboard. These pictures should be shots of your 3 favorite occupations which you experienced or studied this year. Under each picture write a one-line caption to explain the picture.

--DISPLAY finished posters in the classroom.

Session 5 - UNIT POST TEST

--Write a paragraph about why you chose the three occupations on your posters as your favorites.

--List three new skills you have learned this year that you think you are good at.

WRITING

TEACHING ACTIVITIES

FOURTH GRADE RESOURCES

Session 7 - TAOSCORE POST TEST

--IF you have not already done so, administer the TAOSCORE PRE-POST TEST to students.

--COMPLETE the Teacher's Tabulation Form and the Teacher's Final Evaluation Form and submit them to the Career Education Project Office before the deadline date.

TAOSCORE PRE-POST TEST

Teacher's Tabulation Form
Teacher's Final Evaluation form.

ADDITIONAL or ALTERNATIVE SIMULATION SUGGESTIONS

For one reason or another, you may wish additional or alternative simulation experiences for your students. In this event, here are some suggestions:

- 1) Weather Station Simulation
Set up a weather station to record temperature, rainfall etc. Relate to science studies. Study cloud formation, what causes rain and snow etc. and let students predict weather for the following day.
- 2) Quilt of the U. S.
Have students applique the shapes of the states in the United States on a quilt which they piece together. This relates to social studies.
- 3) United Nations Simulation
Have students represent different countries and meet in the General Assembly in costume to discuss real international problems.

Do not hesitate to use your talents and special knowledge in any area to adapt for a class simulation.

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All of the TAOSCORE TEACHER'S
GUIDES, Grades 1 - 6 were developed
by and in consultation with:

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Albuquerque, New Mexico 87114

UNIT TEN: SEWING AND METAL SHOP SIMULATIONS
(More than 7 Sessions)

EXPECTED STUDENT PERFORMANCE:

The student will be able to:

- participate in one of the two simulations in this unit to make either a metal plaque or a vinyl purse by following written directions.
- categorize occupations studied during the year as to whether they deal primarily with:
 - people (or animals)
 - things
 - ideas
- make a decision as to which of the three above categories he prefers to work in
- list 4 occupations in each of these career clusters:
 - business
 - forestry
 - tourism
- list 3 or 4 qualities he likes about himself

CURRICULUM RELATED CONCEPTS:

READING AND WRITING: written directions

MATH: measuring in inches; computing costs and profits;
review of annual finances of class projects

SOCIAL STUDIES: profit concept

MATERIALS NEEDED:

For Metal Shop

1. #32-36 gage brass, copper or aluminum
(#36 gage copper is best for beginners)
2. Leather molding tool (with broad end and fine end)
or - popsicle stick with one end sharpened

Materials Needed Continued

3. Nut pick, pointed dowel rod, old ball point pens (for texture)
4. Stacks of newspapers
5. Steel wool 3/0
6. Wax, plaster of paris or modeling clay
7. Scrap plywood
8. Thin copy paper
9. Cans of spray plastic or clear metal lacquer
10. Varnish
12. Sandpaper
13. Escutcheon pins (round heads) to attach copper to wood in decorative manner
14. Picture hangers

For Vinyl Purses

1. Sewing machines
2. Crushed vinyl yard goods
3. heavyweight interfacing (non-woven type)
4. medium weight cotton lining material
5. scotch tape
6. thread

TEACHING ACTIVITIES

RESOURCES

ion 1 - REVIEW OF YEAR'S CAREER STUDY

--SAY: During this year we have had a chance to experience and study many different kinds of occupations. Let's see how many we can remember.

--LIST careers mentioned on the board, including those related to government occupations, office occupations, communications occupations, manufacturing occupations, health occupations, etc.

--ASK: Now looking at these occupations, which do we find available most in Taos? (office, tourism--restaurant motel and craft shops, health occupations, and forestry)

TEACHING ACTIVITIES

--ASK: Because forestry is important around Taos, what kinds of forestry occupations can you name besides those which are government occupations? (lumberjack, truckers, saw mill employees etc.)

--HAVE students look back at the list on the board and categorize each occupation as to whether it deals primarily with (1) people (or animals) (2) ideas, or (3) things.

Example: frame maker deals mostly with things; doctor deals with people; writers deal with ideas

--ON THE BOARD, after each occupation, have students write the name of the category it deals with primarily.

--SAY: At the end of this unit, you will be asked to write which of the three categories you think you will prefer to work in when you are an adult. Be thinking of how you will answer this.

--ALSO have students re-read their occupational notebooks and the reports they have written.

Session 2 - ALL WORK IS IMPORTANT

--DIVIDE the class into two groups to debate the question: Are some jobs more important than others? (Which could we do without?--)
(Is a secretary less important than a doctor?)

--HAVE students sum up their conclusions.
(If necessary, guide discussion so that students see that without sanitation workers, we'd live in a pretty messy world. All jobs are important and worthwhile--all are needed.)

TEACHING ACTIVITIES

Session 3 - SELF FEELINGS EFFECT YOUR JOB

--ASK: From your many work simulations this year, did you find that how a person feels about himself affects his job? How?

--HAVE students cite examples without naming names.

Example--a very shy person who is afraid of what people think or say about him might have trouble selling a product because he isn't sold on himself.

Example--a person who is always loud and bidding for attention may goof around and not do his job.

Example--a person who feels angry inside because he doesn't think people like him, may be a hard, unkind boss. An angry person may just take it out on someone else.

Example--a person who believes he isn't any good at anything, may react in a number of ways-- what are some?

--HAVE each student write his name on a small piece of paper. Put the slips in a hat or bowl.

--EXPLAIN that in this game, each student will draw a name of some other student --not his own name--

--ASK: Does everybody in the world have good personality qualities? (Stress you are not talking about appearance, but about the kind of person he is-- how does he act when you work with him--is he pleasant, helpful, patient, kind, polite, tactful, a caring person?)

TEACHING ACTIVITIES

- SAY: Each of you will write a note to the person whose name you drew telling him one thing you like about the kind of person he is--not how he looks--not about something he can do--but about the kind of person he is--his good qualities.
- DEPOSIT notes in the hat again for distribution.
- DISTRIBUTE notes. Suggest that they are for the person they were addressed to only and are private.
- ASK: Does everyone have something that he can do well? (yes)
- WRITE names on slips of paper again, and have students draw a name.
- SAY: This time, you will think about the person whose name you drew and remember times when you have worked with him in simulations. What did you notice that that person was good at doing?
WRITE a note to tell that student one thing you think he does well.
(Example: I think you are good at sawing wood, or figuring profit, or typing, or announcing, etc)
- WRITE notes and have them distributed as before.
- NOTE: If this exercise is done in a spirit of genuine helpfulness, it may be enlightening to students who discover some nice things about themselves that they may not have realized, or known that others recognized too. This is peer reinforcement.
-

WRITING

WRITING

TEACHING ACTIVITIES

Session 4 - HOW TO FIND A JOB

--BEFORE CLASS, post "Help Wanted" poster or notice on the bulletin board asking for applications for:

Metal shop supervisor
Metal shop foreman
Custodian
Metal workers

Sewing Shop Supervisor
Foremen
Custodian
Sewing machine operators

--ASK: If you were out of school and you were looking for a job, how would you do it?

(Newspaper want ads, search listings in phone book and make calls, ask friends, go to place of business and ask, employment agencies, company bulletin boards.)

--SAY: In this classroom there are jobs available for two different projects. Study the bulletin board and apply for the job you are most interested in. EXPLAIN: Girls might enjoy the metal shop, and boys might enjoy the sewing shop also--they could make a gift for a relative, so don't think that boys have to sign up for the metal shop, or that girls have to sign up for sewing.

--TEACHER can accept applications and interview prospects about their experience and make selections accordingly.

--WHEN each student has been hired for one of the simulations, tell class that they will each receive written directions for making their product. They are to follow these. Employees will help each other as necessary. A SEWING ASSISTANT MAY BE ENLISTED FROM AMONG PARENTS.

TEACHING ACTIVITIES

--DISTRIBUTE Supplement A to metal shop workers--so that each has a copy.

--DISTRIBUTE Supplement B to sewing shop workers--so that each has a copy.

AFTER COMPLETION OF PROJECTS CONTINUE WITH SESSION 5, page 94.

FIFTH GRADE
RESOURCES

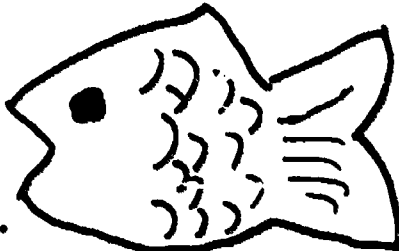
SUPPLEMENT A, p. 88,89

SUPPLEMENT B, p. 90,91,
92,93

HOW TO MAKE A METAL PLAQUE

- 1) Draw a simple design -- one that outlines a shape like an animal or bird -- or write your name with double lines as shown:

JOE



- 2) Trace the design on thin paper.
- 3) Cut a piece of metal foil to the size you need with scissors or tin snips. Allow 1 inch extra on each side around the design.
- 4) Tape the design to the center of the metal piece.
- 5) Put metal piece on a stack of 12 newspapers for padding.
- 6) Using an old ball point pen, trace over the design on the paper. DO NOT PRESS TOO HARD, but see that the design shows on the metal.
- 7) Remove the paper pattern.
- 8) Turn the metal upside down on the padding.
- 9) Use the round end of the leather tool, or the popsicle stick. Gently press down, inside the lines of the design, Work from the lines toward the center in long sweeping strokes.

Do this until the design stands out on the front side.

If the background rises, turn the metal right side up on a hard surface and flatten it with the tool.

- 10.) Decorate the flat background with light cross lines or stripes, or marks made with a dowel or other item that will give texture.



- 11.) To put in details, like eyes, hold the metal over your hand, and draw in the fine marks with the pointed end of the tool.

SUPPLEMENT A - Metal Plaque

Page 2

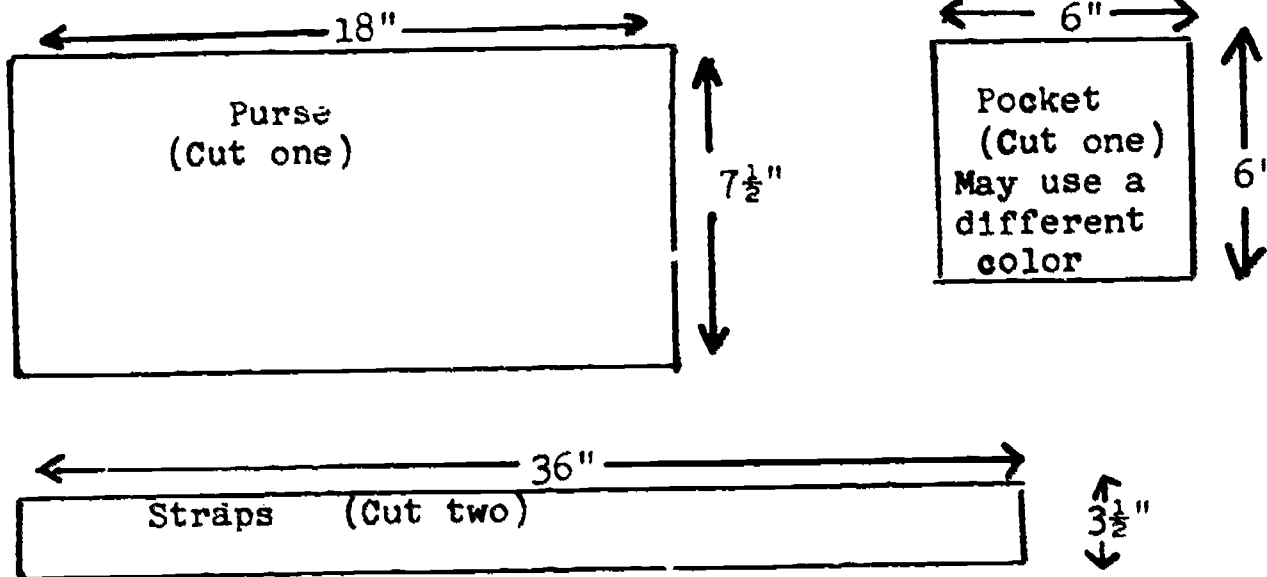
- 12) Polish the metal with steel wool.
- 13) Spray the metal lightly with can of clean plastic or metal lacquer. **DO NOT GO OVER THE SAME SURFACE MORE THAN ONCE.**
- 14) Fill the back of the metal design with clay, plaster of paris, or paraffin wax (melted). This holds the design so metal cannot bend.
- 15) Cut a piece of plywood $1\frac{1}{2}$ inches larger on each side than the piece of metal.
- 16) Sand the plywood smooth on back and front and edges.
- 17) Center the metal on the piece of wood.
- 18) Tap escutcheon pins through the metal into the wood all around the border of the piece of metal--about $1/2$ inch in from the edges. Place pins every $1/2$ inch apart.
- 19) Attach a picture hanger on the center back of your plaque.

Your plaque is finished!

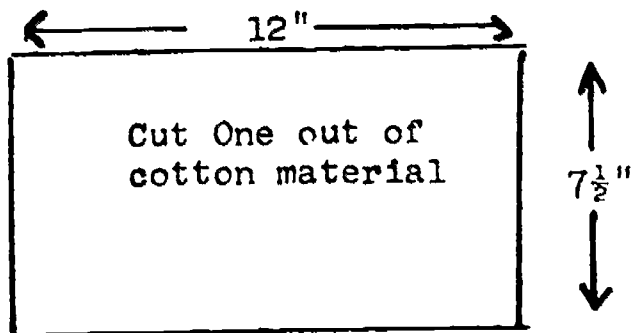
HOW TO MAKE A VINYL PURSE (A Hip Swinger)

CUTTING DIRECTIONS:

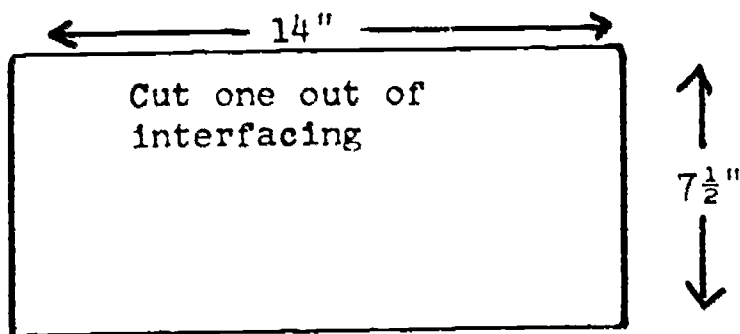
1. Measure and cut these vinyl pieces:



2. Measure and cut this lining piece:



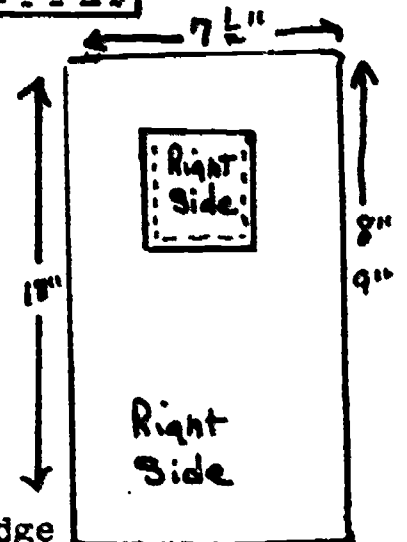
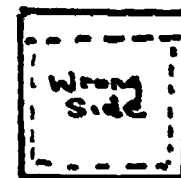
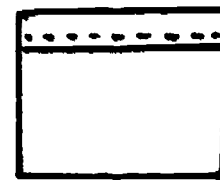
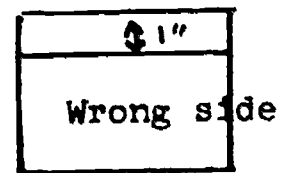
3. Measure and cut one interfacing piece:



SEWING THE PURSE

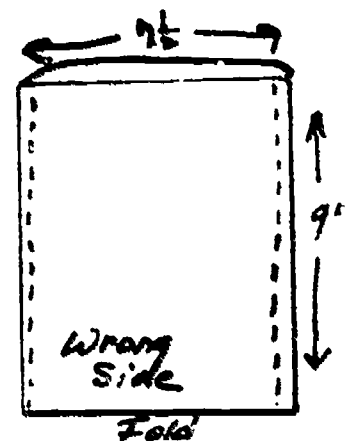
The Pocket

1. Fold the top edge of the vinyl pocket down 1 inch to the wrong side. Tape it down.
2. Thread the machine and bobbin with thread the same color as the plastic. Sew as shown with dotted lines.
3. Turn all the other edges of pocket in 1/2 inch to the wrong side and tape down.
4. Place right side of pocket on right side of purse piece so that the bottom of the pocket is about 8" from the top end of the purse. Tape in place.
5. Stitch the two sides and bottom of the pocket to the purse (stitch 1/2 inch from the edge of the pocket. Use thread the color of the pocket. DO NOT STITCH THE TOP OF THE POCKET CLOSED.

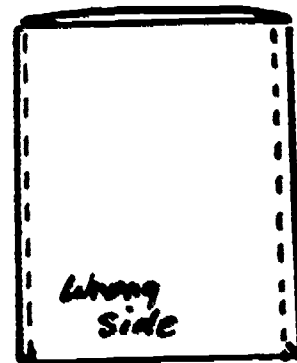


The purse

1. Fold the vinyl purse piece in half with wrong sides out.
2. Measure and mark with pencil or chalk 1/2 in. in from the two sides.
3. Thread sewing machine and bobbin with thread the color of the purse.

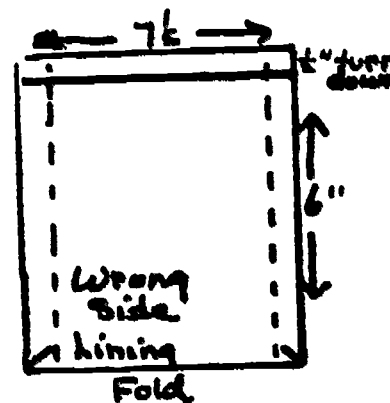


4. Stitch exactly on marked lines.
DO NOT STITCH FOLD OR TOP OF PURSE.
5. With scissors clip corners to stitching line, but NOT THROUGH THE STITCHING.
7. With scissors trim the seams to about $\frac{1}{4}$ inch.
8. Turn purse right side out.



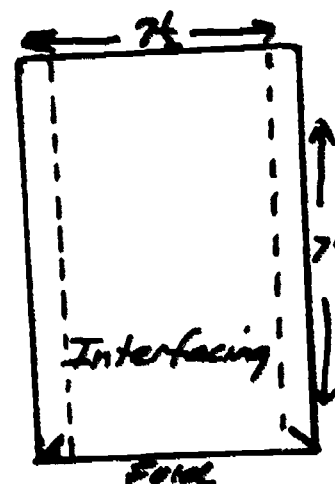
Lining

1. Fold lining, wrong sides out.
2. Measure and mark side seams $\frac{5}{8}$ inches from the 2 sides.
3. Stitch as marked.
4. Clip corners. Trim seams.
5. Turn down the top edge of lining $\frac{1}{2}$ in. and iron it flat.



Interfacing

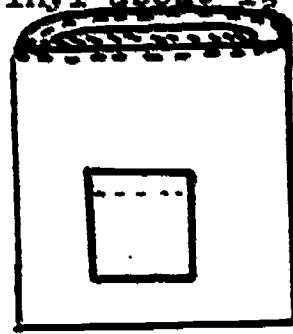
1. Fold interfacing as shown.
2. Measure and mark side seams $\frac{5}{8}$ inches from the two side edges.
3. Stitch as marked.
4. Clip corners. Trim seams.





Assembling the Purse

1. Be sure purse part is right side out.
2. Gently poke ruler into corners from the inside to make them square.

3. Slip interfacing, wrong side out, into the vinyl purse.
Push corners down to fit.
4. Slip lining (wrong side out) into purse on top of
interfacing. NOTE: LINING WILL NOT FIT DOWN INTO THE CORNERS.
5. Tape the top edge of lining to top edge of vinyl.
6. Edge stitch all around the opening.
7. Now push lining down to the bottom of purse, folding
down the top edge of the vinyl about $1\frac{1}{2}$ inches.



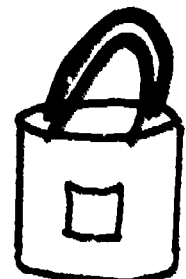
Straps

1. Take 1 strip and fold in the long edge (on one side)
1 inch to the wrong side. 
2. Tape fold over.
3. Fold other raw edge over 1 inch. Turn that edge under $\frac{1}{4}$ inch
and tape.
4. Top stitch along both edges. 
5. Repeat steps 1-4 for the second strap.

Attaching Straps

NOTE: If shorter straps are desired, cut to shorten.

1. Tape both ends of one strap to the inside of the front
of the bag-- $1\frac{1}{2}$ inches from the side seams and $1\frac{1}{2}$ inches from
the top.
2. Stitch down.
3. Tape both ends of the other strap to the
inside of the back of the bag-- $1\frac{1}{2}$ inches
from sides and $1\frac{1}{2}$ " down. Stitch.



TEACHING ACTIVITIES

FIFTH GRADE
RESOURCES

Session 5 - WRAP UP

DISPLAY completed plaques and purses.

--Have students compute approximate cost of making each item.

--ASK: What would you charge for the item if you were going to sell it and wanted to make a profit?

--HAVE Newspaper editor and bookkeeper give a financial report on annual costs and profit of the operation of the newspaper.

--HAVE other ongoing simulations give final financial reports.

MATH

SOCIAL STUDIES-MATH

Session 6 - UNIT POST TEST

--WRITE down whether you would prefer to have a career that deals primarily with (1) people (or animals), (2) ideas or (3) things, and tell why.

--LIST 3 or 4 things you like about yourself.

WRITING

Session 7 - TAOSCORE POST TEST

--IF you have not already done so, administer the TAOSCORE PRE-POST TEST to students.

--COMPLETE the Teacher's Tabulation Form and the Teacher's Final Evaluation Form and submit these to the Career Education Project Office before the deadline date.

TAOSCORE PRE-POST TEST

Teacher's Tabulation Form
Teacher's Final Evaluation Form

ADDITIONAL or ALTERNATIVE SIMULATION SUGGESTIONS

For one reason or another, you may wish additional or alternative simulation experiences for your students. In this event, here are some suggestions:

- 1) Bicycle repair and maintenance shop
- 2) Loom Weaving
- 3) Sewing clothing
- 4) Candle making

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	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5	GRADE 6
UNIT FIVE	Woodworking With Hand Tools	Transportation Models Assembly Plant	Ceramic Company Simulation and Salesmanship	Dramatics Company Simulation	Perfume Manufacturing Simulation	Tin Can Enterprises
UNIT SIX	Post Office Simulation (On-going)	School Bus & Taxi Company Simulation	Floral Design & Arrangement	Plastic Dip Creations	Art Gallery & Frame Making Simulation	Appearance Counts (On-going)
UNIT SEVEN	Weaving, Braiding and Sewing	Trucking Company Simulation	Dam Simulation	Restaurant Simulation (On-going)	Cribbage Tournament (On-going)	Jewelry Manufacturing Corporation
UNIT EIGHT	Construction Company Simulation	Airline Company Simulation	Forest Simulation	Easter Egg Manufacturing Simulation	Health Occupations	Working Toward Your Future
UNIT NINE	Bank Simulation	Making Bottled Snow Scenes	Pollution Control (On-going)	Multiplication Bingo Tournament	Mass Communications Simulations	Electrical Shop Simulation
UNIT TEN	Popsicle Sales Simulation	Plant Nursery Simulation	Manufacturing Magnetic Postal Scales	The Craft of Making Ojos	Sewing and Metal Shop Simulations	Your Attitudes Are Showing
UNIT ELEVEN	Aircraft Simulation	Egg Hatchery Simulation				

TAOSCORE - CAREER EDUCATION CONCEPT DEVELOPMENT MATRIX

	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5	GRADE 6
UNIT TWELVE	Self-Understanding	Toy Factory Simulation				
UNIT THIRTEEN	Pinata Party	Soap Carving Hobby and A Party				

UNIT NINE: ELECTRICAL SHOP SIMULATION
(more than 4 sessions)

SIXTH GRADE

EXPECTED STUDENT PERFORMANCE:

The student will be able to:

- correctly replace an electric plug on a lamp or small appliance
- correctly replace a light socket for a lamp
- make an extension cord that works
- construct a small lamp

CURRICULUM RELATED CONCEPTS:

SCIENCE: electricity

MATERIALS NEEDED:

screw drivers
lamp cord (2 wire)
electrical plugs for lamps
light sockets for lamps
receptacles for extension cords
driftwood
white spray paint
fine sand paper
lamp shades

Materials might be purchased with profits from other class simulations.

TEACHING ACTIVITIES

RESOURCES

Session 1 - INTRODUCTION

- PROVIDE each student with a length of lamp cord wire, for practice, and an electric plug.
- ASK: How many wires does lamp cord have?
(?)

TEACHING ACTIVITIES

- ASK: Why does the wire have 2 wires?
(One wire carries electricity from the wall socket to the lamp or appliance. The second wire carries electricity from the lamp back to the wall socket.) (In other words, for electricity to flow, there must be a complete path for electricity to follow.)
- ASK: What is the covering on the wires for? What is it made of? (It is rubber or plastic. It is an insulator--it will not allow electricity to flow through it. Wires or substances that carry electricity are called "conductors". Insulating materials are called "non-conductors")
- SAY: Name some other materials that are conductors. (copper, water, aluminum, air, and ground.)
- Name some materials that are non-conductors. (wood, rubber, plastics..)
- ASK: How does electricity get from the wall socket into the wire? (Through the metal prongs that fit into the wall socket. The prongs carry electricity to the screws that connect the wire, and the electricity then goes into the wire.)
- How does electricity get from the wire back into the wall socket?
(Goes through the screw in the plug that connects the wire to the plug, into the copper prong, and into the wires in the wall.)
- ASK: What would happen if one wire came loose from the screw in the plug and were no longer touching the metal screw? (There would no longer be a complete path for current, and the light would not work.)

SCIENCE: electricity needs complete circuit to flow.

SCIENCE: conductors; non-conductors; insulators

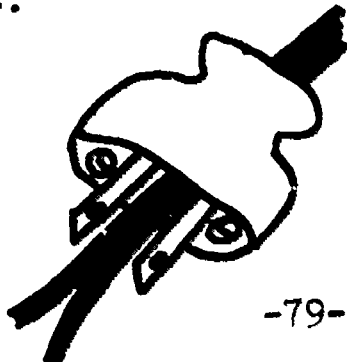
TEACHING ACTIVITIES

--ASK: What would happen if strands of one wire got loose around the screw in the plug and touched the other screw or wire around the other screw? (Current would come from the wall, into the prong, into the first screw, and then jump into the loose wire that is touching it. Because there is nothing using the current at that point (no lamp), current would get higher and higher and could start fire. If you touch the plug, you would be getting live electricity, and would get a bad shock--could be killed.) (Besides that, no electricity would get to the lamp and the lamp would not lite)

--EXPLAIN: When you pull on an electric cord, there is danger of pulling the wires loose from their connections. For this reason, when we connect wires to a plug, we use a special knot--an Underwriter's knot. This takes the strain off the connections when you pull.

--HAVE students practice making an underwriter's knot and wiring a plug as follows:

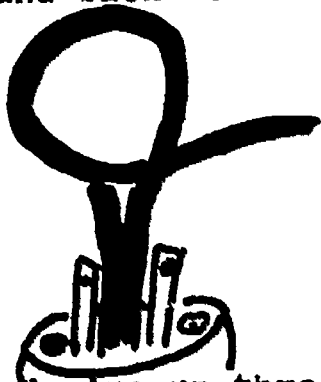
- 1) Slip the cardboard off the plug. This acts as an insulator so bare ends of wire don't contact wires inside the wall socket.
- 2) Thread wires through the plug. Separate the two wires in the cord so there are two strands.



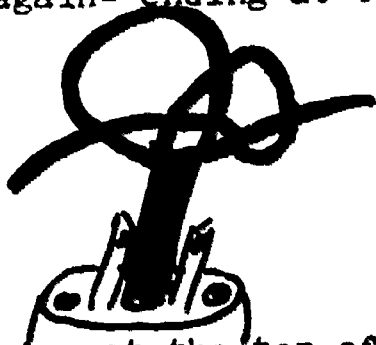
TEACHING ACTIVITIES

NOTE: The 2 strands should be about 4 inches long.

- 3) With the wire on the right, make a loop to the left and back to the right as shown:



- 4) Run the second wire up through the loop, over the end of the other wire, and back down under the bottom, then up through the loop again--ending at the left side.



- 5) Pull the wire at the top of the plug to draw the knot up into the plug and pull it tight. Trim wire now if it is too long to just go around screws.
- 6) Skin the insulation off the ends of each wire leaving about 1/2 inch bare. Twist ends.
- 7) Loosen the 2 screws in the plug, but don't remove them.
- 8) Wrap bare end of each wire around a different screw, under the head of the screw. Wind wire in the same direction that the screw will turn to tighten.
- 9) Tuck in stray wire threads. BE SURE WIRES DO NOT TOUCH EACH OTHER BETWEEN SCREWS.

TEACHING ACTIVITIES

10) Tighten screws down.

11) Replace cardboard insulation.

--HAVE students bring small lamps and small appliances to class for repair of plugs. Advertise in the School newspaper for lamps that need plugs or wire replaced.

--CAUTION: Do not attempt to repair appliances that have 3 wires.

Session 2 : REPLACING LIGHT SOCKETS IN LAMPS

--HAVE students list occupations that deal with electrical repairs. (include those who repair electric typewriters, adding machines, copy machines etc.)

--ASK: If you don't plan to make your career in an electrical field, why is it important for you to learn these simple electrical repairs? (It can save you money if you can make simple, non-dangerous repairs by yourself.)

--PROVIDE each student with a light socket. He already has lamp cord.

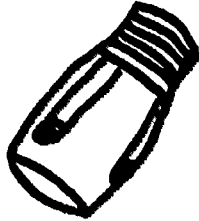
--HAVE students follow these directions:

- 1) Take light socket apart by pressing the thin brass shell just below the cap.
- 2) Thread wire up through the bottom on the shell.



TEACHING ACTIVITIES

- 3) Separate wires and make an underwriter's knot.
- 4) Bare the ends of wires $\frac{1}{2}$ inch and twist around loosened screws on the inside porcelain part of the socket.



--DISCUSS how electricity flow through the screw onto the metal strip into the metal threaded part which holds the metal base of the light bulb.

- 5) Pull wire tight at the bottom of cap.
- 6) Fit porcelain insides into place.
- 7) Replace the top brass shell and snap back into bottom shell.

--HAVE students repair lamps that need new sockets, or new cords in the manner in which they have learned.

Session 3 - MAKING AN EXTENSION CORD

NOTE: THIS SESSION MAY REQUIRE SOLDERING IF THE RECEPTACLE NEEDS IT. STUDENTS WILL FIND THIS ACTIVITY VERY SATISFYING AS THEY WILL BE LEARNING ANOTHER SKILL.

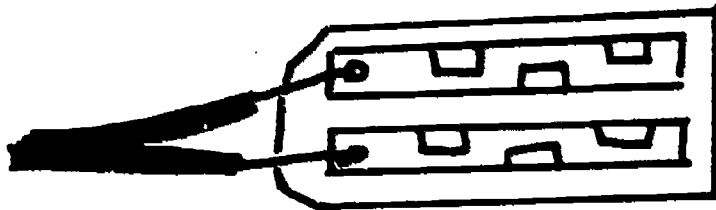
ENLIST EXPERIENCED ASSISTANCE FROM A PARENT OF HIGH SCHOOL STUDENT WITH THE SOLDERING TECHNIQUES AND SAFETY RULES.

--DISCUSS uses of extension cords.

--PROVIDE each student with a six foot lenth of lamp cord, a plug, and an extension cord plug-in receptacle.

TEACHING ACTIVITIES

- 1) Connect plug to one end of cord.
- 2) Open receptacle by removing screws. Observe that inside it has two metal strips with a hole (or screw) in one end of each strip for the wire connection.



- 3) Bare ends of wires $\frac{1}{2}$ inch and fasten in hole. (If screw type, twist wire around screw and tighten screw. No soldering required.)
- 4) Heat soldering iron and place it on the metal strip--NOT DIRECTLY ON THE HOLE AND WIRE.
- 5) When strip is hot enough, solder touched to the wire connected to the hole will melt and form a good bond and connection.
- 6) Replace top of receptacle and screw tight.

Now you are ready to test the extension cord--
NOT IN A WALL SOCKET, BUT IN A LOW VOLTAGE
CIRCUIT TESTER THAT YOU CAN BUILD.

Making a Circuit tester

- 1) Attach a single wire to one terminal of a $1\frac{1}{2}$ volt battery.
- 2) Attach loose end of that wire to a small socket for small watt bulb.
- 3) Attach a second wire to the socket and leave the end free.
- 4) Connect a wire to the second battery terminal and leave the end free.

TEACHING ACTIVITIES

To Test The Extension Cord-

Connect cord to the battery circuit tester as follows:

- 1) Take loose end of wire from battery terminal and stick it into any prong slot in the extension cord receptacle.
- 2) Touch one prong of the plug of the extension cord to the loose wire from the bulb socket.

ASK: Does the bulb light?
(If not--touch the other prong to the wire.)



--WHEN the light glows, this indicates the extension cord provides a complete path for current flow. If light does not glow, check light bulb to see if it is burned out, check to see that battery is good, check connections on tester, and last check connections on plug and receptacle of extension cord. Then check wires of cord to see there are no breaks.

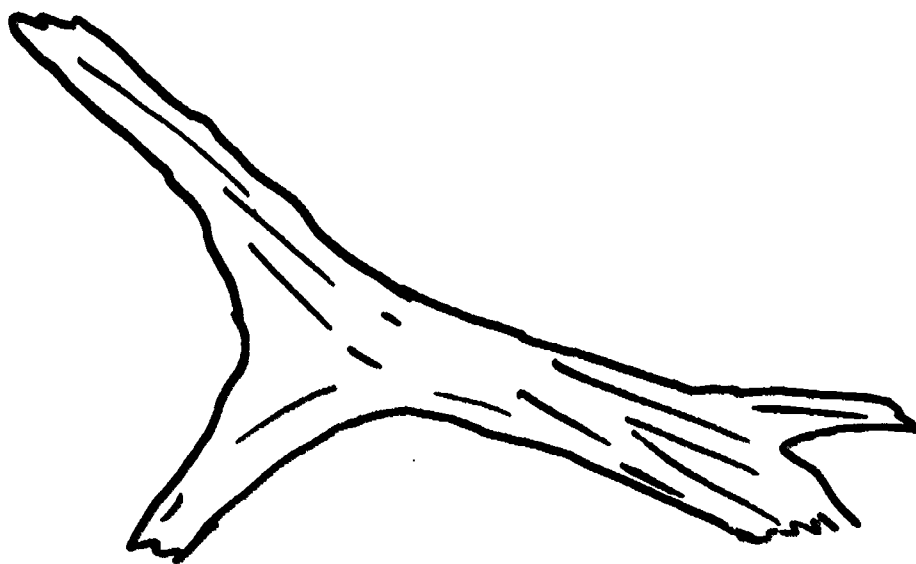
on 4 - MAKING TABLE LAMPS

NOTE: These may be made by constructing wood bases, or using large bottles such as rum jugs. To make bottle base lamp, secure a light socket in opening of jug--attach cord and plug and lamp shade.

TEACHING ACTIVITIES

MAKING DRIFTWOOD LAMPS

--FIND a whole piece of driftwood in the mountains or near a river bank. It can be up to 2 feet long. It should balance good on a flat surface if it is to be a base for a lamp. Unusual shapes are particularly attractive. For example:



- 1) Give the driftwood base a light coat of white spray paint.
- 2) Immediately, sand base lightly with sandpaper to remove most of the paint.
- 3) Decide where to place the shaft for the lamp. Drill hole from the top at this point through the wood to the bottom. Hole should be big enough for lamp wire to run through.

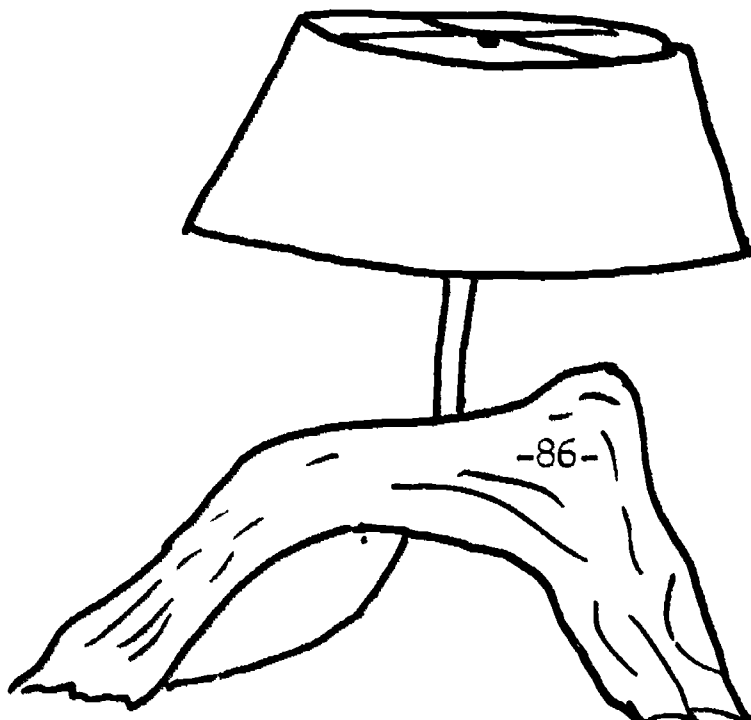
TEACHING ACTIVITIES

- 4) On top of the hole for the wire, set hollow brass piping that is wide enough for the light socket to fit in on the top. It should be about 6 inches tall. Ce
- 5) Thread wire through the lamp and brass casing. Cement casing to lamp.
- 6) Connect wire to light socket.
- 7) Install socket in brass casing.
- 8) Attach plug to loose end of wire.
- 9) Attach lamp shade that you purchase at the store, or make one from an old lamp shade frame:
 1. cover frame by winding yarn around it
 2. cover frame with new fabric. Glue edges.

--EXPLAIN that driftwood lamps sell for about \$35 and up in craft stores.

--ASK: Is there profit in lamp making?

--HAVE students decide whether to market their lamps or keep them.



UNIT TEN: YOUR ATTITUDES ARE SHOWING
(9 sessions)

SIXTH GRADE

NOTE: THIS IS AN IMPORTANT SELF-CONCEPT UNIT. MOST EMPLOYERS RATE ATTITUDE AS THE SINGLE MOST IMPORTANT FACTOR IN OBTAINING A JOB AND KEEPING IT.

EXPECTED STUDENT PERFORMANCE:

The student will be able to:

- examine his on-the-job feelings and behaviors and list ways he would like to change
- examine his own personality characteristics and rate himself
- compare his self-rating of characteristics with peer ratings of those characteristics
- role play situations showing how personality characteristics effect others.

CURRICULUM RELATED CONCEPTS:

READING AND WRITING: Reading test questions; oral communication; use of dictionary; role playing

TEACHING ACTIVITIES

RESOURCES

- ession 1
- PROVIDE each student with a copy of the Attitude Self-Quizz, Supplement A, page 88, 89.
 - EXPLAIN: This is an opportunity for you to test yourself. You have all experienced a number of real work situations this year, probably as both an authority figure--boss-- and as an employee working under an authority. As you complete the Self-Quizz, remember your feelings and actions and attitudes that you felt when you were in a work situation as an employee working under someone else.

If you have trouble reading the questions, you may ask a friend to help, but be sure the answers are your own. No one else will see your paper, so be honest with Yourself.

ATTITUDE SELF-QUIZZ

Answer each question by writing in "yes" or "no".

1. Does it make you angry when your boss at work tells you what to do? _____
2. Does it make you angry when an adult tells you to do something? _____
3. When someone "puts you down" at work, do you quit? _____
4. When your boss criticizes your work for good reason, do you argue with him? _____
5. Do you "bad mouth" your boss behind his back? _____
6. Do you purposely ignor company rules to get even with bosses? _____
7. When an adult gives you advice, do you pretend to listen, but "turn him off"? _____
8. Would you be absent from school and work because you wanted to goof off? _____
9. Do you feel as if your job is important to keep the company running smoothly? _____
10. Do you feel pride and loyalty toward the company you work for? _____
11. Do you care if you are "late for work"? _____
12. At work, do you usually try to do the best job you can? _____
13. Would you help a fellow employee if he needed help? _____
14. If a fellow employee were getting the blame for something you did, would you speak up? _____

ATTITUDE SELF-QUIZZ, Page 2

- 15. At work, can you hold your tongue and smile even when you are angry? _____
- 16. Can you talk to a boss about a problem in a nice way without "telling him off"? _____
- 17. Would you squeel on a fellow employee who was goofing off? _____
- 18. Would you try to "get ahead" in the company even if you had to "stomp" on fellow workers? _____
- 19. Do you feel as if other employees are "out to get you"? _____
- 20. Do you like to complain about your job, your boss, and your fellow employees? _____

TEACHING ACTIVITIES

ion 2 -SMALL GROUP DISCUSSION OF SELF-QUIZZ

--EXPLAIN: Most employers say that they feel the single most important quality of a good employee is his attitude on the job.

This means:

1. Attitude toward authority figures on the job. (ASK: who are authority figures)
2. Attitude toward the company.
3. Attitude toward fellow workers.
4. Attitude toward your work.

MANY times attitudes are shown by the way we behave. For example, the man who doesn't care for his job, or his company, doesn't care if he late to work, or if he's absent.

YOUR ATTITUDE toward your job may be more important than what skills you have, or how well you do your job.

ATTITUDE IS THE KEY TO GETTING A JOB.
ATTITUDE IS THE KEY TO KEEPING A JOB.

--SELECT 4 or 5 group discussion leaders.
Train leaders briefly with these instructions.

1. Read each question in the quizz.
2. Have students tell what answer shows a good attitude, or a positive attitude as opposed to a negative attitude.
3. Let students discuss questions they disagree on and cite examples.
4. Suggest that students look at things as if they were the boss instead of the worker if they can't see a point.
5. Have students mark their papers to show what attitudes they want to try to improve.

--GIVE discussion leaders list of the best answers: #1-8...no; #9-16....yes; #18-20..no

TEACHING ACTIVITIES

--INSTRUCT leaders to try to get students to open up about the underlying feelings they may have that cause them to feel the way they do. For example: if someone resents authority--from bosses and any adult, ask WHY he resents authority.

--INSTRUCT leaders to discuss:
loyalty to a company
dependability
relationships to fellow workers

Session 3 - PERSONALITY CHARACTERISTICS AFFECT RELATIONSHIPS

--WRITE each of the following words on a separate slip of paper:

appreciation	recognition
cheerfulness	respect
consideration	refinement
cooperation	sincerity
courtesy	sympathy
criticism	tact
empathy	thoughtfulness
friendliness	understanding
generosity	unselfishness
loyalty	willingness
manners	effort
poise	

--PUT words in a hat and have each student draw a word.

--THEN have students find a partner to form a team. TEAMS then look up the full meaning of the words they drew and plan two role-plays for each word. One role-play to show how the good quality can affect another person, the other to show how the opposite or lack of the quality affects another person. (The role-plays should be brief one or two line plays) (In role plays, they will show how the other person reacts to a quality or lack of it.)

DICTIONARY STUDY

TEACHING ACTIVITIES

Session 4 - ROLE PLAYS

- HAVE teams present their role plays, and have class discuss the characteristic and possible reactions of others to it, or to the lack of the characteristic.
 - DISCUSS ways that people show their attitudes without talking about them.
 1. thru facial expressions
 2. through voice tone
 3. through mannerisms, movements, posture
 4. through the way they walk--
 - head up - proud
 - head down - poor self image
 - angry walk
 - happy walk
 - HAVE students demonstrate examples of how people show feelings without saying them.
-

Session 5- RATING SELF ON CHARACTERISTICS

- PROVIDE each student with a copy of Supplement B, p. 93.
 - INSTRUCT students to rate themselves by assigning a number between 1-4 to each characteristic--For example, if he feels he always exhibits cheerfulness, he would give himself a 4; if usually, he would give himself a 3; if only sometimes, he would rate himself a 2; if almost never or seldom, he would rate himself a 1. Do this with each of the traits listed in Supplement B.
 - AFTER completing the rating, have students add up the points they have to find their total scores.
-

SUPPLEMENT B, p. 93

Session 6 - PEER RATING

- HAVE students pair up with someone who is not a best friend, but has worked with the student.

SUPPLEMENT B

SELF-RATING ON PERSONALITY CHARACTERISTICS

Rate yourself on each characteristic by writing in front of each word a number between 1 and 4. (4 is highest, 1 is lowest)

_____ appreciation	_____ unselfishness
_____ cheerfulness	_____ willingness
_____ consideration	_____ effort
_____ cooperation	
_____ courtesy	
_____ criticism	
_____ empathy	_____ total points
_____ friendliness	
_____ generosity	
_____ loyalty	
_____ manners	
_____ poise	
_____ recognition	
_____ respect	
_____ refinement	
_____ sincerity	
_____ sympathy	
_____ tact	
_____ thoughtfulness	
_____ understanding	

TEACHING ACTIVITIES

- PROVIDE each student with another copy of Supplement B, p. 93. Have team members rate each other as realistically as they can.
 - HAVE each student present his rating of his team partner to the partner.
 - STUDENTS then compare their "self-rating" with that of the peer. If student disagrees with peers rating, he may discuss it with him, and ask why? If there is still a doubt about the accuracy of a rating, let the student ask an impartial third person to rate the characteristic in question.
 - IN THIS WAY, STUDENTS MAY DISCOVER HOW THEY AFFECT OTHER PERSONS. THEY MAY ALSO SEE THEY HAVE NOT BEEN REALISTIC IN THEIR OWN RATING WHICH MAY HAVE BEEN TOO LOW OR TOO HIGH.
 - HAVE students list for themselves characteristics they want to personally work on.
-

Ion 7 - ATTITUDE EXPERIMENT

NOTE: This session begins with an experiment to illustrate how we convey attitudes without saying them. This is an example of conveying anger without saying you are angry.

--TEACHER storm across the room. Drop book loudly on desk, and with impatience in your voice say, "Everyone please take your seat."

--THEN in a normal calm tone ASK: What did you just hear me say" (to sit)

--ASK: Did something about me say anything else? (Yes, it said you were angry)

What said I was angry? (your walk, your action of banging the book, your tone of voice.)

TEACHING ACTIVITIES

- EXPLAIN: I was not really angry. It was an experiment to show that you hear much more than my words. Everything about me expressed my underneath attitude of anger.
- ASK: How did you feel when you thought I was angry? How did you react inside? (perhaps frightened)
- NOW TURN STERNLY TO A CHILD WHO HAS NOT BEEN PAYING STRICT ATTENTION, and say: "Joe, you will stay after class 30 minutes today"
- WATCH to see if the child reacts and how he reacts. Does he answer? Does he ask why? Does he react in anger?
- DISCUSS his reaction with the class and with Joe. EXPLAIN it was another experiment.
- SAY: Now lets pretend you are a secretary who has just made a lot of mistakes on a letter she typed. It is time to go home for the day, and her boss just said he wants her to stay and retype the letter.
- HAVE different students answer the boss with a "Yes, sir", and see how those two words can mean different things. HAVE class decide which way she had better answer if she wants to keep her job.
- HAVE students think of similar situations and role play ways to react and respond.
Examples:
1. Bus boy drops a tray of dishes and gets yelled at by the boss.
 2. Boss reprimands a dishwasher for being too slow.
 3. Boss falsely accuses a clerk of stealing something in the store.

TEACHING ACTIVITIES

--SAY: Even though we all have feelings inside, if we want to get along in the business world, we must learn to control our feelings in our voice, actions, and words.

ion 8 - WRAP UP

--WRITE a paragraph or two telling about your best personality characteristics and attitudes.

--WRITE a paragraph about the characteristics and attitudes you would like to change about yourself. WRITE how you will go about getting yourself to make these changes.

--LET students keep these paragraphs to refer back to during the summer while they try to practice what they have written.

WRITING

ion 9 - CONCLUSION and TAOSCORE POST TEST

--HAVE students report on annual financial success of on-going projects or simulations during the year, i.e. the class store.

--IF you have not already done so, administer the TAOSCORE PRE-POST TEST to students.

--COMPLETE the Teacher's Tabulation Form and the Teacher's Final Evaluation Form and submit to the Career Education Project office by the deadline date.

TAOSCDRE PRE-POST
TEST

Teacher's Tabulation
Form
Teacher's Final
Evaluation Form.

ADDITIONAL or ALTERNATIVE SIMULATION SUGGESTIONS

For one reason or another, you may wish additional or alternative simulation experiences for your students. In this event, here are some suggestions:

1. Small motor repair
2. Upholstery
3. Advanced Office Practices

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