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ABSTRACT

This book is designed to be of assistance to primary school teachers who have had little training in arts and crafts and for use in teacher training colleges. Tested in Nigeria and Jamaica, this manual gives children an opportunity to develop their natural creativity, and also develops accuracy and manual dexterity in hand skills. Lesson plans are given for various paper crafts (tearing, measurement, cutting, folding, and crayon etching), fiber crafts, paper mache, and clay crafts. Each lesson discusses materials needed, teacher's preparation required, and class procedures, and provides explanatory drawings and a designation for the appropriate grade level. The book contains a total of 59 craft activities. A reference list of eight related craft guides is included. (PPB)

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Primary Schools Arts and Crafts

Developing Manual Skills

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PRIMARY SCHOOL ARTS AND CRAFTS
Developing Manual Skills
Lesson Plans Classes I Thru VI

Compiled and edited by
Mildred Douglass

OVS/Technical Resources Division
Peace Corps, July 1969

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INTRODUCTION

This book, a lesson plan manual, is designed to be of assistance to primary school teachers who have had little training in Arts and Crafts, and for use in teacher training colleges. It is detailed more than would be necessary for the trained teacher; it is hoped, however, that the trained teacher may find it helpful. It is not a book for teaching "Art", but is planned to accomplish two purposes. First, to give an opportunity for children to develop their natural creativity. Second, to train children in accuracy and manual dexterity, how to use their hands skillfully. The lessons have been tested in the primary schools of Midwest Nigeria and in Jamaica, with the result of successful lessons and enjoyment for both the teacher and children.

To be creative means to express individual ideas in an individual way. Each child sees, feels, thinks differently from every other child and should be given the freedom and encouragement to express this difference. Copying the work and ideas of others produces nothing new or different, it represses the child's growth and prevents the development of creative expression. It does not teach the child to think for himself or to make his own decisions.

As a child works with his hands, he develops better physical coordination. By doing lessons in accurate measurement, eye-hand coordination is developed. It also trains his powers of observation and his ability to follow directions and to obey instructions carefully. These skills are needed to prepare the child for further training in the many skills needed in today's society.

This lesson plan book is not meant to be rigid or exhaustive. Lessons have been suggested for class levels in groups of I to III and IV to VI or for all classes. However, if some lessons appear too difficult or too simple for the suggested classes, they may be used in any manner the teacher chooses. For children who have never had any craft work, the simplest lessons would not be too easy.

The teacher should feel free to improvise, change or vary the lessons.

He should investigate local crafts and introduce these to his class. Taking children to visit local craftsmen will interest them. Asking some of the craftsmen to help instruct the children in their special crafts, to explain what materials are used and how to prepare them should gain the cooperation of the craftsmen and interest them in the school. This will keep the local crafts alive and to develop them where possible.

This book is intended to help teachers in various countries where conditions differ considerably. No mention is made as to age of the children or the expected number in a class. The teacher is free to adapt the lessons to the circumstances. If the class is very large, only one half or one third of the children should do the lesson while others are studying. Each lesson should take one period for classes I to III, and longer periods for classes IV to VI.

It is the hope of all who have worked on this manual that every teacher who uses it will find pleasure and satisfaction in teaching the lessons and that the children will enjoy following them.

SUGGESTIONS FOR TEACHERS

Teaching arts and crafts can become a very exciting and challenging experience. It will add zest to the school week. The children will look forward to it with great anticipation. Do you feel hesitant about teaching arts and crafts because you are not an experienced art teacher? Don't - you can learn along with the children - just keep one step ahead! Read the lesson plan carefully and prepare the examples using the methods suggested. You will be sure of yourself when it comes time to teach the lesson. You will improve your own skills too. The time taken in preparation is well worth the effort.

Be experimental, discover things for yourself by using your imagination and ingenuity as to materials and methods, and work out lessons of your own. You will make mistakes - everyone does - but mistakes are teaching tools, we learn from them.

Children's art and craft work is different from that of adults. Its charm is in the particular way they have of expressing themselves and their ideas. Be proud of their work. Be glad it looks like the work of children. Accept it. Don't judge it by adult standards, but only by the ability and capacity of the child.

The measurement lessons given for the older children stress accuracy. This is necessary for training children to follow directions carefully and to give them the satisfaction of doing as nearly perfect a lesson as possible. This prepares the child for future training in technical skills.

Encouragement and praise should be given to the children. Also "suggest" or "remind" them avoid giving a direct order whenever possible. Let the children make their own decisions and always emphasize originality where it is possible for them to express their own ideas. Do not give grades or marks for children's art and craft work. Let them know which work is good by displaying it in a special section of the classroom. By "good" is meant that a child has put forth his best effort. Do not always display the work of a chosen few. If a child improves his work or shows originality, it should be rewarded by special mention. It is also encouragement to the

children to allow the class to decide which pieces of work should be put on special display. Their choice may sometimes surprise you, but always honor their choices.

The preparing, distribution and collection of materials should be shared by the children working in an orderly manner. They should be assigned specific duties, such as one child distributing the paper, another the paints, another the brushes, etc. The same children should be responsible for their collection and care after the lesson is finished. This teaches them to work in an orderly manner. Without this order the class will be chaos. With it the lessons run smoothly because you have gained the children's cooperation.

Displaying all the work and discussing the lesson after the classroom is in order again, is very important. This may mean spreading the work out on the floor with the children gathered around so that all may see and make their choices of work to be placed in the special display section. After returning to their seats a discussion should be held. Questions should be asked and answered as to the difficulties of the work, why some is more pleasing to look at, what is a well balanced design or picture, etc. It is during these discussions that the children learn what it is that is "good" or what is unsatisfactory; where they made mistakes, how they can improve.

Make a survey of your classroom. How may it be arranged as a convenient work room? Can tables or benches or desks be grouped together or arranged to provide a larger area on which to work? It is possible to use the floor? Is there a dining hall with tables that may be used for an afternoon class? Is there a vacant room or building on the compound that could be used as an arts and crafts room? If so, it could be used by the entire school on different days at different periods. Are there cupboards or a room that can be locked up for safe keeping of materials? Is water available? Water can be carried into the room or set on the verandah in buckets so that the children may wash their hands, clean up the containers and tools and have water for their projects.

Being proud of the children's work also means that it should be shared with other classes and with parents on special occasions. When an especially

pleasing lesson has been completed, put all the work on display and invite other classes in to enjoy it. Invite the headmaster in often to show him what your children have accomplished. Make a collection of the best pieces of work from each lesson and have an arts and crafts exhibit at the end of each term and invite the parents. Be sure to include at least one or two pieces from every member of the class.

You, as a teacher, have an extraordinary opportunity to help children to develop desirable attitudes and values toward living and working. Art and crafts are creative mediums through which these may be taught.

PREPARATION OF MATERIALS

It may be possible to purchase all the materials and equipment required to teach this Arts and Crafts course. If it is not, most of the materials and tools may be produced from local products as the following notes suggest. It is expected that some tools and materials, such as scissors, newsprint or other inexpensive paper, colored chalk, powdered paint in the three primary colors, red, yellow, blue, will be provided by the school. The lesson plans are organized to use the simplest materials obtainable in every area. Many of these the children will be able to make or to collect.

Every teacher should have an "odds and ends" box into which the children can put things they bring to school from time to time. Pieces of cloth, seeds, pebbles, feathers, cans and bottles, pieces of paper, etc. This is a valuable source of supply when such things are needed. They are ready, at hand, and do not have to be collected all at once. Encourage the children to bring such things to school; keep a list posted in the classroom to remind them what to look for and collect. A more complete list is presented at the end of this section.

BRUSHES

Materials needed:

For bristles: animal hair (from tail), feathers, raffia; sisal.

For handles: bamboo or other straight sticks the size of a pencil.

Tools: sharp knife, razor blade, thread, rubber cement.

Method: Take the quantity of animal hair, feathers, fiber, etc., for the size needed. Fig. 1.



Tie one end and wrap securely with thread. Fig. 2. Spread a small amount of rubber cement on the tied end of the brush. Push this deep into the bamboo handle. Fig. 3. Let dry for 24 hours. Shape the brush to a point by trimming the edges with a sharp knife or razor blade. Fig. 4. If bamboo is not available, tie the brush material around the end of a stick which has been dipped (1/2inch) into rubber cement and let dry for 24 hours before trimming into desired shape.

Flat stiff brushes may also be made from coarse fiber or raffia, the ends being cut straight in order to provide a wide flat stroke. The above brushes will last a long time if cleaned, dried and stored with care.

Quick brushes may be made from chewing sticks or a piece of living bush or shrub. A strong fibrous wood is best. The stick should be the size of a pencil. Remove the bark and pound out one end with a rock until the fibers are clean. Take care that they are not damaged too much. The end should be trimmed with a knife or razor blade. These can be made as needed and will keep several days if cleaned and placed in water. A fine feather brush may be made by taking a chicken or large bird feather, cutting it to about 2 inches in length (from the tip). Strip off the lower half so that the quill can be inserted into the hole of a bamboo stick which has been filled with rubber cement. Dry for 24 hours, then trim the tip to a fine point.



BAMBOO PENS

Bamboo pens are suitable for lettering and pattern making. If they are well made, they will be capable of writing a wide stroke as well as a thin line.

Materials needed: Green bamboo about the size of a pencil.

Tools: A very sharp knife.

Method: Choose a piece of green bamboo about the size of a pencil. Hold the bamboo stick so that the tip rests firmly against a hard surface. Starting about one half inch from the end, cut a bevelled edge downwards to the end, exposing the hole in the center of the stick. Fig. 1.



Trim a piece off either side (as at "a" and "b" in Fig. 2), until the pen is of the desired width. The bamboo should next be turned over and another bevelled edge cut, taking care that it is exactly parallel with the edge on the opposite side, trimming the bevel until the tip is very thin. Fig. 3. This tip must then be cut to a straight edge on some smooth hard surface. The knife must be very sharp if it is to cut well. There is no need to split the finished nib.

CHARCOAL

Enough charcoal may be made at one time to last the class for a year, if the children gather many dry sticks about the size of a pencil. Build a small fire under the sticks and burn until the sticks become black. Remove them from the fire while they are still firm but charred throughout. Sprinkle them with water to stop the burning, allow to cool and to dry. Some of the pieces will not be usable. Sort out and keep the better ones and store in boxes. Charcoal or wood which has been burned in the kitchen fire is also usable.

RUBBER CEMENT

Cut very small pieces from a sheet of raw rubber. Put into a glass jar, filling it about 1/8th full. Add regular (white) gasoline (petrol) to fill the jar 7/8ths full. Tighten the lid and put into a cool place, out of the sun. The rubber will dissolve and form a thick gum. If the mixture is too thick, add more gasoline. If too thin, add more rubber. It should be of a consistency which will spread easily. Stir with a stick occasionally during the two days it takes for the rubber to dissolve.

STARCH

Starch to use as gum/paste or as colored starch is made by the same method. Cassava, maize, rice or wheat flour starch is mixed 1 part starch with 3 parts water and stirred to a smooth paste. Stirring constantly, heat over a fire until the paste thickens and becomes clear. There should be no lumps in it. Colored starch to be used for finger painting, etc., should be of the consistency of thick cream. Adding hot water will thin down a too thick starch. Add color, stirring well. Starch paste or paint will not keep longer than two days. It is best made up fresh the day it is to be used, or at the earliest, the night before.

CARDBOARD (Laminated newspaper)

With thin starch paste paint a sheet of newspaper. Lay a second sheet on top of this and smooth it down firmly. Continue with this method until the desired thickness is obtained. Three or four sheets is thick enough to make boxes, toys, etc. If a drawing or diagram is to be drawn, the last sheet used should be of plain newsprint. Set aside on a smooth dry surface to dry. This will take several days. Smooth the papers occasionally or put weights on them in order to produce a wrinkle free surface.

PAPIER MACHÉ

Use plenty of newspapers. Two or three newspapers will make a ball of papier maché about 4 inches in diameter. Tear paper into pieces about the size of a thumb nail. Put the pieces in a bucket and cover with water. Allow to stand overnight, stir occasionally. Squeeze all the water out, using the hands, and place in a clean bucket. Add medium thick starch and mix well. Allow to stand a few minutes before using. A few drops of oil of cloves in the starch will prevent the papier maché from going moldy. Anything made of papier maché will take several days to dry before it can be painted.

SANDPAPER

Spread raw latex from a rubber tree on stiff paper. Or spread the paper with thin rubber cement. Dust with fine sand. Allow to dry and then rub with a ruler to grade. Small pieces pasted on the back of cloth, paper, etc., will make the cloth or paper stick to a flannel board. Sandpaper is also useful for smoothing dry papier maché, clay pots, or figures.

LOOSE CHALK

When using colored chalk for drawing or leaf rubbing, the paper should be dampened. Brushed with a not too wet water wash or dipped quickly in water and dried for a few minutes, the chalk will not fall off in dust. The dampness binds the chalk to the paper. If the paper is too wet, it cannot be used as it tears too easily.

PAINTS

It would be desirable for each teacher to have large cans of powdered paint in the three primary colors of red, yellow, blue. Also, if possible, white and black. If these are not available, paint may be made from market dyes, adding a small amount of glue (thin gum), to make it permanent. If white powdered chalk is added, an opaque paint is obtained which is best for painting on newspaper. Washing blue or bluing is an excellent blue and may be used if a little of the liquid glue is added.

Colored inks may also be used, treating them as the washing blue.

Vegetable colors may be made from seeds, leaves, roots, etc., or any colors used by local craftsmen. The teacher should experiment with what is to be found in the area. These are not usually permanent and will fade. Ask the

children or the local craftsmen, they should know the local materials and how they are prepared.

Earth colors made from clay are good opaque paints. There are many different colors, yellow, various shades of red, gray and white. They are naturally thick and adhere well to paper.

RAFFIA PALM

Raffia palm is usually found growing near water. It should be cut while green and the leaves removed. The outside "bark" dried over heat and then split very thin may be used as nails (native nails), when sharpened with a sharp knife to a fine point.

Allow leaves to dry in the sun for three or four days and slit with a knife into any width desired. This makes the usual "raffia". Color with market dyes. The heart or pith may be split into thin strips or used in any thickness for construction, bird cages, toys, etc. It may also be carved or stuck together with rubber cement.

Use the dried ribs of the leaves for brooms, for weaving or as stems for abacus.

OIL PALM

The ribs are used for short brooms; leaves for weaving and basketry.

COCONUT PALM

Fiber of the outside of the palm trunk may be used for mats and brushes. The nutshell may be carved.

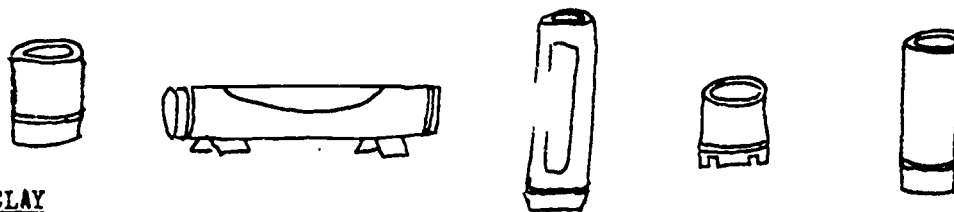
The ribs of the leaves are used for brooms. They are not as durable as raffia palm ribs.

BAMBOO

There are many uses for bamboo, some of which have already been mentioned. Sections of the larger bamboo may be used as containers for water, paint, or starch if they are cut when green, dried and cleaned out. If cracks appear, immerse in water until the bamboo has soaked up the moisture, expanded and the cracks are closed. Sections may also be used as drinking cups.

The smaller sections may also be used for construction.

Longer sections may be cut, as in illustration, and used as flower or plant containers.



CLAY

Clay may be obtained from local potters or directly from stream banks. If the clay is dry, pound the chunks to a powder, picking out any sticks, stones or leaves. Mix with just enough water to make into balls and wedge. Wedging is throwing the clay onto a flat surface to remove the surplus water and pushing out air pockets. Or beat it well with a stick. Store the moist clay in tightly covered containers and allow to "ripen" for a week or so before using. If the clay is wet, just dug from a stream bank, put it in a mortar after it has been cleaned of sticks and foreign matter, and pound. This breaks up the larger pieces and makes the clay fine grained. Add water and mix thoroughly. Pour mixture into a bucket or pan that is lined with a piece of strong, loosely woven cloth or sacking, large enough to be draped over the sides. This is a sieve which enables the water to drain from the clay. The process is hastened by straining over the sacking and pounding with a stick or stones but not hard enough to break the cloth or to force the clay to come through in chunks. Store the clay in tightly covered containers.

The teacher and children can learn about working with clay by visiting the local potters and seeing them process and work the clay.

Teaching helps: The children should learn to wedge their clay when it is at the sticky stage. Place the clay on a hard surface and knead like bread. Cut into pieces with a wire or strong cord, stack the pieces and slap the chunk on the hard surface with force. Do this several times between periods of kneading.

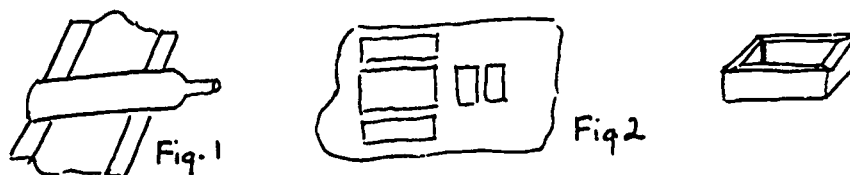
If the clay piece is not finished in one lesson, it should be covered with a clean damp cloth or a piece of plastic or wax paper (bread wrapper). A small flat piece of wood or tin may be used as a work surface, for it can be easily turned as a child works and he is able to see the piece from all sides. Tools may be improvised for carving details, a stick which has been sharpened and flattened at the end, a nail, a knife, etc.

In modelling animals and figures, it is well to keep the clay in one large

piece, pulling out a chunk for the head and as many more pieces as are needed for the legs, arms, etc. Keeping figures thick and chunky makes them more compact and usually produces work more suitable for clay. Also the figures are less apt to fall apart.

Clay Work - Slab Method:

Wedge clay. Flatten it out evenly on a cloth. Using two thin boards (at least 1/4th inch thick) lay these on either side of the clay. Use a smooth piece of wood cut from a tree branch of uniform thickness as a rolling pin, or use a large beer bottle or other glass bottle about that size. Keep the roller on the two boards and roll the clay until it is level with the boards. Fig. 1.



If making a box, cut paper patterns for the base and sides. Lay these on the clay slab, and cut around with a knife. Fig. 2. Allow these to dry a bit and assemble by scoring the edges to be joined and using slip (clay mixed with water to a thick consistency) to moisten the edges. Press together. Reinforce the inside joinings by pressing a thin roll of clay into the joint smoothing it into the sides.

Drying Clay Work:

Thin edges and small parts of clay work dry faster than the body or main section of the work and often crack and fall off. To avoid this, moisten the parts lightly with a paint brush dipped in water. Do this several times during the drying period. Two weeks, under proper drying conditions (not rainy season) is usually enough time for a piece of clay work to dry. Cracks sometimes appear around the base of a bowl where sides and bottom are joined together. This can be avoided by placing the bowl on small sticks so that air can circulate under as well as around the bowl. The body of an animal has a tendency to sag from the weight of the water in the clay. To avoid this, place a piece of crumpled paper under the body until it dries. The head and neck can be supported by bracing with a stick, the end of which has been stuck in a lump of clay to prevent its slipping. Remove as soon as the clay is firm enough to hold its shape.

COLLECTING MATERIALS

Every arts and crafts teacher should have an "odds and ends" box into which items the children bring to school can be kept. There should be marked covered tins or jars for such things as cassava or other starch, dyes, etc. Children can be appointed to be in charge of collecting each item in local villages. Store these things for future use.

Collect the following:

Newspapers

Paper of any kind, especially colored

Magazines

Boxes and cartons

Bottles and jars

Tin cans

Colored thread, rope, yarn, string

Raffia, bamboo

Bottle tops and caps to use for counters in math

Used razor blades

Scraps of cloth, sacking

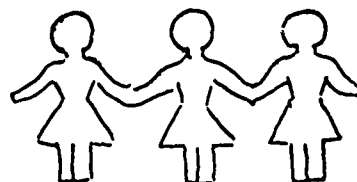
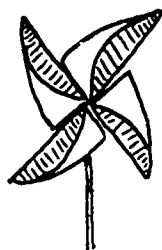
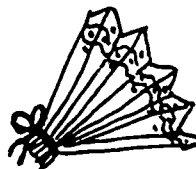
Beads, stones, seeds, beans

Feathers, shells

Anything else that can be used

LESSON PLANS

PAPER CRAFT



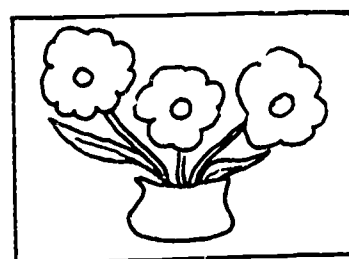
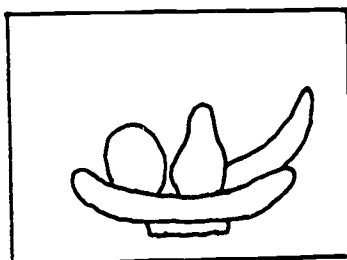
PAPER CRAFT CLASSES I - III

Paper Tearing: Fruit, Flowers, Objects

Materials: Colored newspaper (3 or 4 colors); newsprint or other plain paper (9x12 inches); starch paste; prepared examples.

Teacher's Preparation: A day or two before the lesson have the children prepare colored newspaper by brushing or dipping into water color or market dye bath and placing in a clean area of the floor to dry. From this colored paper prepare several examples of large very simple objects, fruit, flowers, bowls, etc. For the older classes prepare more detailed figures such as: clothes on a line, houses, people, trees, etc.

Procedure: Explain paper tearing to the class and show examples. Demonstrate tearing by taking paper in one hand and holding the corner between thumb and first finger of the other hand and gently tear forward. Tearing paper lengthwise (with the grain of the paper; will give straighter lines and tearing crosswise more irregular lines. In tearing crosswise, the technique is to hold firmly close to the tearing line and slowly tear out the desired shape. Lightly paste the figures to the sheet of plain paper. When the children understand the method, distribute materials and let the children begin to work. Two or three children may share one sheet of each color. Encourage the children to use their own ideas and not to copy their neighbors. When the lesson is completed and the classroom is cleaned up, display the pictures, on the wall if possible, and discuss the work.



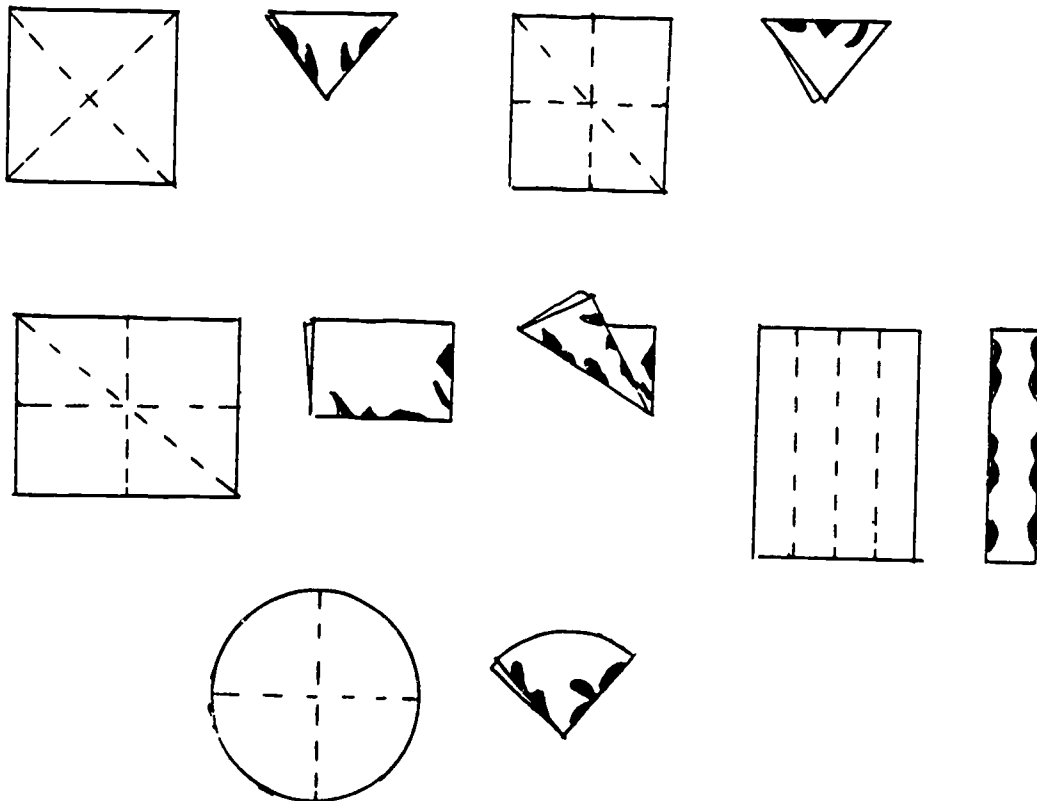
PAPER CRAFT CLASSES I - III

Paper Tearing: Doilies and Lace Patterns

Materials: Colored newspaper (3 or 4 colors); newsprint ($7\frac{1}{2} \times 10$ or $1/8$ th sheet); starch paste; examples.

Teacher's Preparation: Prepare or have the children prepare colored newspaper (see previous paper tearing lesson) or use newspaper and mount on the plain newsprint when making examples.

Procedure: Explain to the class what they are to do and show them examples. Demonstrate the different folds and how to tear out the design. Mount on the colored newspaper. When the children understand the method, distribute the materials and begin the lesson. Each child should make several doilies or patterns and mount on the colored paper the one he likes best. After collecting the left over materials and cleaning up the classroom floor and desks, display the work and talk over the lesson.



PAPER CRAFT CLASSES I - IIIPaper Tearing: Weaving

Materials: Plain and colored newspaper or newsprint; starch paste.

Teacher's Preparation: Prepare or have the children prepare colored paper (6x6 inches) so that each child will have two sheets each of plain and colored paper. Prepare several examples of paper weaving, using combinations of plain and colored or two colored papers. (See first lesson in paper tearing for technique).

Procedure: Explain the method of paper tearing and weaving --over and under each strip, then under and over the next strip. Demonstrate this method, by folding plain paper in half and marking off (by folding) margins of 1/2 inch at the open side. Carefully tear the paper in approximately 1/2 inch strips from the folded side to the margins. Do not tear through the margins. Open it up and smooth it flat. Fig. 1. The colored paper should be folded in the middle and torn into strips 1/2 inch wide. Weave the colored strips in and out through the plain paper until the space is filled. Lightly gum the loose ends. This gives a checker-board design. Fig. 2.

Using a piece of colored paper, fold in the center and mark off margins. Tear this in a zigzag pattern. Fig. 3. Tear plain paper into straight strips and weave them into the colored paper. This gives a different design. Fig. 4.

When the class understands the methods of tearing and weaving, distribute the materials and begin the lesson. Observe the children and give help when needed. When the lesson is completed, collect left over materials and display the work for class discussion. If time allows, variations of the above may be used. Fig. 5.

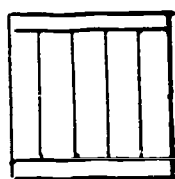


Fig. 1

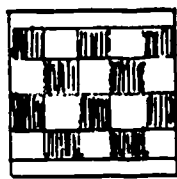


Fig. 2

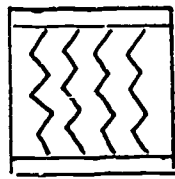


Fig. 3

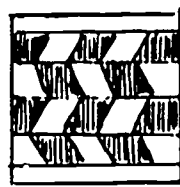


Fig. 4



Fig. 5

PAPER CRAFT CLASSES I - III

Paper Tearing: Template Mosaics

Materials: Newsprint or plain light paper (two sheets per child, one 7 1/2x10 inches and one 3 3/4x5 1/8 or 1/8th and 1/16th sheet of newsprint); crayons; starch paste; templates (patterns); examples.

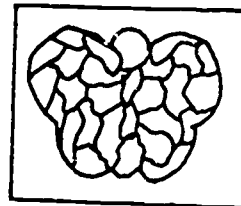
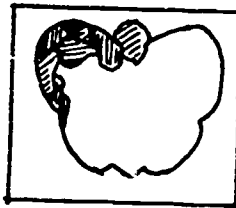
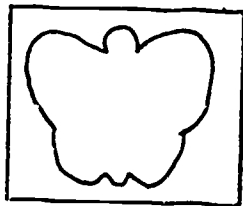
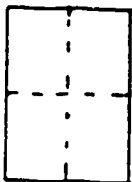
Teacher's Preparation: Prepare paper of proper sizes, trace template patterns on cardboard or heavy paper and cut out. Prepare examples.

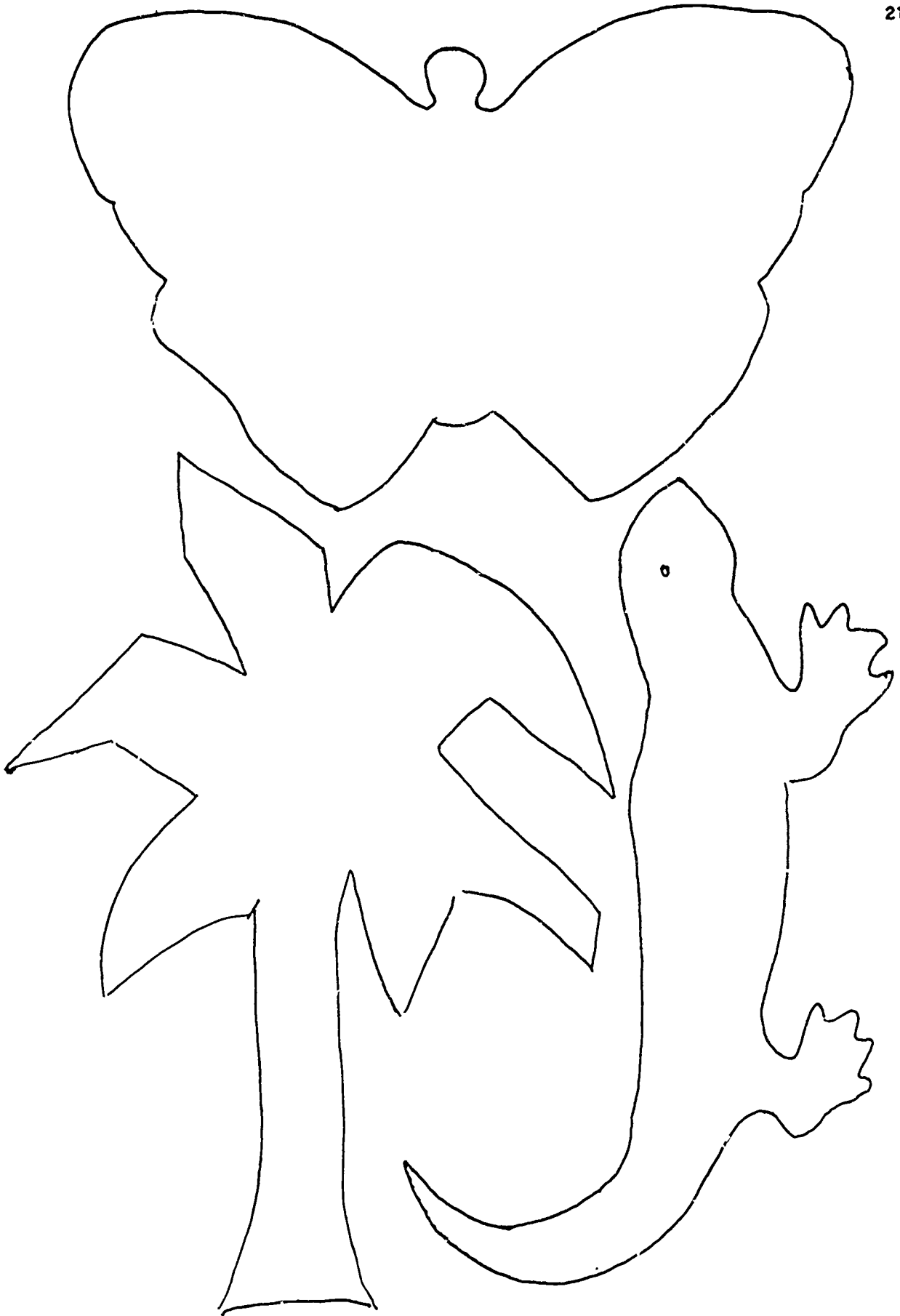
Classroom Arrangement: Children should work in groups of four to six to share crayons and paste.

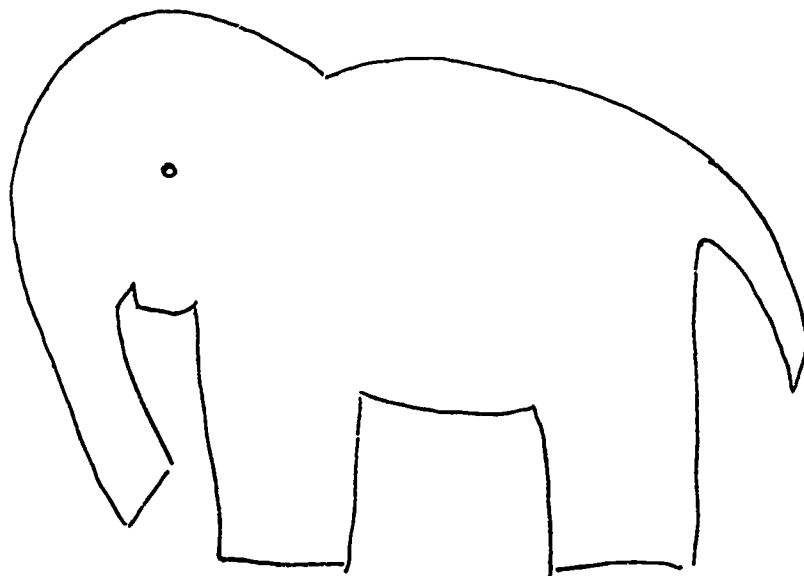
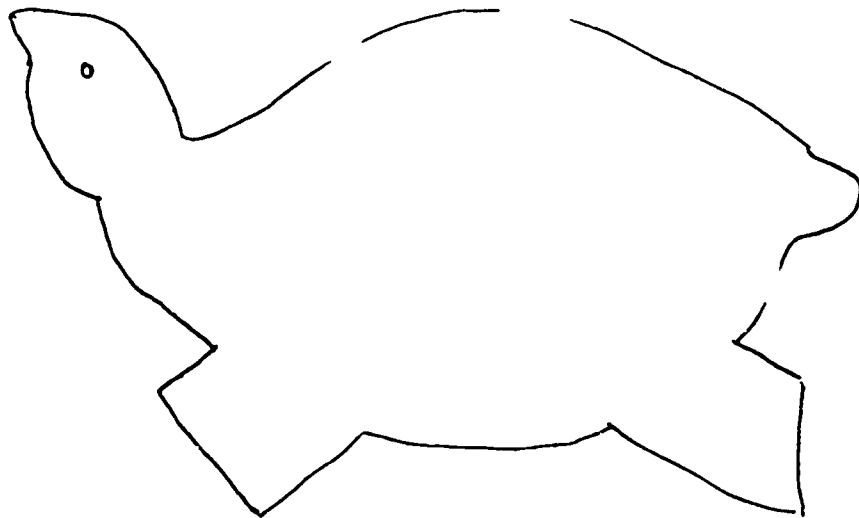
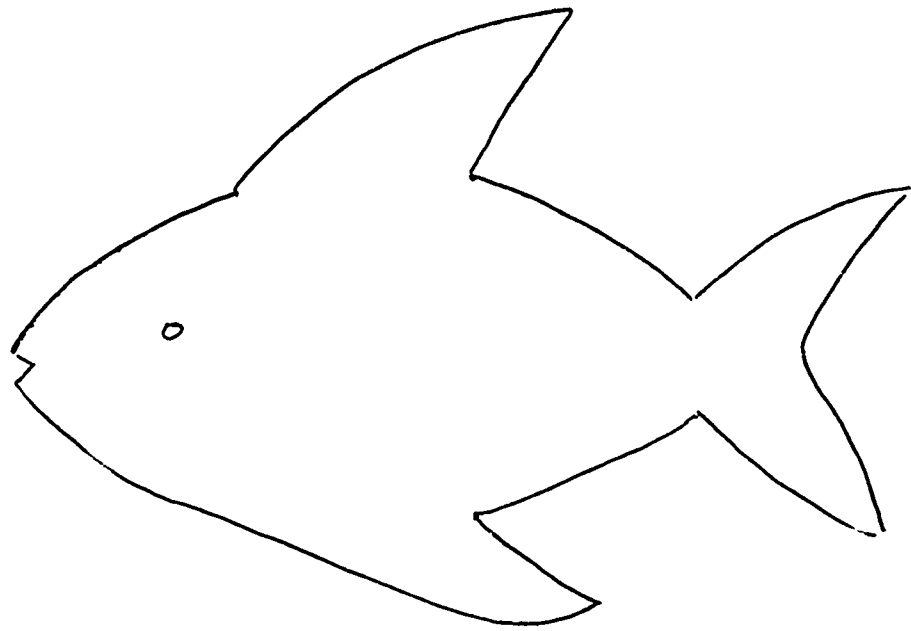
Procedure: Explain the template mosaic to class showing completed and partially completed examples. Demonstrate the folding of the smaller piece of paper into quarters to show guide lines. Rub each section with a different colored crayon. On the larger piece of paper trace around the template with a black crayon. Tear small pieces of the colored paper and paste piece by piece onto the traced pattern keeping within the black outline and without too much over-lapping until the traced figure is completely covered with the torn pieces. When the class understands the method, distribute materials and proceed with the lesson.

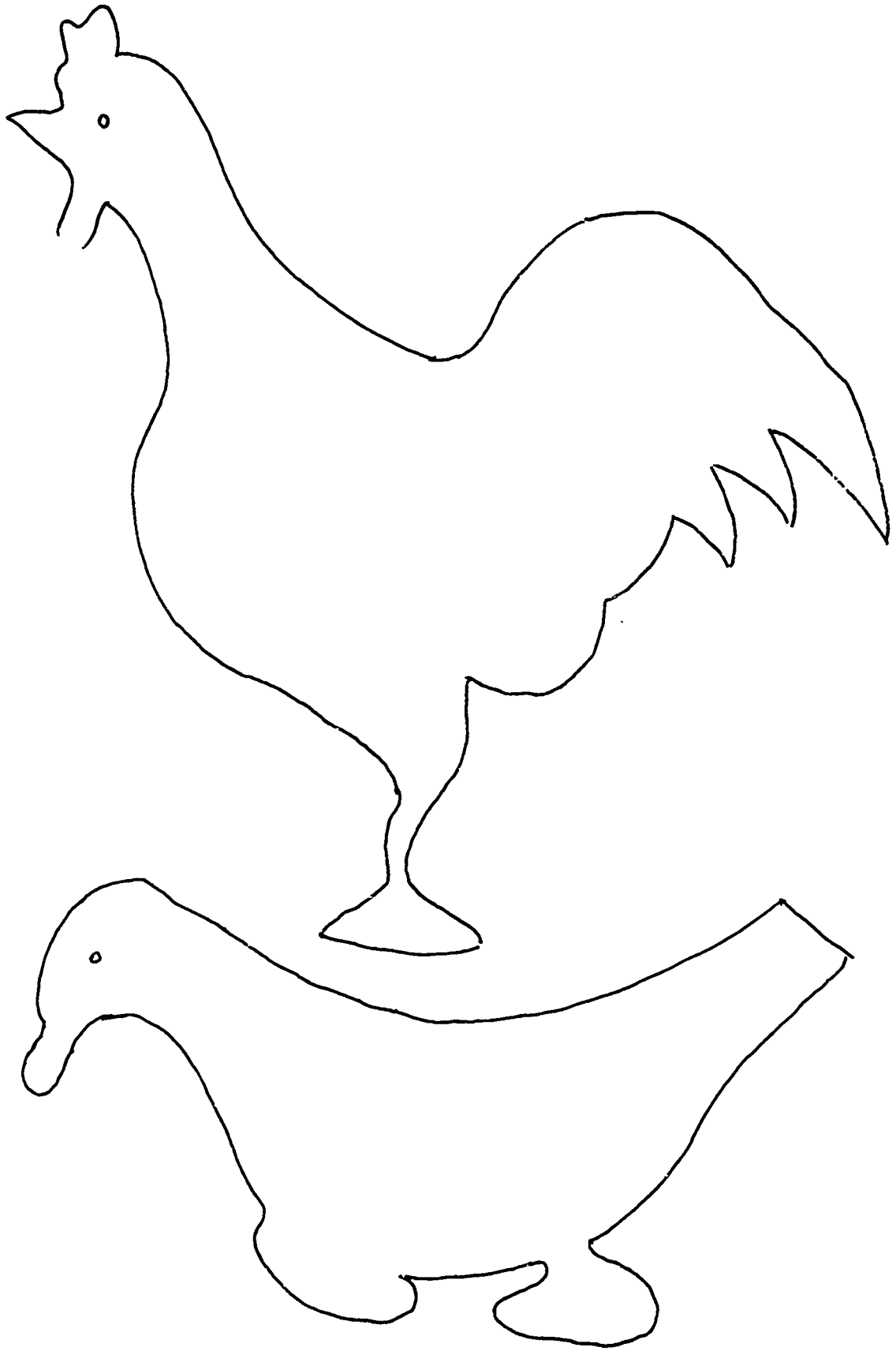
When work is completed, collect left over materials and clean up the class room. Display and discuss the lesson.

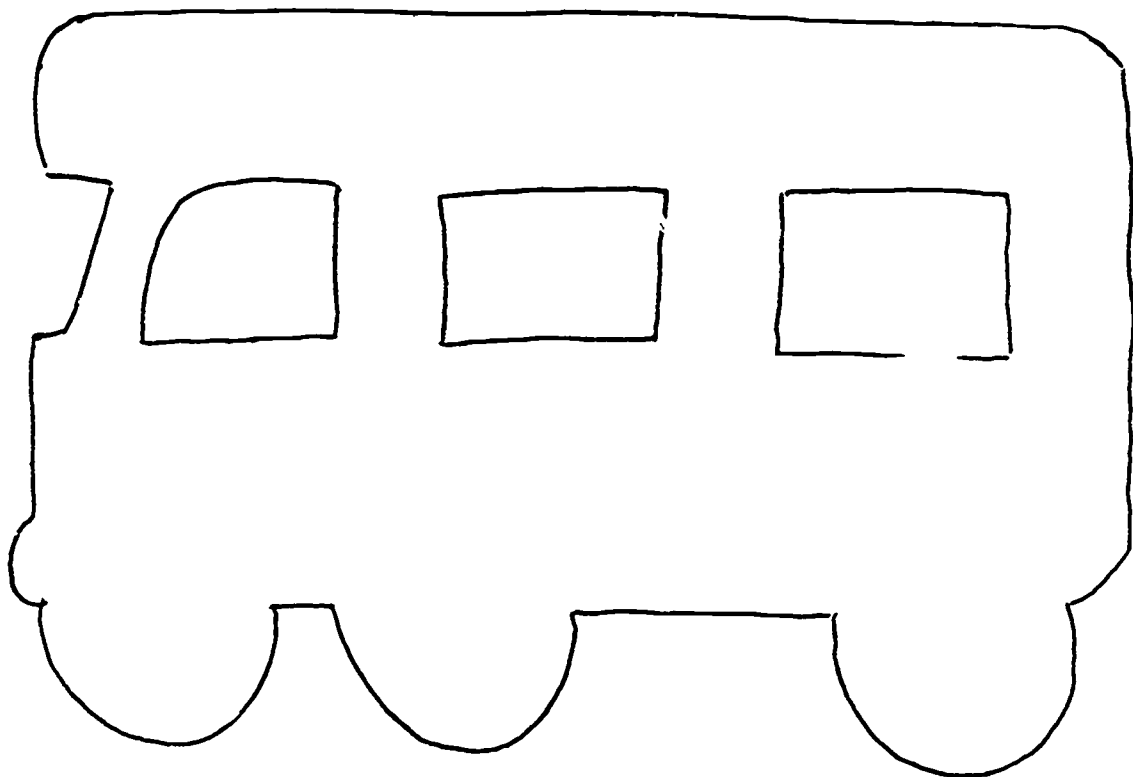
Suggested templates: butterfly, turtle, fish, duck, cock.











PAPER CRAFT CLASSES I - IIIPaper Folding: Fan

Materials: Plain or colored paper ($7\frac{1}{2} \times 10$); crayons or colored chalk; string or fiber; hole punch or a sharp pointed instrument for the teacher's use only.

Teacher's Preparation: Prepare paper of proper size; cut string or fiber into 10 inch lengths, one for each child; prepare examples of the fan.

Procedure: Explain the lesson to the class, showing examples of the fans. Demonstrate the method of folding, emphasizing accuracy in the folding. Taking a sheet of paper, draw and color a design or simple picture lengthwise on the paper, or draw a border design on one edge. When completed, fold the short side of the paper up about $\frac{1}{2}$ inch and press well. Fig. 1. Turn the paper over, Fig. 2, and fold up another $\frac{1}{2}$ inch, being careful to have the edges together. Fig. 3. Repeat, turning the paper and folding it until it is completely pleated. Fig. 4. Holding the bottom securely, make a hole 1 inch from the edge and run string thru the hole and tie tightly. Fig. 5. Open the other end and display the fan. Fig. 6. When the children understand the method of coloring and folding, distribute the materials and proceed with the lesson. Observe the class and give help when needed. The teacher should make the holes, not the children. Fans may be displayed on the wall by lightly pasting or taping the center section to the wall after the classroom has been cleaned and materials put away.

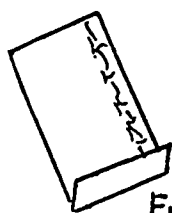


Fig. 1

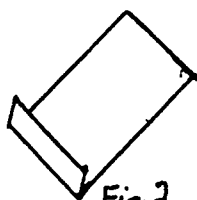


Fig. 2

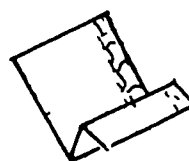


Fig. 3



Fig. 4

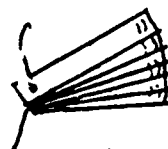


Fig. 5



Fig. 6

PAPER CRAFT CLASSES I - IIIPaper Folding: Drinking Cup

Materials: Firm paper, such as exercise book paper, 6 or 7 inches square, one per child.

Teacher's Preparation: Prepare paper of correct size and finished examples of the drinking cup.

Procedure: Explain the lesson to the class and show them the finished examples. Demonstrate the method of folding by folding the square on the diagonal. Fig. 1. Finding the center of the left side, take the right hand corner and place it at the center mark creasing the fold. Fig. 2. Do the same with the left hand corner, keeping the edges together. Fig. 3. Bring down the top corner over the folded sides. Fig. 4. Turn the cup over and bring the other top corner down on that side. Fig. 5. Distribute the paper and go ghtu the demonstration again step by step. The class should complete each step before going onto the next step. These cups may be used for drinking. If they are of heavy paper, such as cement bag paper they may be used several times.

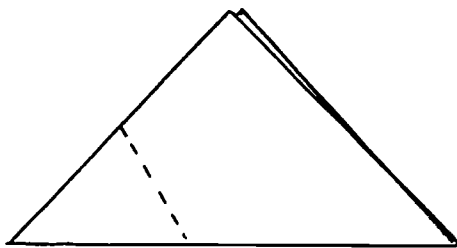


Fig. 1

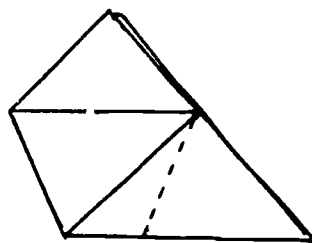


Fig. 2

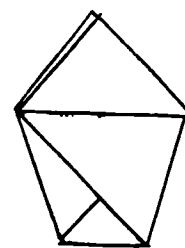


Fig. 3

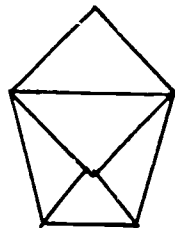


Fig. 4

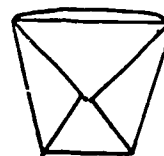


Fig. 5

PAPER CRAFT CLASSES I - IIIPaper Folding: Picture Frame

Materials: Medium weight plain paper 7 inches square; thread.

Teacher's Preparation: Prepare paper of proper size and examples of picture frame.

Procedure: Explain the lesson to the class showing them the finished picture frame.

Demonstrate the method by folding a square in half, then in quarters, to find the center. Mark the center lightly. Fig. 1.

Fold each corner to the center point. Figs. 2 and 3.

Fold each point back so that it touches the center of each side. Figs. 4 and 5. Attach a thread or string to one of the points and the picture frame may be hung on the wall.

Distribute the materials and go thru the demonstration again with the children following. After the frames are completed the children may draw a simple picture on the inside of the frame, or a picture cut from a magazine or paper may be pasted inside.

Collect materials and discuss the lesson after the work has been put on display.

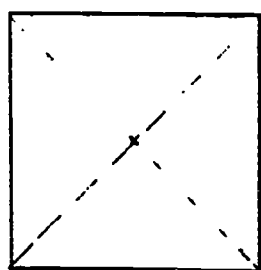


Fig. 1

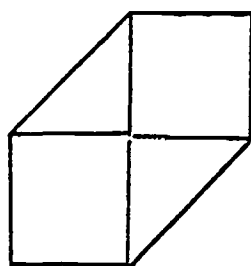


Fig. 2

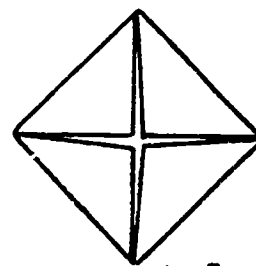


Fig. 3

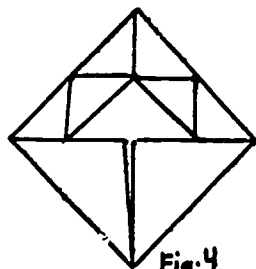


Fig. 4

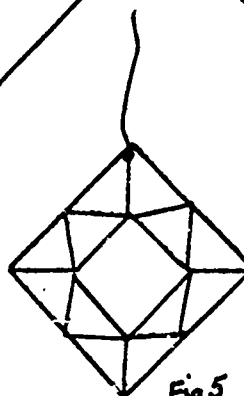


Fig. 5

PAPER CRAFT CLASSES I - IIIPaper Folding: Hat

Materials: 15x24 inch newspaper or other paper, colored or plain.

Teacher's Preparation: Prepare paper of proper size and examples of hat.

Procedure: Explain the lesson to the class, showing them examples or a finished hat. Stress the necessity of accuracy in folding. Demonstrate the method by folding the paper in half at the center of the two longest sides. Fig. 1.

Fold again in the center of the two longest sides. Open up and using the center fold as a guide, fold bottom corners toward the center. Fig. 2. and Fig. 3.

Taking top strip, fold down. Figs. 4 and 5.

Turn the hat completely over and fold the other strip down as on the first side. Open up the hat and put it on.

Distribute the materials and go thru the demonstration again with the class following step by step.

When the hats are completed, the children should put them on, wear them for the rest of the day, and then take them home.

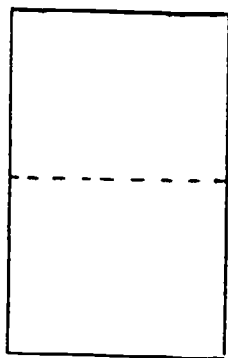


Fig. 1

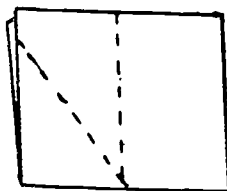


Fig. 2

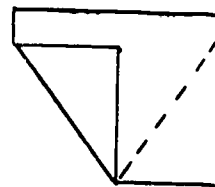


Fig. 3

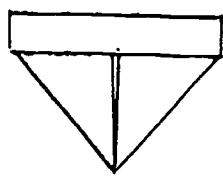


Fig. 4

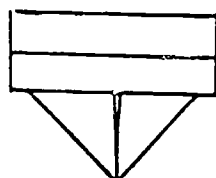
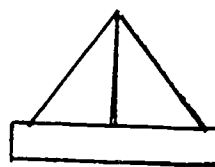


Fig. 5



PAPER CRAFT CLASSES I - IIIPaper Folding: Boat

Materials: Paper, either newspaper or cement bag or other.

Teacher's Preparation: Prepare paper, one sheet about 8x11 inches for each child. Make a folded boat.

Procedure: Explain the lesson to the class and show example of the boat.

Review the lesson on making a folded hat. Begin demonstration.

Step 1. Make a folded hat. (See previous lesson)

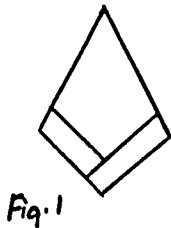


Fig. 1

Step 2. Put the thumbs inside at the center of each side and pull gently outward. Fig. 1. Press the two points together and flatten the whole piece. Fig. 2.

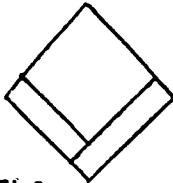


Fig. 2

Step 3. Take point "a" and fold so that it lies on top of point "b". Figs. 3 and 4.

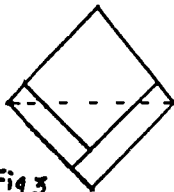


Fig. 3

Step 4. Turn the whole hat over and fold up the other side the same so that it looks as in Fig. 5.

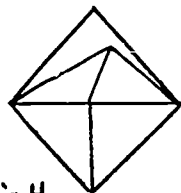


Fig. 4

Step 5. Again put the thumbs inside at the center of each side and pull outwards, flattening the piece so that it looks as in Fig. 6. Fold in center along broken line ----, both sides.



Fig. 5

Step 6. Open up last fold and pull down to form the boat as in Figs. 7 and 8.

Distribute materials and go thru the demonstration again step by step, with the children following and completing each step in turn.

If heavy paper is used, the boats may be "sailed" in water for a little while before becoming too wet.

This lesson stresses the accuracy of folding and the importance of listening and following directions.

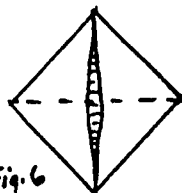


Fig. 6

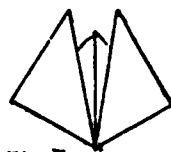


Fig. 7



Fig. 8

PAPER CRAFT CLASSES I - IIIPaper Folding: Airplane

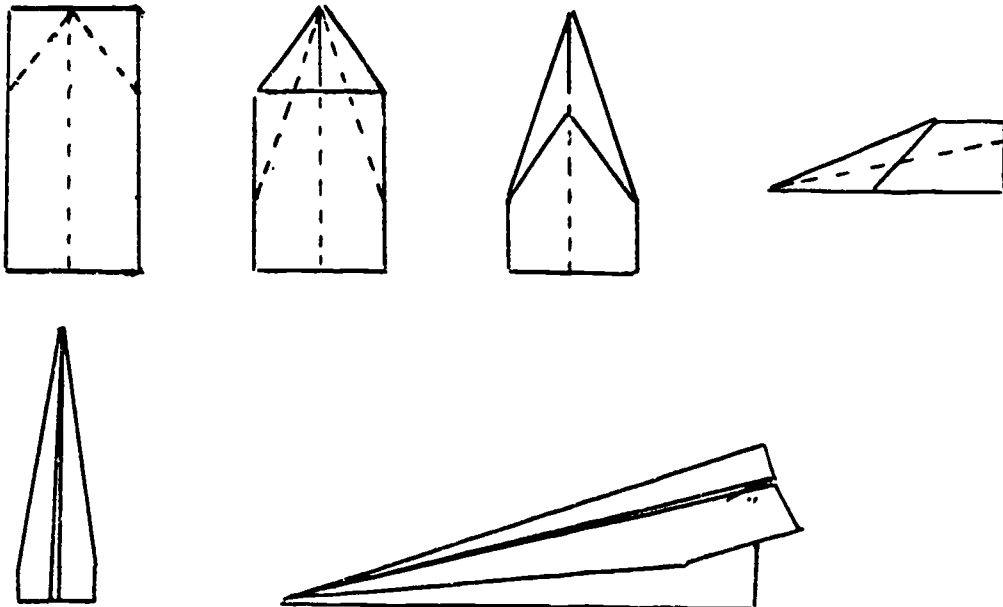
Materials: Fairly stiff paper (old exercise book paper); scissors or razor blades; finished airplanes.

Teacher's Preparation: The teacher should fold and fly airplanes until he is thoroughly familiar with the process and can make one that flies well.

Procedure: Explain the lesson to the class, showing them how the airplane flies and emphasizing the need for careful and accurate folding. If exercise book paper is being used, trim the ragged edge with scissors or a razor blade and ruler.

Demonstrate folding by following the steps illustrated below. After distributing the materials go thru the demonstration again step by step, with the children following.

When the planes have been completed, the children should try flying them. If the planes do not glide properly, go over the folding again and give help where necessary, explaining to the child or the class what had been the cause of the faulty flying. All broken lines ----- are folding lines.



PAPER CRAFT CLASSES I - IIIPaper Folding: Pinwheel

Materials: Medium weight paper cut into 6 inch squares, one for each child; pins; 10 to 12 inch length thin sticks (bamboo or other), one for each child; scissors or razor blades.

Teacher's Preparation: Prepare or have the children prepare the thin sticks. Cut the paper to proper size and make examples of the pinwheel.

Procedure: Explain the lesson to the class and show the examples of the pinwheels. Demonstrate the method of folding corner to corner, and marking the center. Fig. 1.

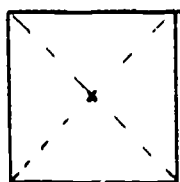


Fig. 1

Using the folds as guide lines, cut each about three quarters toward the center. Fig. 2.

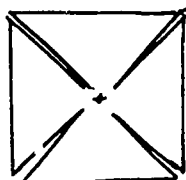


Fig. 2

Fold, but do not crease, each corner to the center, overlapping at the center. Pass a pin thru all the center points and into the stick. Fig. 3 and Fig. 4. When the child runs, the windmill will turn around.

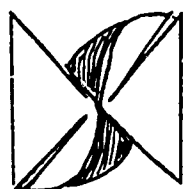


Fig. 3

After the demonstration distribute the materials and go thru the demonstration again the children following each step. Care should be taken not to cut to the center and to have points overlapping. Before folding and cutting the paper may be colored with a different color on each side.

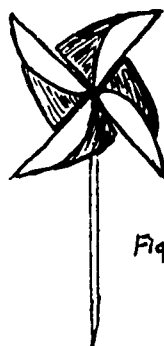


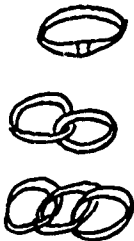
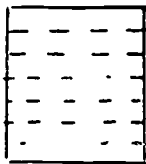
Fig. 4

PAPER CRAFT CLASSES I - IIIPaper Cutting: Chains and Spirals

Materials: Colored paper ($7\frac{1}{2} \times 10$ inches), or colored magazine pages, one sheet per child; scissors; paste, thread.

Teacher's Preparation: Prepare of correct size and examples of chains. Cut circles of various sizes or have some of the children cut them from template patterns, enough for the entire class. Prepare examples of spirals cut from circles.

Procedure: Explain the lesson and show examples of chains. Demonstrate the folding of the paper by taking one piece, folding it in the center crosswise and then folding it twice more. Open it up and smooth it out. Cut on the folded guide lines until all eight strips are cut. Taking one strip, paste the ends over each other, lapping about one inch. Take the next strip, pass it thru the first circle and paste in the same way, and so on until all eight strips are used in making a chain of eight links. When the children understand the method, distribute materials and proceed with the lesson. When the chains are completed, the children may join them together making them long enough to stretch the length of the room, or across the classroom.



When the chains are completed, show examples and demonstrate the making of the spirals. Take one circle and begin to cut at the outer edge and make a continuous $\frac{1}{2}$ inch wide cut to the center. Pull it out, stretching it slightly, and suspend it from a thread. When children understand the method, distribute the circles and begin working. After cutting the spirals, the children should tie a thread from the top or the bottom and attach the thread to a long string stretched across the room. When the work is completed, put away extra materials and clean up the classroom. The chains and spirals make attractive party or Christmas decorations.

PAPER CRAFT CLASSES I - I^{VI}

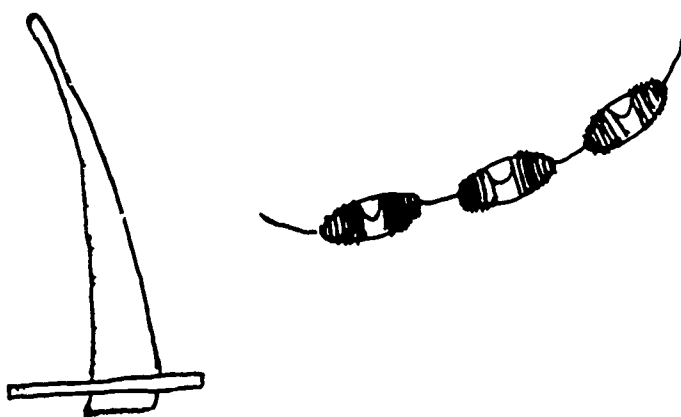
Paper Cutting: Beads

Materials: Newspaper (may be colored); paste; small sticks or twigs 3 to 4 inches long; scissors if the children are to prepare the strips; containers for the paste and stick brushes; string or thread; finished strand of beads.

Teacher's Preparation: For the younger children the triangles of paper should be prepared before class begins; the older classes should cut their own. Prepare the starch paste and put into containers with three or four brushes, if the children are working in groups. Remind the class to bring the small sticks or twigs for rolling the beads. Prepare a strand of beads as an example.

Procedure: Explain the lesson and show the class the strand of beads. Demonstrate the method of cutting the strips, which should be about 1 inch wide and 6 inches long tapering to a slightly rounded end. Fig. 1. Taking one strip and a small stick, wrap the triangle around the stick, starting with the wide end, Fig. 2, and securing the point with a dab of paste. Make several beads so that the children will understand the method of wrapping.

Distribute the materials and begin the lesson. Observe the children and give help when needed. After each child has completed several beads, show them how to thread them on a string and tie the ends together. Fig. 3. The beads may be used during the math lesson also. When the lesson has been completed, gather up materials and discuss the lesson.



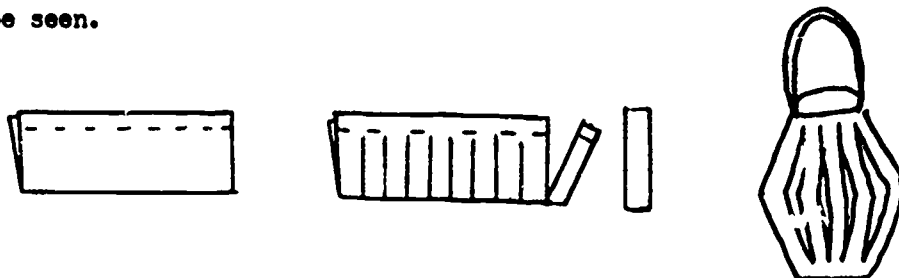
PAPER CRAFT CLASSES I - III

Paper Cutting: Lantern

Materials: Plain or colored paper of various sizes, not larger than 5x8 inches, or colored magazine pages; scissors; paste; thread.

Teacher's Preparation: Prepare examples of the lantern and paper in various sizes, but all rectangular.

Procedure Explain the lesson to the class and show them the prepared examples. Demonstrate the folding and cutting by taking a piece of the paper and folding it in half, lengthwise, then fold the open edges in approximately $\frac{3}{4}$ of an inch. Fig. 1. Smooth out the top folds, these are guide lines. Cut with scissors or razor blade, from the folded (center) edge at about $\frac{1}{2}$ inch intervals to the top guide line. Fig. 2. On the last cutting, go thru the guide line so that there is a separate strip for the lantern handle. Fig. 2. Open up and curve around, pasting edges over each other. Paste handle on top. Fig. 3. When the children understand the method, distribute the materials and begin the lesson. When the work is completed, gather up left over materials. Pass a long thread or string thru the handles of the lanterns and stretch across the room so that the lanterns hang free and can be seen.



These lanterns are very attractive party or Christmas decorations.

PAPER CRAFT CLASSES I - III

Paper Cutting: Template Figures to be used in Making a Mural

A Mural is a wall decoration made by producing a scene or design using cutout or torn figures attached to a background. The scene may also be painted or drawn directly on the background.

Materials: Templates or patterns cut from light weight cardboard; crayons; newsprint or other plain paper 7½x10 inches, two sheets per child; two or three large sheets of newsprint or other long, wide strips of plain paper to be used for the background; scissors, tape; paste; examples.

Teacher's Preparation: Tape or paste the large sheets of paper together and attach to the classroom wall to be used as the background of the scene. The teacher or the children may lightly sketch in hills, roads, river, trees, etc. giving the idea for the scene. Prepare templates as in paper tearing mosaic lesson. Some suggestions are given with this lesson, the teacher should draw others of his own design. Prepare traced and colored examples of the figures.

Procedure: Show the class the template patterns and discuss with them the making of a scene, using the cutout figures on the background attached to the classroom wall. Demonstrate the tracing, coloring and cutting out of the patterns, adding any details where necessary with dark crayon. Attach these temporarily, to the background, giving the children the idea of the scene.

When the children understand the lesson, distribute the materials and begin the lesson. Each child should make two cutouts and color them as he wishes, sharing crayons and templates.

When the work is completed, collect materials and clean up the classroom. After discussing the work, two or three children at a time should come forward and using a bit of paste (from the teacher's desk), attach their cutouts to the background in an appropriate place, completing the mural. If they wish, the children may add some drawing directly to the background to make it more complete, such as birds, clouds, human figures.

PAPER CRAFT CLASSES IV - VIPaper Cutting: Three Dimensional Circles, Squares, Strips

Materials: Paper of a better quality than newsprint, colored magazine pages or typewriter paper or painted newspaper; scissors; rulers; paste; thread.

Teacher's Preparation: Prepare examples of each type.

Procedure - Squares: Explain the lesson to the class and show examples. Demonstrate the method of folding and cutting, distribute the 6 inch squares and go thru the demonstration again step by step with the class following each step.

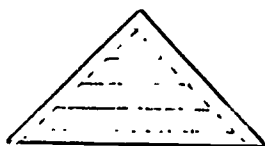


Fig. 1

Step 1. Fold square diagonally twice. Using a ruler, mark a 1/2 inch margin on each side and guide lines for cutting 1/2 inch apart. Fig. 1.



Fig. 2

Step 2. Cut from folded edges, first from one side and then the other to within 1/2 inch (the margin) from the opposite edge. Fig. 2. Do not cut thru the margin.

Step 3. Open up carefully, hold by the top and stretch gently. Attach a thread at the top and hang up.



Fig. 3

Circles: Step 1. Cut a circle then fold it in half twice. Mark margins 1/4th inch wide and guide lines 1/2 inch apart as in the square. Fig. 3.



Fig. 4

Step 2. Cut across folded edges, first from one side and then the other to within 1/4th inch (margin) from the opposite edge. Fig. 4.

Step 3. Open carefully and stretch gently. Attach a thread to the top and hang up.

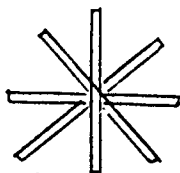


Fig. 5

Strips:

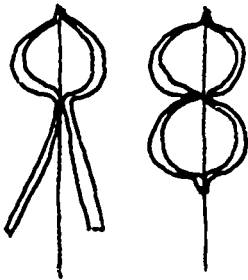
Step 1. Cut strips of paper 1/2 inch wide and as long as the length of the paper used.



Fig. 6

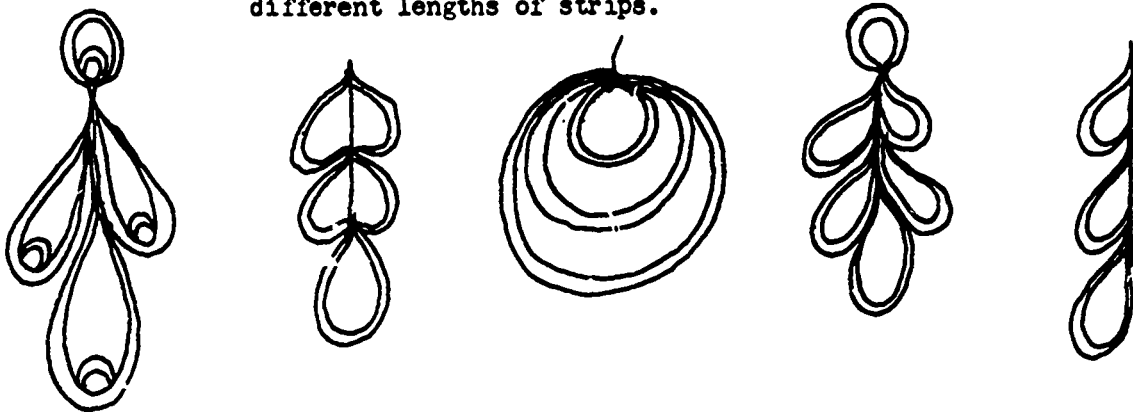
Strip ball: Lay 4 strips of the same length of paper across one another and paste lightly. Fig. 5. Pick up ends - overlap in the same order and paste lightly.

Fig. 6. Attach thread and hang up.



Looped strips: Taking 3 strips, paste lightly together at the top. Holding the center strip straight push up the two outer strips making loops, paste lightly. Take ends of outer strips and push up, making loops. Paste. Cut off extra length of the center strip. Attach a thread and hang up. Five strips may be used in this manner also. Fig. 7,

Variations of the loop: Try the following illustrations with different lengths of strips.



When the class has completed the lesson, gather up materials and clean up the classroom. These strip figures make nice Christmas or any holiday decorations. Discuss the lessons and ask the children to think of different ways to use the strips. Encourage them to be original in creating the strip decorations. Using several colored strips together is also effective.

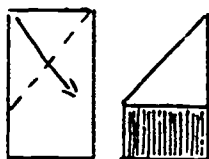
PAPER CRAFT ALL CLASSES

Paper Cutting: Squares, Circles, Rectangles in Lace Patterns; Paper Dolls

Materials: Paper (newsprint, newspaper), $7\frac{1}{2} \times 10$, or $1/8$ th sheet of newsprint, several pieces per child; scissors or razor blades.

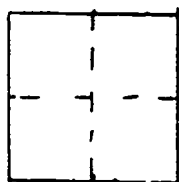
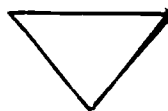
Teacher's Preparation: Prepare paper of proper size and several examples of each type of folding and cutting.

Procedure: Explain the lesson to the class and show examples. Demonstrate step by step with the children following each step. Distribute the first sheets of paper.

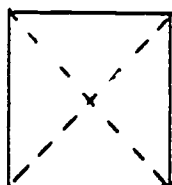


Step 1. Make a square from the rectangular paper by folding and cutting as in Fig. 1 and Fig. 2. Cut off shaded area.

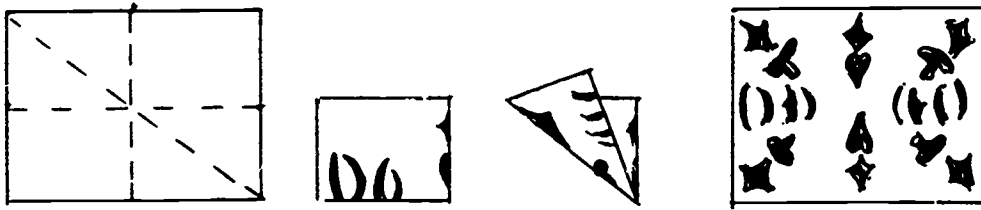
Step 2. Fold and cut squares as illustrated below. Cut out shaded areas. Open carefully.



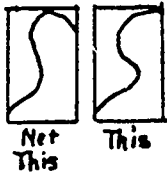
Step 3. Fold and cut a circle from a square, as in illustration. Before cutting design, open up one fold. Cut out shaded areas. Open carefully.



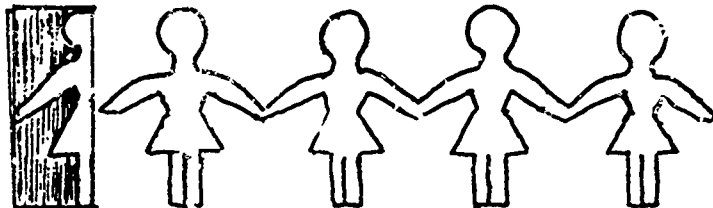
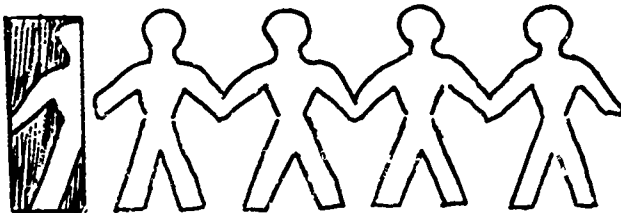
Step 4. Fold and cut rectangle as illustrated. Cut out shaded areas. Open carefully.



Step 5. Paper Dolls (7½x12 paper)



Fold rectangle in half, in half again and in half a third time. Begin cutting the head from the folded side, never from the open side. Cut out the shaded areas, as in illustration. The hands of the dolls should be attached. Cut the head straight from the side do not dip down.



When the lesson has been completed, clean up the classroom and display the work. The squares, circles and rectangles could be pasted lightly on colored newspaper to show off the designs. The children should experiment with folding and cutting original designs. There are many other methods of folding and cutting; only a few have been illustrated here.

PAPER CRAFT CLASSES IV - VI

Paper Folding and Cutting: Five Pointed Star

Materials: Plain paper cut into 4 inch squares; scissors.

Teacher's Preparation: Prepare paper, several squares for each child and examples of plain stars and some cut as snowflakes and in lace patterns.

Procedure: Explain the lesson and show the examples. The demonstration should be given step by step. The teacher gives the entire demonstration of folding and cutting, illustrating the folds on the blackboard as well as actually folding the paper.

Distribute the materials and repeat the demonstration step by step with the class following, completing each step before going on to the next.

Step 1. Fold the 4 inch square in half forming a triangle. Fig. 1.

Step 2. Find the center of line "ab" by folding point "a" to point "b" making a small crease. Fig. 2.

Open up into Fig. 1 triangle.

Step 3. Fold point "c" to point "d" and crease. Note points "e" and "f". Fig. 3.

Step 4. Fold point "a" up toward point "b" along the "f" - "cd" line, keeping point "f" very sharp. Fig. 4.

Step 5. Hold work in hand. Fold point "e" back to point "cd" keeping point "f" very sharp. The front will look as Fig. 5, the back as Fig. 6.

Step 6. Having the back side toward you, cut from point "e" along the broken line ---- as in Fig. 6. The deeper the cut, the sharper the points of the star. Open carefully.

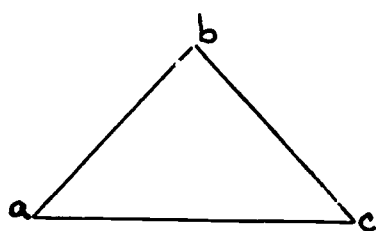


Fig. 1.

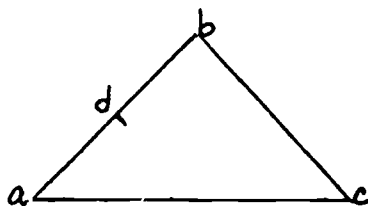


Fig. 2

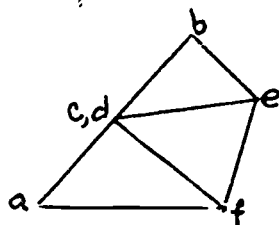


Fig. 3

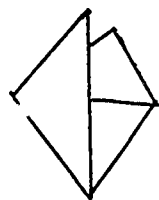


Fig. 4

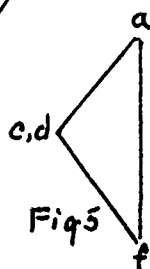


Fig. 5

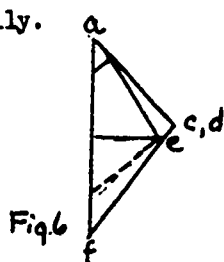
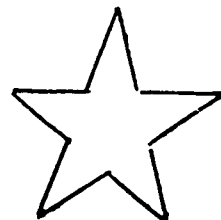


Fig. 6



Snowflake: When the star has been cut but before opening it up, cut along the edges as in Fig. 7. Shaded parts should be cut out. Open carefully. Children should not copy the teacher's example or his neighbor's, but should try for original cutting.

Lace Patterns: when the star has been cut but before opening it up, cut along folded edges as in Fig. 8. Open up carefully. Encourage the children to be original in their designs.

After the lesson is finished, the cutouts may be mounted on colored paper (painted newspaper) and displayed. The cutouts can also be used for effective rubbings.

Clean up the classroom and discuss the lesson.



Fig. 7
Snowflake



Fig. 8
Lace pattern

PAPER CRAFT - MEASUREMENT LESSON CLASSES IV - VI

Cut-Out Stick Figures

Materials: Light cardboard (cereal or soap boxes) or laminated newspaper (see Preparation of Materials); rulers; pencils; scissors or razor blades; paste; thread and string.

Teacher's Preparation: Prepare examples in various stages of completion; write on the blackboard or a large sheet of newsprint, the measurements to be used; cut 1 inch circles from cardboard to use as templates for figure heads.

Procedure: Explain to the class that they are to construct stick figures in various positions of action, recalling the lesson on the drawing of stick figures. The teacher may use the same technique of asking one child at a time to come before the class and take positions of running, jumping, throwing a ball, etc. The charts prepared for the stick figure drawing lesson may also be used.

Ask the children to count the pieces used in the examples which the teacher has prepared. (17 pieces) Explain that the proportions of the pieces are about the same as the proportions of a human figure. A child may be measured if necessary.

The shoulders are wider than the hips.

The two sections of the arms are approximately the same length.

The shoulders are about the width of the length of one section of the arms.

The two sections of the legs are approximately the same length but are longer than the arms.

The head is approximately one half the width of the shoulders.

Demonstrate the measuring necessary on a piece of light cardboard.

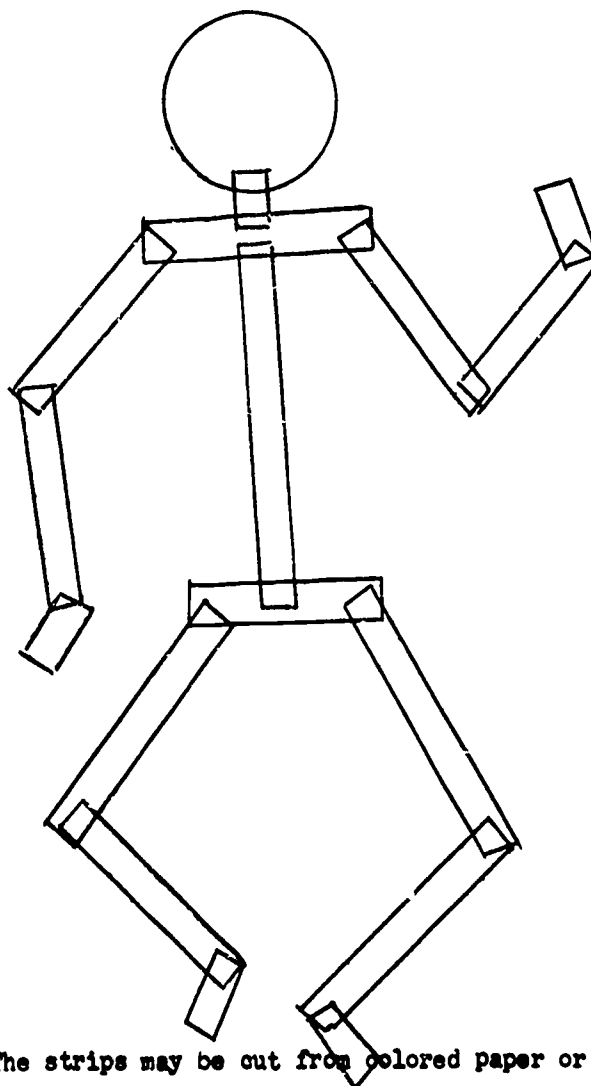
Depending upon the size of the cardboard, measure three or four strips $\frac{1}{4}$ th or $\frac{3}{10}$ centimeters wide. They are to be cut, then measured and cut as follows:

1 strip	$\frac{1}{4}$ inch for neck
4 strips	$\frac{3}{4}$ inch for hands and feet
1 strip	$1\frac{1}{4}$ inch for hips
5 strips	$1\frac{1}{2}$ inches for arms, forearms and shoulders
4 strips	2 inches for thighs and legs
1 strip	$2\frac{1}{2}$ inches for trunk of body
1 circle	1 inch diameter for head

Arrange the strips in different positions until the desired pose is obtained. Lightly paste the parts together as in illustration. Attach a thread to the head and suspend from a string stretched along the classroom wall.

After the class understands the method to be used and questions have been answered, distribute materials and begin the lesson. Observe the work and give help where necessary.

When the figures are completed, hang them by threads on the stretched string. Collect materials and discuss the work. Suggest to the class that what they have learned about the proportions of the body in this lesson will help them in their clay work, painting and drawing lessons.



VARIATION: The strips may be cut from colored paper or colored magazine advertisements and pasted on plain paper.

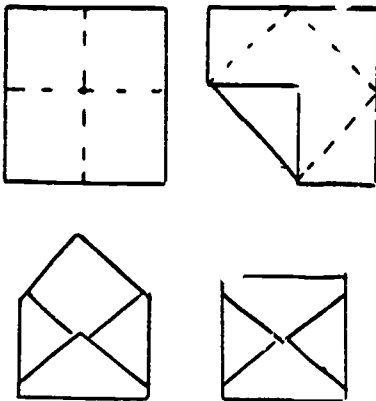
PAPER CRAFT - MEASUREMENT LESSON CLASSES IV - VI

Envelopes - Various Sizes - Two or Three Lessons

Materials: Paper, newsprint or other ($7\frac{1}{2} \times 10$ or $1/8$ th sheet of newsprint) (8×10 "Typewriter" paper may also be used); pencils, rulers, scissors or razor blades; paste.

Teacher's Preparation: Prepare paper of proper size, four sheets per child and examples of each type of envelope.

Procedure: Explain the lesson to the class and demonstrate the making of the simplest square envelope first. Making a square of a sheet of paper, fold it in quarters to find the center. Fold one corner to the center, extending it slightly beyond the center point. Do the same with two other points. Secure with a bit of paste, being careful not to get any inside the envelope. Fold down the top as in the illustration. Answer any questions and then distribute the materials, only one sheet of paper to each child. The class should follow the teacher step by step as he again shows them how to fold the envelope. When the envelopes are completed, put them aside and begin the second demonstration.



Second Envelope: This should be demonstrated step by step with the class measuring their own papers following the teacher's illustration on the blackboard, completing each step before going on to the next. The measurements given are for the correct size to be used by the class. Double the measurements for the blackboard illustration. Stress the necessity for accuracy in measurements.

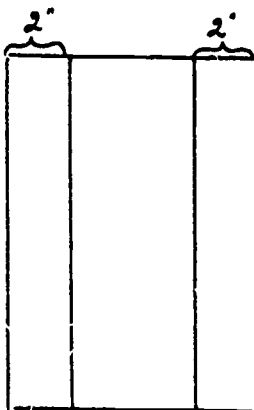


Fig. 1

Explain the lesson, showing examples and distribute another sheet of paper to each child. On the blackboard draw a rectangle measuring 10×15 inches. (This represents the $7\frac{1}{2} \times 10$ paper).

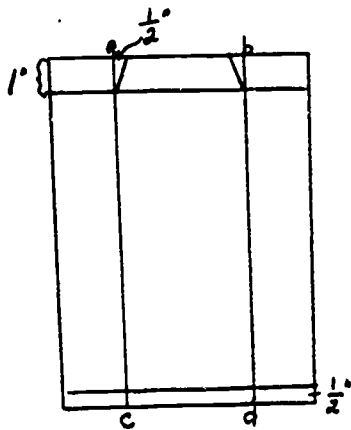


Fig. 2

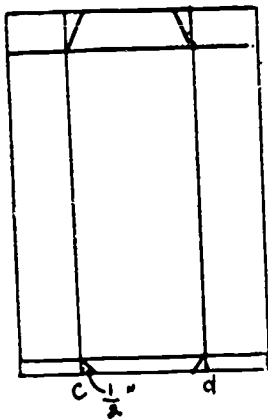


Fig. 3

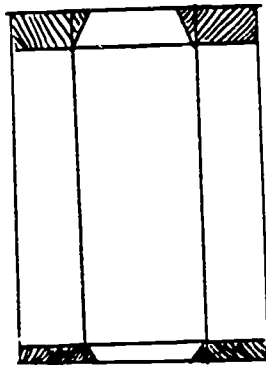


Fig. 4

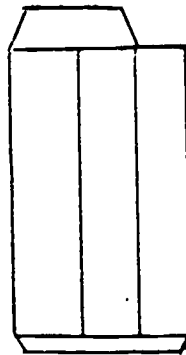


Fig. 5

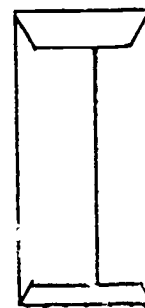


Fig. 6

Step 1. Measure in from both sides at top and bottom 2 inches, draw lines. Fig. 1.

Step 2. Measure down from the top edge 1 inch on both sides, draw line. Measure up from the bottom edge 1/2 inch, draw line. Label as in Fig. 2, a, b, c, d.

Step 3. Measure in from points a and b 1/2 inch, draw a line as in Fig. 2.

Step 4. Measure in from points c and c 1/2 inch, as in Fig. 3.

Step 5. Shade parts as in Fig. 4. These parts are to be cut off. Show example of a partially cut out envelope. With the teacher helping, the children may cut out their envelopes.

Step 6. Fold in on the long lines and cross lines as in Fig. 5. Paste along the long over-lap and on the bottom flap, slipping a strip of paper inside the envelope before pasting to keep the paper from getting inside.

Observe the work and give help when necessary. Children should write their names on the inside of the top flap. Collect the completed work and clean up the classroom.

SECOND ENVELOPE LESSON

Third Envelope Style: Use the same materials and the same method as for the first lesson: demonstrating on the blackboard step by step, the class completing each step after the teacher's demonstration before going onto the next step. Follow the lesson's diagrams. Double the measurements given in the blackboard illustration.

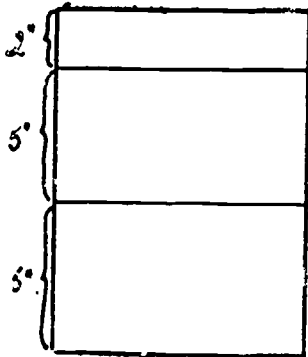


Fig. 1

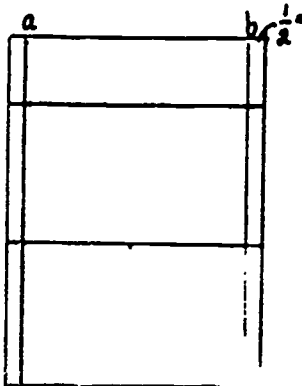


Fig. 2

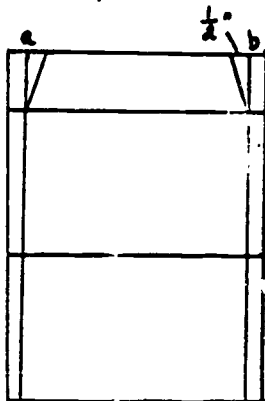


Fig. 3

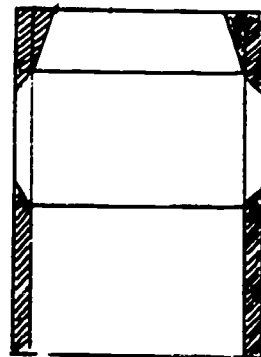


Fig. 4

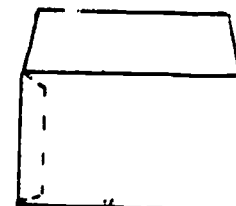


Fig. 5

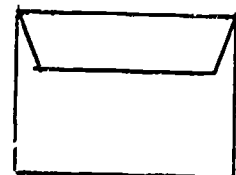


Fig. 6

Step 1. On a $7\frac{1}{2} \times 10$ paper measure down from the top edge of the paper on both sides, 2 inches and 5 inches, draw lines. Fig. 1.

Step 2. Measure in from each side, top and bottom $\frac{1}{2}$ inch, draw lines. Label points a and b. Fig. 2.

Step 3. At the top edge, measure in $\frac{1}{2}$ inch on both sides from points a and b. Draw lines as in Fig. 3.

Step 4. Measure $\frac{1}{2}$ inch on the edges of both sides down from the first line and up from the second line as in diagram. Fig. 4. Shade parts shown. These are to be cut off. Show the class a partially cut out envelope and then have the children cut their own.

Step 5. Fold in on the outside lines of the center section and on the crosswise lines as in Fig. 5.

Paste the side flaps on the top of the folded over part and press down the lower section so that the envelope looks as in Fig. 6. Slip a piece of paper inside the envelope before pasting. When envelopes are completed, the children should write their names on the inside of the top flap. Put aside to dry and begin with the demonstration of the fourth envelope.

Fourth Envelope (Expanded Type)

Use the same technique of blackboard illustration with the class following step by step.

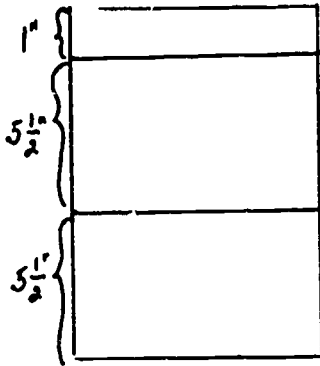


Fig. 1.

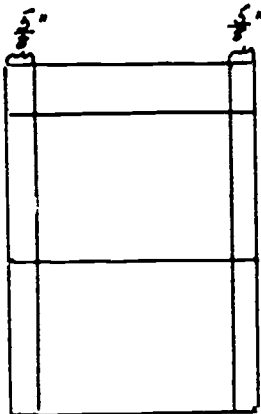


Fig. 2

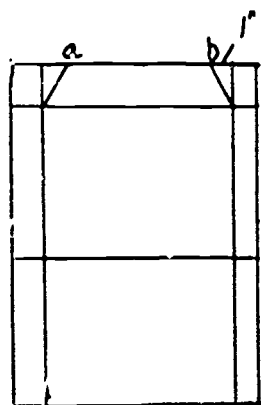


Fig. 3

Step 1. Using a $7\frac{1}{2} \times 10$ paper measure down from the top edge 1 inch and $5\frac{1}{2}$ inches, draw lines. Fig. 1.

Step 2. Measure in from each side, top and bottom $\frac{5}{8}$ inch, draw lines. Fig. 2.

Step 3. Measure in at the top edge 1 inch, mark points a and b. Draw lines from a and b as in Fig. 3.

Step 4. Measure $\frac{1}{2}$ inch on edges of both sides down from the first line and up from the second line, draw lines as in Fig. 4. Shade parts shown. These are to be cut out. Show the class a partially cut out envelope. Have them cut their own.

Step 5. Fold in on cross lines. Fold in line on sides of center section, then fold back (half way) to the edge as represented on diagram with broken line ----. this is the expanding section. Paste should be put only on the top of the folded back section after slipping paper inside so that the paste will not get inside the envelope.

When the envelopes are completed, have the children write their names on the inside of the top flap and put aside to dry. After collection leftover materials, clean up the classroom and discuss the lesson. The children should use the envelopes to enclose letters written during another class period.

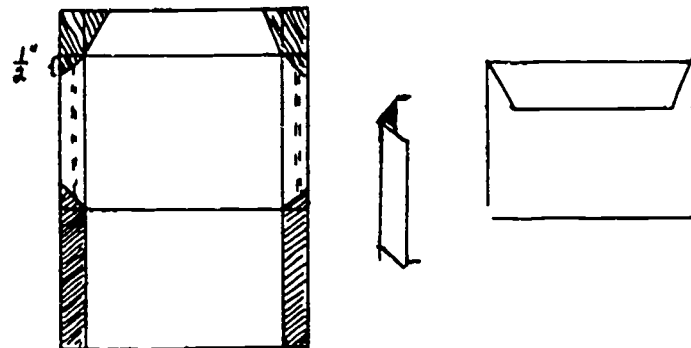


Fig. 4

PAPER CRAFT - MEASUREMENT LESSON CLASSES V AND VI

Folding Books - Two Lessons

Classes V and VI are to make concertina or folding reading books for Class II. Each child should choose a subject of interest to the younger children, writing and illustrating a simple story. The title of the story and the name of the author should be printed on the cover of the book.

Materials: Paper, cement bag or brown paper bag or other heavy paper (the children should bring this if possible); pencil; rulers; newsprint or any plain paper; scissors; paste.

Teacher's Preparation: Prepare partially completed and completed examples. Prepare or have children prepare newsprint strips 22 inches long by 5 inches wide.

Procedure - First Lesson: Explain the lesson to the class showing examples and telling them that when the books are completed they are to be used by Class II in a reading lesson. Stress accuracy in measuring.

Begin the demonstration by measuring a piece of heavy paper into a strip 24 inches long and 6 inches wide. Cut off excess paper.

Fold the strip in the center, then fold ends back to first fold. This will open out to be a "concertina".



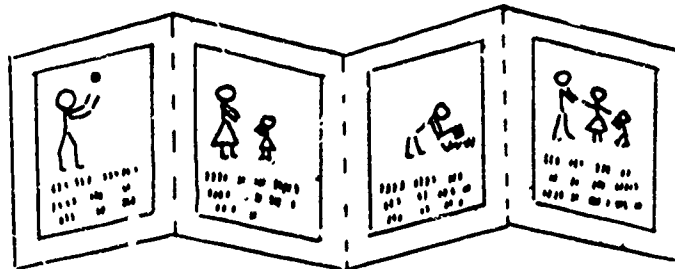
When the children understand the method, distribute the heavy paper, rulers, etc., and begin the lesson. Observe their work and give help where necessary. When the books have been completed they should be set aside and the teacher begins with the next demonstration.

Taking a strip of newsprint (22x5 inches), fold it in the center, crease, and fold ends to the center, crease. Cut on the creased lines. These four pieces are the pages to be written on and illustrated and then pasted into the folded book. If newsprint is not used have each child measure and cut four pieces of plain paper $5 \times 5\frac{1}{2}$ inches.

When the class understands how the pages are to be cut, distribute the

plain paper and begin the measurement. Give help where needed. When the pages have been cut, tell the children to place them inside their folded books, write their names on the outside lightly in pencil and pass them up to the teacher to be kept until the next lesson. Clean up the classroom and discuss the lesson, reminding the children that they should be thinking about the story and illustrations which they will complete in the next lesson.

Procedure - Second Lesson: Review the last lesson and discuss with the class suitable subjects for the reading books and their illustrations. Show examples. Stick figures or simple drawings are to be used for the illustrations. Each child should think up his own ideas, not copy his neighbors as the object is to have as many different stories as possible. On exercise book paper, the children may make rough sketches and write the story to try out their ideas. (This may have been done at a previous time.) When the children have an idea of what they want to write and to draw, distribute the folded books and other materials. The writing and drawing should be done on the loose sheets, then if one is spoiled another may be cut and used. After the children have finished their writing and drawing, the pages should be lightly pasted into the books, keeping an even margin around the sheet. The title and name of the author is to be printed on the front of the book. (The front of the book is the back of the first page when the book is closed.) Clean up the classroom and discuss the lesson. Several children should show and read their books to the class before passing them up to the teacher. Later, two or three children should be chosen to take the books to Class II and tell about their preparation and purpose.



PAPER CRAFT - MEASUREMENT LESSON CLASSES IV - VI

Book Covers Using Decorated Papers

Materials: Decorated papers (finger painting, stencils, yam or potato prints, colored starch designs); pencils, scissors, rulers; books to cover (paperback or small textbook); paste.

Teacher's Preparation: Prepare completed and partially completed examples. The day before the lesson remind the children to bring books to be covered.

Procedure: Explain the lesson and show examples. Do the demonstration step by step with the children completing one step before going on to the next demonstration.

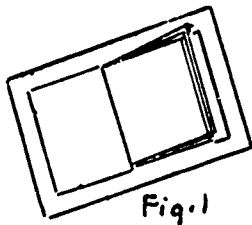


Fig. 1

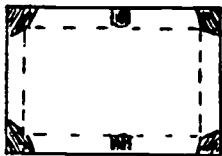


Fig. 2

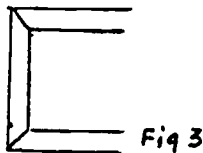


Fig. 3

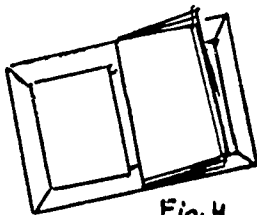


Fig. 4

Step 1. Place a sheet of decorated paper colored side down on the desk and put a book on it. There should be at least a 1 inch margin of paper around the edges of the book. The front and back covers of the book should lie flat, the center section standing up. Fig. 1.

Step 2. The covering paper is folded over along the top and lower edges and sides.

Step 3. Remove the book and crease along the folded guide lines. Fig. 2.

Step 4. Clip out the shaded corners as in Fig. 2 and at the center back the width of the central part of the book.

Step 5. The book is replaced in the cover and the paper cover is pasted where the corners overlap. Fig. 3.

Step 6. Using another paper, measure the inside cover and cut two pieces to fit, overlapping $\frac{1}{4}$ inch, and ending $\frac{1}{2}$ inch from the body of the book. These are the lining or end papers. Paste along the outside edge on three sides. Do not paste the center edge. Fig. 4.

When the children understand the method, distribute the decorated papers, making sure each child receives his own. Go thru the lesson step by step with the children following. The children should work gently with the decorated papers because they are brittle and tear easily.

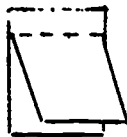
PAPER CRAFT - MEASUREMENT LESSON CLASSES IV - VI

Note Books with Decorated Paper Covers

Materials: Decorated papers from previous lessons; scissors; rulers; light cardboard; paste; raffia or other fiber; newsprint cut into strips 3x30 inches, two for each child; hole punch or sharp instrument for punching holes (for the teacher's use only).

Teacher's Preparation: Prepare completed and partially completed examples. Cut or have the children cut the 3x30 inch strips.

Procedure: Explain to the class that they are to make note books using decorated papers from previous lessons for the covers. Show examples. Proceed with step by step demonstration.



Step 1. Measure and cut 2 pieces of cardboard 3x6 inches. Score one piece 1/2 inch from the top. Scoring is drawing a razor blade or scissors edge across the cardboard, but not cutting thru, so that the cardboard will bend.

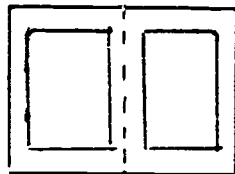


Fig. 1

Step 2. Place a decorated paper colored side down on the desk so that there is at least a 1 inch margin around each piece. Fig. 1.

Step 3. Carefully draw around the cardboard, then remove it.

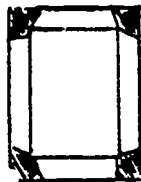


Fig. 2

Step 4. Cut paper in half, if necessary and fold it in on the drawn guidelines, clipping corners as in Fig. 2.

Step 5. Place cardboard inside the paper again and paste where the corners overlap. It is not necessary to put paste over the entire surface of the cardboard. This dampens the paper and makes it wrinkle.



Fig. 3

Step 6. Taking another paper, measure to fit the inside of the cover overlapping 1/4th to 1/2 inch. Cut out two. These are the lining papers. Paste all around the edges, smooth flat. Fig. 3.

When the covers are completed, distribute the strips of newsprint to make the leaves of the note book.



Fig. 4

Step 7. Since the strips are the correct width, they need to be cut into 6 inch lengths. These should be measured and cut.

Step 8. Place cut sheets between the covers. The teacher should go around and punch holes in the top of the note books and hand out the fiber. The fiber goes thru the holes and is tied firmly on the front of the note books. Fig. 4.

When the note books are finished, put them on display and clean up the classroom. The note books may be used in class or taken home. These make pleasing gifts for parents.

PAPER CRAFT - MEASUREMENT LESSON CLASSES IV - VI

Workholder - Large Expanding Envelope

Materials: Ask the children to bring large grocery paper bags, if such are obtainable. If not cement bags or any large sheets of heavy craft paper; pencils; rulers; scissors or razor blades; paste.

Teacher's Preparation: Be sure that heavy paper is at hand, approximately 14x22 inches, one piece per child. Prepare completed and cut out but not pasted examples of the envelope.

This lesson should be demonstrated as in other envelope lessons, the teacher explaining step by step and illustrating that step on the blackboard, the class completing each step before on to the next. Measurements given may be used for blackboard diagrams as well as for the class for their paper envelopes. Stress accuracy in measurement.

Classroom Arrangement: A large working space is needed by each child. Some children should work at the desks, others work on the floor.

Procedure: Explain the lesson and show examples to class. Begin demonstration by drawing a rectangle on the blackboard 14x22 inches.

Distribute materials.

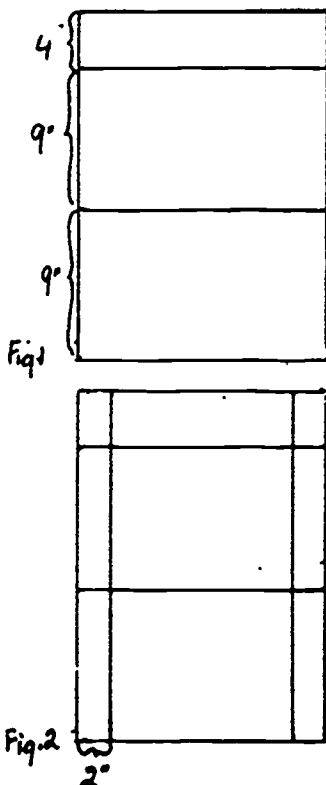
Step 1. The children are to measure a rectangle 14x22 inches on their papers. Observe measuring and give help where necessary. When completed, cut off excess paper.

Step 2. Measure down from the top edge 4 inches. Do this at both the right and left sides. Draw a line.

Step 3. Measure down from the top edge 9 inches. Draw a line. Fig. 1.

Step 4. Measure in from the top and bottom edges on both sides, 2 inches. Draw lines. Fig. 2.

Step 5. At the top edge, measure in toward the center from the lines just drawn, 1 inch. Fig. 3.



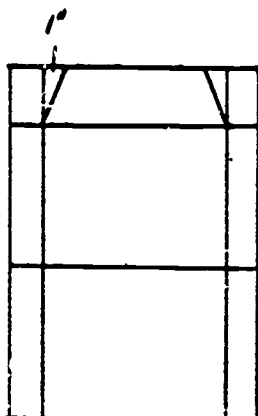


Fig. 3

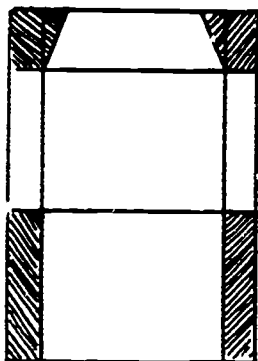


Fig. 4

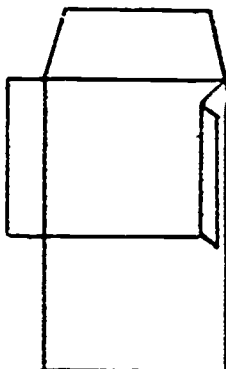


Fig. 5

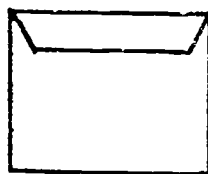


Fig. 6

Step 6. Shade the drawing as in Fig. 4. The shaded parts should be cut off. Show the class the cut out example. Making sure the class understands just where to cut, have them cut out air envelopes.

Step 7. Fold in center section flaps so that the folded edge is in line with the top and lower sections. Then fold back to the outer edge as in Fig 5. These flaps are the gussets that allow the envelope to expand.

Step 8. Fold down on top line and up from lower line. Fig. 6.

Step 9. Slip strips of paper inside both sides of the envelope for protection and spread the top of the folded back side section and press the lower section firmly against them.

When the paste is dry, take the slips of paper out and tell the children to write their names on the inside of the top flap.

Collect the envelopes and keep them for the next lesson, lettering of name plates.

While the envelopes are drying, clean up the classroom and discuss the lesson.

PAPER CRAFT - MEASUREMENT LESSON CLASSES IV - VILettering Name Plates for Workho'der Envelope Three LessonsLesson One

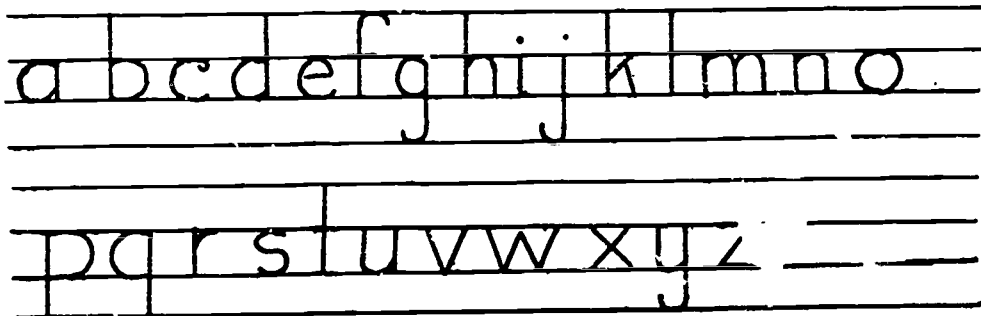
Materials: Bamboo pens (Previously prepared - see Preparation of Materials); ink; ruler exercise book paper; paste; scissors or razor blades.

Teacher's Preparation: The following lettering is based on the circle and straight line method. All letters are made up of circles or parts of circles and/or straight lines. It is a simple but effective style, but if the teacher knows other styles he may teach them, using the technique of practicing each letter.

Prepare a chart on a full sized sheet of newsprint, drawing both lower case and capital letters. This should be displayed in the classroom.

Procedure: Explain the lesson to the class and the theory of letters being based on the circle and straight line. Begin the demonstration on the blackboard, using previously drawn long straight lines 2 inches apart. Carefully draw lower case letters, having the children watch as each letter is formed and giving them time to repeat drawing each letter on their exercise book paper. Draw circles counter clockwise. The children should practice first with pencils and then bamboo pens and ink.

After having gone thru the alphabet, practicing each letter, have the class go thru it again using bamboo pens and ink doing just one example of each letter on a fresh piece of paper.



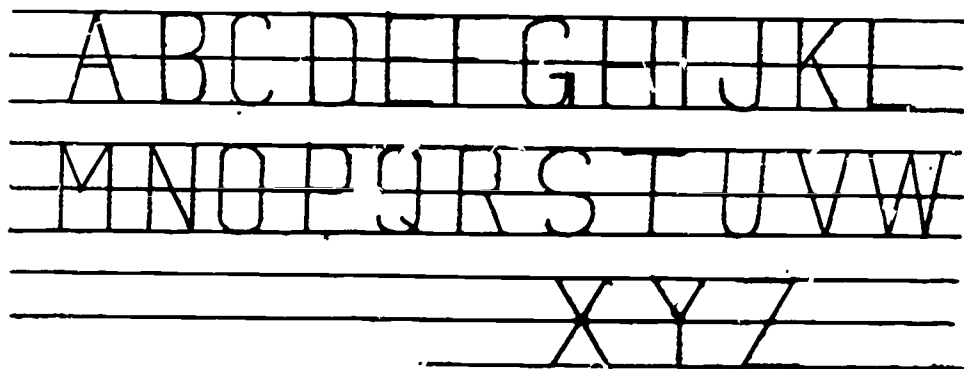
The teacher should walk around and observe the work, giving help and correction when needed.

After the class has finished the specimen papers (be sure that their names are written on the work), collect them to correct and hand back for the second lesson. Put materials away and discuss the lesson.

Lesson Two

Procedure: Distribute the corrected papers from the last lesson and discuss the corrections. Proceed as in first lesson, drawing capital letters. Have the children watch carefully the demonstration on the blackboard, which is to be followed by the class practicing each letter after it is drawn.

After having gone thru the alphabet practicing each letter, have the class go thru it once more using bamboo pens and ink on a fresh piece of exercise book paper. Observe the work and help the children when necessary. When the class has finished, collect the papers for correction and put away materials. Discuss the lesson.



Lesson Three

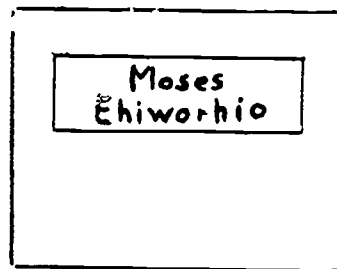
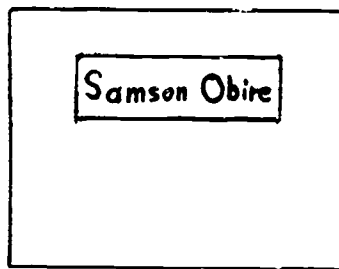
Procedure: Distribute the corrected papers and discuss the corrections. Explain that name plates are to be made for the workholder envelope, using a clean sheet of exercise book paper. Each child is to letter his name with a bamboo pen and ink. Use capitals for the first letter of each name and lower case for the rest of the letters. The children

should practice their names a few times on old papers and then letter their names to be used as their name plates.

After the lettering is completed, the name plate should be cut to the proper size for the length of the name and pasted on the front of the workholder envelope.

The envelopes should be used in the classroom to hold various work papers or drawings, etc.

Discuss the lesson and admire the lettering after putting away the materials.



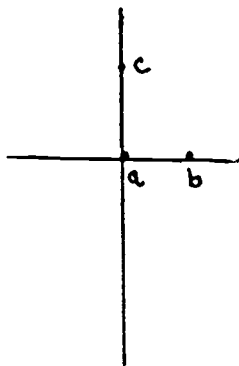
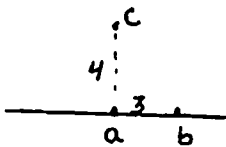
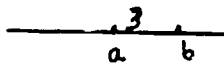
PAPER CRAFT - MEASUREMENT LESSON CLASSES V AND VI

Grid Construction and Basic Box Two Lessons

Materials: Pencils; rulers; paper and light weight cardboard or laminated newspaper; paste.

Teacher's Preparation: Prepare charts on large sheets of newsprint or on the blackboard previous to the lesson, following the illustrations of this lesson. Prepare a drawn and cut out box and one completed.

Procedure - First Lesson: Explain to the class that they will learn to draw a grid pattern using the 3, 4, 5 method and to plot a box pattern on the grid, which then will be cut out, assembled and painted. Explain the method. This lesson should be done step by step, the teacher illustrating each step on the blackboard with the class following and completing the step before going on.



Step 1. The teacher draws a straight line on the blackboard marking the center. This is the construction line. The center point is "a".

Step 2. On the construction line from the center mark measure to the right 3 inches. Make a mark. This is point "b".

Step 3. Directly above the center mark measure above the construction line 4 inches. Make a mark. This is point "c".

Step 4. Place the ruler between the two marks "b" and "c". This should measure 5 inches. If it doesn't, remeasure the other two points looking straight down at the ruler at the point, not looking at it from an angle. When correct, draw a perpendicular line thru "a" and "c", going above and below the construction line. This is the perpendicular. This method is known as the 3, 4, 5 method and where the perpendicular crosses the construction line it creates a right angle.

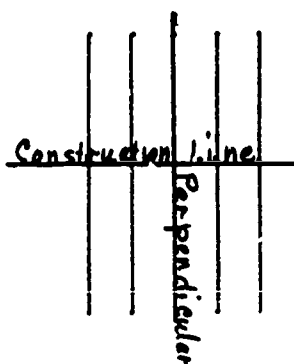
This method may be used in any unit of measurement, inches, feet, yards as

long as the ratio of units is 3, 4, 5.

When the demonstration is complete and the children understand the method, have them do the step by step construction of the two lines.

After the above has been completed, the teacher continues his demonstration at the blackboard.

Construction of the Grid:



Step 1. On the construction line beginning at the center (perpendicular) mark off 2 inch spaces to the right and left.

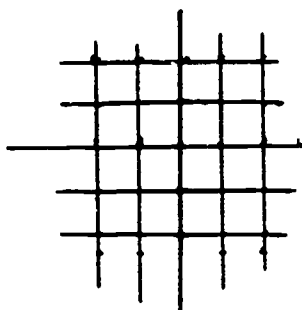
Step 2. Holding the ruler parallel with the construction line, slide the ruler to the top of the perpendicular, and using it as the center mark off 2 inch measurements.

Step 3. Do the same as step 2, but at the bottom of the perpendicular.

Step 4. Draw lines connecting the three marks.

Step 5. Do the same as steps 1, 2, and 3, only on the perpendicular using the construction line as the center.

Step 6. Draw lines connecting the three marks.



When this demonstration is finished, have the class do the same step by step using 1 inch measurements.

The teacher should observe the class carefully to be sure that the children's measurements are accurate.

If the children have trouble with the 3, 4, 5 method, have them practice on a separate paper before marking on the cardboard or laminated newspaper. When the grids have been drawn, collect extra materials and discuss the lesson. The grids, with names written on them should be saved until the next lesson.

Procedure - Second Lesson: After reviewing the last lesson and distributing the grids and materials, begin the demonstration.

Using the teacher's chart or illustration on the blackboard, show the class how to count off the squares for the square box. Using the center block of 4 squares as the central unit, count to each side.

Explain that the shaded areas are to be folded in as reinforcements, the solid colored ones are to be cut out.

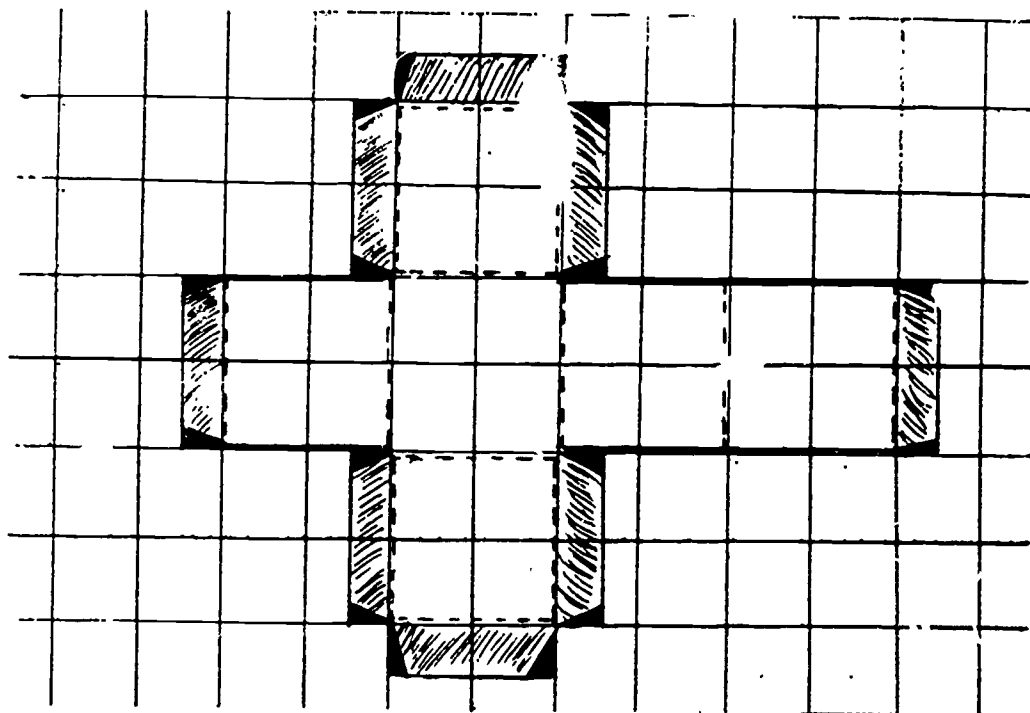
After the children understand the method of counting and using the prepared chart or illustration, they may begin work. The teacher should give help where needed.

When the children have completed the drawing, they should cut out the box, fold it on the broken (-----) lines. The teacher should demonstrate the cutting out and the pasting together. If necessary, the counting of the squares and cutting may be by the step by step method. When the boxes are completed and the paste is dry, they may be painted and decorated. Clean up the classroom and discuss the lesson. Larger or smaller boxes or boxes of other shape may be made by this method using a larger or smaller measurement of the grid.

The broken lines ----- are folding lines, all fold in toward the center.

The shaded sections are reinforcements, fold inside and paste.

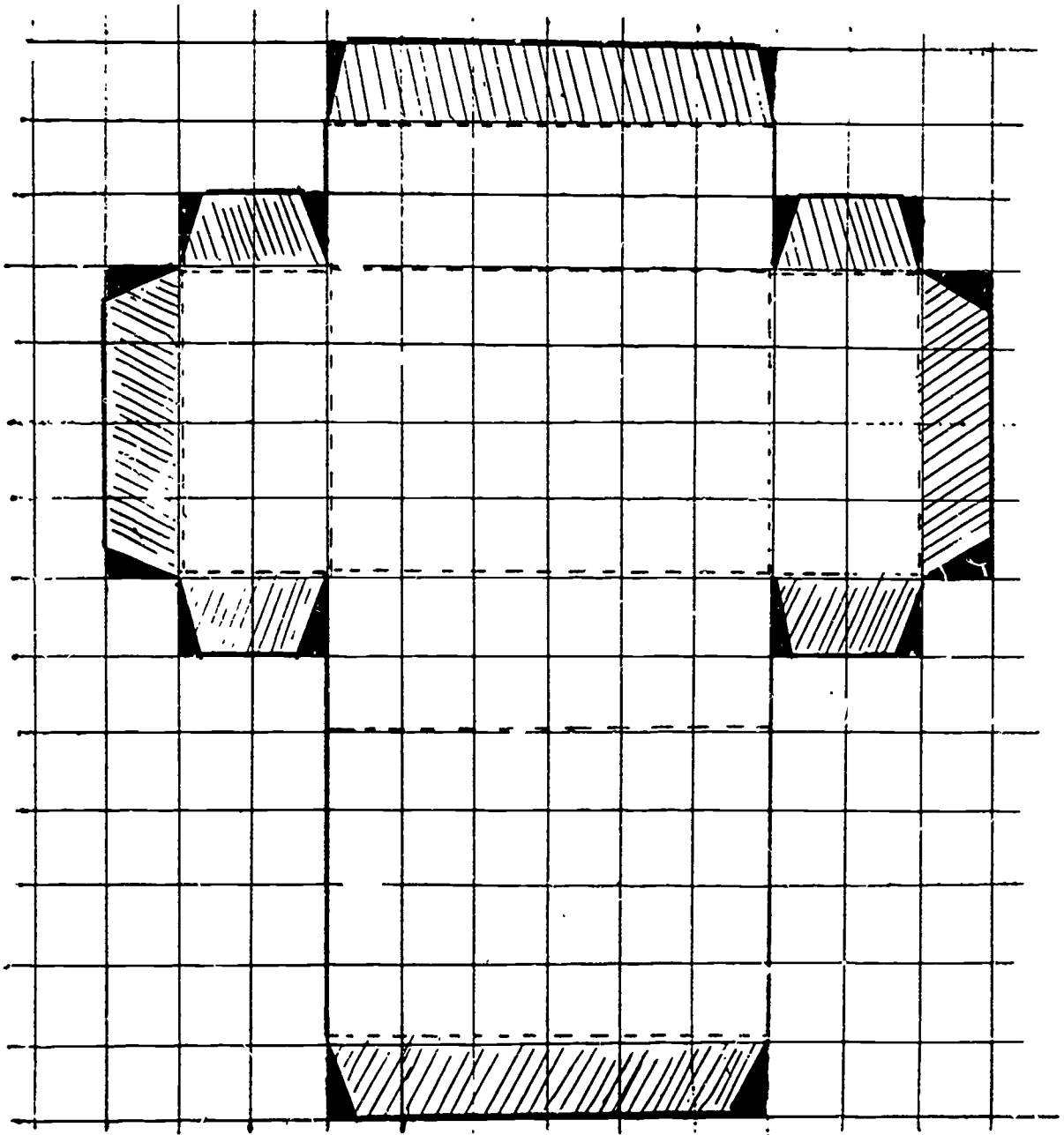
The solid sections are to be cut out.



The 3, 4, 5 method of measurement may be used anywhere a right angle is desired, for the construction of a house, basketball court, section of a field, etc.

VARIATION OF GRID BOX PATTERN

To be plotted on 1 inch or 1½ inch grid.



PAPER CRAFT - MEASUREMENT LESSON CLASSES V AND VI

Picture Mats or Frames Two Lessons

This is an exercise in accurate measurement and also a method of making mats for framing pictures, leaf rubbings, etc.

Materials: Newsprint 7x10 inches for the first lesson; heavy paper (cartridge or light weight poster paper) for second lesson. If heavy paper is not available, painted newsprint or newspaper is a satisfactory substitute. The framing paper should be cut into appropriate size for frames, allowing at least 2 inches or more for width of the frame. Pencils; rulers; razor blades; paste; pictures from previous lessons; chart for use in first lesson.

Teacher's Preparation: Prepare chart. Double measurements given in chart illustration for blackboard demonstration and chart making. Prepare examples of framed pictures with different sizes of frame openings.

Procedure - First Lesson: The entire demonstration for the 3 inch square should be made on the blackboard as the teacher explains the lesson. After materials have been distributed, the demonstration should be given again step by step, the class following and completing each step before going onto the next.

Step 1. Demonstrate on the blackboard the 3, 4, 5, method of erecting a perpendicular (see lesson on grid construction). The class follows placing construction line and perpendicular in the center of the paper and drawing the lines from top to bottom and entirely across the paper. All measurements should be taken from these lines.

Step 2. Hang up the chart. The children are to construct a 3 inch square. To make a 3 inch square: On the construction line measure $1\frac{1}{2}$ inches on both sides of the perpendicular. Mark points. Keeping the ruler in position, slide perpendicular and measure $1\frac{1}{2}$ inches on either side of the perpendicular, mark points.

Step 3. Keeping ruler in position, slide down perpendicular below the construction line and measure $1\frac{1}{2}$ inches on either side. Mark points. Draw lines connecting all three points. Fig. 1. If lines do not appear correct,

check measurements.

Step 4. Using the construction line as the center, measure on the perpendicular $1\frac{1}{2}$ inches on either side of the construction line. Mark points.

Step 5. Slide ruler to the right of the perpendicular and measure $1\frac{1}{2}$ inches on either side of the construction line on the line drawn in Step 3. Mark points.

Step 6. Do the same left of the perpendicular. Mark points. Draw a line connection on the three points.

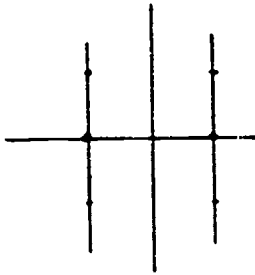


Fig. 1

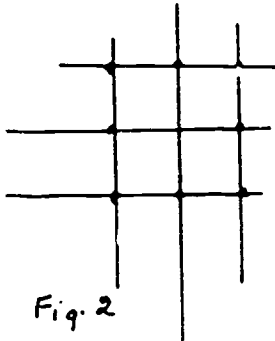


Fig. 2

Fig. 2.

When the square is correctly drawn, tell the class to construct a 4 inch square on the same paper (measuring 2 inches on either side of the construction and perpendicular lines).

Follow this with drawing a rectangle 6x7 inches ($3\frac{1}{2} \times 3$ on either side of the construction and perpendicular lines). Always use the construction and the perpendicular lines for measurements, never use the square just drawn.

When the exercise is finished, collect papers (be sure names are on them) for correction and to be returned at the next lesson.

Procedure - Second Lesson: Return the papers from the last lesson and discuss corrections as it is reviewed. Distribute the pictures, prints, or paintings to be framed. Be sure that each child receives his own. Distribute other materials.

The teacher demonstrates step by step the 3, 4, 5, method and tells the children to measure his picture and decide the size of the frame opening. The frame should be at least $1/2$ inch smaller than the picture, or small enough to cover the rough edges.

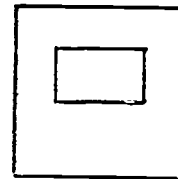
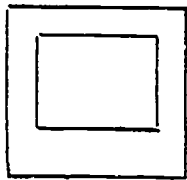
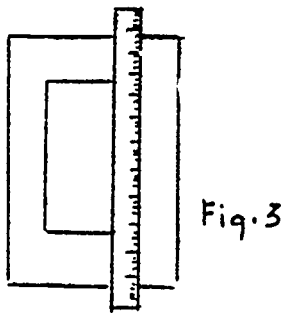
Step In the center of the wrong side of the framing paper the children should draw a construction line and using the 3, 4, 5, method erect a perpendicular. The teacher checks to see that these are correct. All measurements should be taken from these lines, not from the edges of the paper.

Step 2. Using the technique of the first lesson, measure and draw the frame. The teacher again checks measurements before the children begin the cutting, making corrections if necessary.

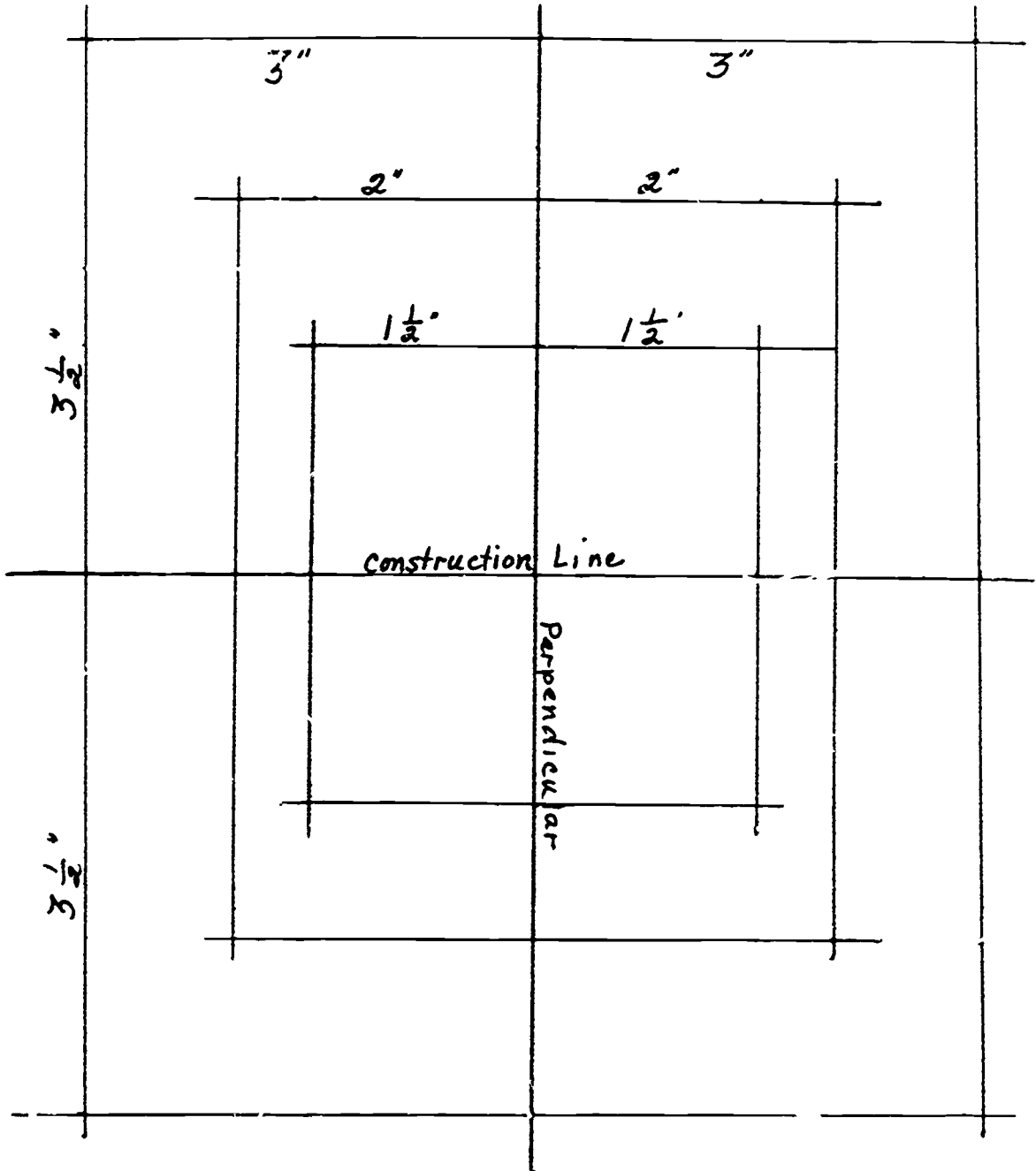
Step 3. With a razor blade and using a ruler as a guide, cut along the four lines. Keep corners sharp and clean but do not cut beyond the corner points. Fig. 3.

Step 4. Place the frame right side up over the picture and paste lightly at the corners only.

When the pictures are framed, display them, clean up the classroom and discuss the lesson. Admire the pictures!

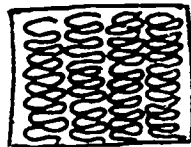
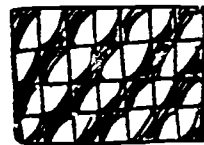


Chart



LESSON PLANS

PAINTING, DRAWING, DESIGN



PAINTING, DRAWING, DESIGN CLASSES I - III

Picture Painting Suggestions

Materials Needed

For each child: A brush, a sheet of paper (preferably 10x12 inches), paint in at least two colors.

For the class:

1. Large covered containers (jars, tins with tight lids), for mixing and storing paint. If a piece of plastic or waxed paper from a loaf of bread, is tied over the top of an open container, it will be fairly air-tight.
2. Small containers for water and each color of paint. Jars, caps of jars, tins, coconut shells, sections of bamboo including a solid joint may be used. A cupped leaf will do in emergencies.
3. Newspapers. Save all newspapers after they have been used and store them carefully. They will last for many lessons.
4. Some system of displaying pictures on the classroom wall. Pins, tape or a small dab of paste on the back of the picture can be used.



Classroom Arrangement and Organization

Children should work in groups of 5 or 6. These groups can be formed at the beginning of the term and can work together each painting lesson.



Each group should be responsible for arranging working space, cleaning up, washing and properly storing materials used.



A large work area is needed for each child. Desks can be pushed together with the children standing around them. (Children work better while standing.)

Painting Techniques

How to hold the brush: A brush should be held differently from a pen or pencil. Pens make narrow lines and are held firmly near to their writing point. Brushes are held loosely with thumb and first two fingers in a straight position. Brushes should be held close to the end of the handle, not down near the bristles.

How to paint with the brush: Only the bristles need be dipped in water or paint. Drain the brush on the side of the container before removing.

In applying paint to paper, pull or drag the brush across the paper, never push. A wide line is made by allowing all the bristles to drag across the paper and holding the brush at a slant. For narrow lines hold the handle more upright and allow just the tip of the brush to touch the paper. When changing colors, always wash the brush in water before putting it in another color - stress this point. If a dirty brush is put into a new color it will muddy the color.

How to take care of brushes: Wash color from the brush in clean water until



all paint is removed. Squeeze excess water from the bristles by pulling the brush up between the thumb and first two fingers so that all the bristles will dry straight. Store the brushes standing in a tin, the handles down, bristles up.

Picture Subject Matter

The following topics are suggested only to guide the teacher in the planning of topics which are of interest to a particular age group of children. Do not use the topics listed unless they are within the experience of the children. The teacher should create his own topics or use ideas related to other subjects which the children are studying.

Primary I topics concentrate on the child doing a simple activity.

Primary II topics refer to the child and others.

Primary III topics include the child and others in more complex situations.

Primary I

Me and my mother

Me and my brother or sister

Me and my house

Taking food after school

Me getting ready to go to school

Me playing with a ball

Me doing my favorite P.E. exercise

Me dancing

Me sleeping

Me carrying something

Primary II

Me and my friends walking to school
 Going to church with my parents.
 Racing with my friend
 What I did after school yesterday
 Me helping my family on the compound (washing clothes, sweeping, etc.)
 Me and my family eating the evening meal
 Getting caught in the rain
 Getting my hair barbed/braided

Primary III

Playing a game with my friends
 Me and my parents at market or a shop
 What I want to do when I grow up
 Walking down the street in my town/village
 Sitting around the compound in the evening
 Me dancing at a festival or in a procession
 My father/mother entertaining visitors

All Three Classes

A dream I had recently
 The first rain after the dry season
 Attending a local festival
 A place I visit or an event that occurred during the holidays

PAINTING, DRAWING, DESIGN ALL CLASSES

Painting or Drawing Pictures

It is suggested that for the first lesson of each term the children should draw or paint pictures, illustrating a holiday experience, something they saw or did.

This lesson takes no teacher preparation. The materials needed should be already at hand so that the class need not miss a lesson because the teacher has had no time to gather materials and prepare examples.

Materials: Paper, paints, crayon colored chalk or charco

Procedure: Discuss holiday experiences with the class and explain that each child is to draw a picture of something he saw or something he did during the holiday.

Distribute materials and have the children begin to draw or paint.

Shortly before the lesson time is up, collect the materials and then have several of the children show and explain their pictures. Display all pictures on the classroom wall.

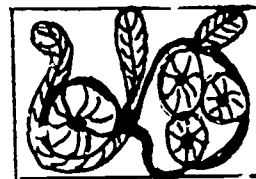
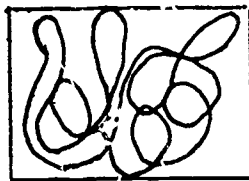
PAINTING, DRAWING, DESIGN ALL CLASSES

Free or Rhythmic Drawing

Materials: Paper (one half sheet of newspaper or newsprint or cement bag paper); charcoal; colored chalk or paint and brushes; prepared examples.

Teacher's Preparation: Prepare paper of proper size and examples of free drawing.

Procedure: Explain the lesson to the class and show examples. Demonstrate the method to be used by drawing on the blackboard an outline the same size as the children's paper. Holding chalk easily, draw a continuous line, wandering over the surface with a free flowing movement until the space is filled. Stand back and look at the results. Ask the class what it might suggest to them. If suggestions are given (looks like a flower, butterfly, etc.), add details that emphasize the suggestion. Then fill in with colored chalk. If there are no suggestions, add any details necessary to make a balanced design and fill in with colors. Distribute paper and charcoal and begin the lesson. The children are to use the charcoal for the continuous line. Explain that the lines should be viewed from all sides before adding details. Show the class the examples again to give them ideas of how to color and expand their designs. Distribute the colored chalk or paints and brushes and continue the lesson. When the pictures are completed, collect materials, clean up the classroom and display the pictures for discussion. Several, chosen by the class, may be mounted on the wall.



VARIATIONS: Another way to develop free drawing is to draw or paint to music or drumming. If the children stand while working, they will be able to use the whole arm, even the body in large naturally free movement. This is a good first of the term lesson and one that may be repeated because it gives the children an opportunity to use their creative imagination.

PAINTING, DRAWING, DESIGN ALL CLASSES

*Collages

A collage is a collection of various materials of different textures arranged to form designs or patterns and fix onto a background. They may be made from leaves, seeds, flowers, sticks, pebbles, grasses, all of which may be gathered from the school compound. Also, scraps of paper, cloth, feathers, string, yarn, raffia, matting, bottle caps, or other materials found at home.

Materials: Any of the above and pieces of cardboard, cartons, cement bag paper or other firm material to use as a mounting surface. Starch paste or rubber cement. Prepared small examples.

Teacher's Preparation: Several days before the lesson explain to the class what collages are, showing examples and ask the children to bring materials from home. Either prepare mounting material or ask children to bring suitable material from home.

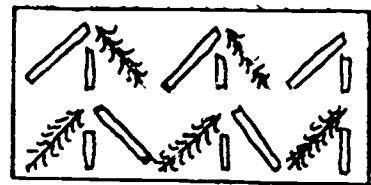
Procedure: Explain the method of making a collage and again show examples. Demonstrate the method by laying materials on backing until a balanced and pleasing design is achieved. Without disturbing the arrangement, show the children how to pick up the corner of each piece or each small bit in turn and past securely to the background. It is also possible to sew the pieces to the backing with needle and thread if suitable material is used. When the class understands the method, distribute materials and let the children choose those which they like or feel would go well together and then begin the lesson.

Encourage the children to choose objects of different textures and sizes in order to learn about variations. Assist with the fastening to background if help is needed.

When the collages are completed, collect the materials and clean up the classroom. Display the collages on the floor or wall and discuss the work. What makes them pleasing? What did they learn while working?

* This is a good first of the term lesson.

Sticks and
ferns or
leaves



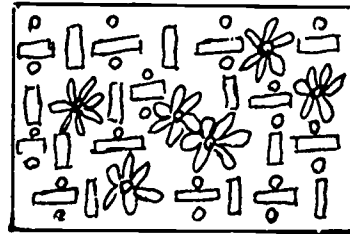
VARIATIONS: If fresh material from the school compound is used, the children might work outside in an area beside a classroom wall. A small section should be marked out for each child and he then places the objects directly on the soil. No need to paste, but they may be fastened with a bit of clay or mud. When the children have completed their collages, the entire school should be invited to see and enjoy the results.



Flowers, leaves, feathers, seeds



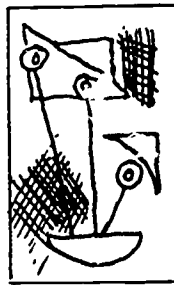
Leaf, pebble, sticks, feather



Flowers, sticks, pebbles



Cut paper, cloth



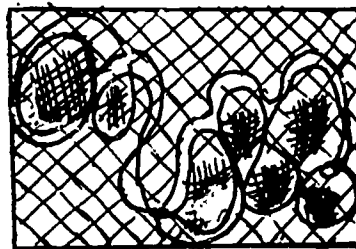
Matting, paper, sticks



Paper, cloth



Coconut fiber, grass bottle caps



Mat, yarn or raffia, coconut fibre

PAINTING, DRAWING, DESIGN ALL CLASSES

Rubbings: Leaf and Grass

A rubbing is the method of showing a three dimensional object in a two dimensional form by placing textured objects beneath paper and rubbing the surface with crayon, etc. The textured object will show up as a darker outline than the background of the paper.

Materials: Newsprint or other plain paper of similar weight; broken crayons with the paper removed or colored chalk; leaves, grasses; newspapers for making thin smooth pads on which to work; examples of finished rubbings; pins or tape or paste to attach rubbings to the wall for display. If colored chalk is used slightly dampen the paper before rubbing. The light moisture binds the chalk to the paper.

Teacher's Preparation: Prepare paper of proper size (approximately 10x12 inches or 1/8th sheet of newsprint) several sheets for each child. The day before the lesson have the children fold 3 or 4 thicknesses of newspaper into a pad the size of the paper to be used for the rubbings. This should be smooth as any folds or creases will show thru on the rubbings. Tell the children to bring leaves and grasses, or gather them from the school compound. Prepare several examples of rubbings.

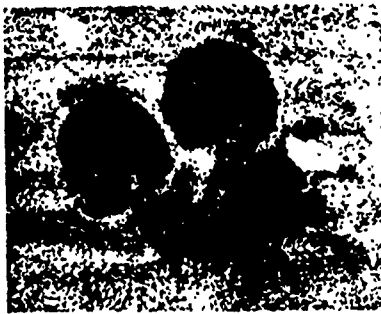
Procedure: Explain the lesson, showing examples of leaf and grass rubbings. Demonstrate the method to be used by putting one leaf wrong side up, on a pad and place a sheet of plain paper on top of the leaf. Firmly holding the crayon on its side, rub the crayon across the paper from left to right in one unbroken stroke. Do not rub back and forth, but lift the crayon from the right side of the paper to begin again on the left side. The raised portion, center rib and veins, will appear darker than the outline of the leaf. Continue rubbing across the paper until the entire leaf is outlined. When using the grasses, rub the crayon from bottom to the top of the paper. One hand should hold the paper in place and the rubbing should be firm but gentle so that the leaf will not move about. Make several of the rubbings so that the children will understand the technique.

After the children understand the method to be used, distribute the materials and begin the lesson. Each child should make several rubbings, beginning with one leaf and then trying arrangements with two or three leaves and with grasses.

When the lesson is completed, collect materials and then display one rubbing of each child's selection on the classroom wall.



VARIATION: A shadow effect may be obtained by arranging the leaves, making the rubbing, then carefully lifting the paper and moving it slightly to one side, rubbing again. This may be done in two different colors of crayon and gives a very pleasing effect. Overlapping leaves and grasses gives still a different effect. Before giving the lesson to the class, the teacher should try all these different methods. Also the finished rubbings (crayon not chalk) can be brushed with a market dye wash or dipped quickly into a light dye bath and hung up to dry. The rubbings should be saved to be used in later lessons as pictures to be mounted in frames, as envelopes, book covers for boxes.



PAINTING, DRAWING, DESIGN ALL CLASSESRubbing: Texture Rubbings

Materials: Paper; crayons or colored chalk; a variety of things with texture such as: woven straw mat, textures cloth, lace, string, yarn, thread, torn paper, cut paper, flat pieces of fairly smooth wood, coins, feather, anything that will provide a slightly raised surface: newspaper pads used in the leaf rubbing lesson; scissors; finished rubbings of several different textures.

Teacher's Preparation: Ask the children to bring as many of the listed materials as possible, the teacher supplying some also. In preparing the finished examples the teacher should experiment with many of the textured materials and with cut and torn paper, discovering the varied and pleasing results of textured rubbings.

Procedure: Explain the lesson and its similarity to the lesson on leaf and grass rubbings. Demonstrate as in the previous lesson using one object alone and then several in arrangements. Try for a pleasing and well balanced design. Cut or torn paper may be in the form of figures, or stars, doilies or odd shaped pieces for an abstract effect. Try lightly rubbing over a woven mat and using it as a background for another arrangement. When the children understand the method, distribute pads and materials and begin the lesson. Each child should make several rubbings. The best of these should be displayed on the classroom wall. When the lesson is completed, collect the materials and clean up the classroom.

VARIATION: Shadow effects, etc., as outlined in the previous lesson can be used in this lesson. Again, all rubbings should be saved to be used in later lessons.



PAINTING, DRAWING, DESIGN ALL CLASSES

Colored Starch: Finger Painting

Materials: Cassava, rice, maize or wheat starch (see preparation of materials); powdered paints, washing blue or colored ink; newspapers or newsprint or exercise book paper, several sheets per child; containers for paint and water; finished examples.

Teacher's Preparation: Make starch of a thick cream consistency, add color and put into containers. Prepare working area (should be smooth, if not use newspaper pads from rubbing lessons); provide pan or bucket of water and a towel for the children to wash their hands when they have finished the lesson. Prepare several examples of finger painting.

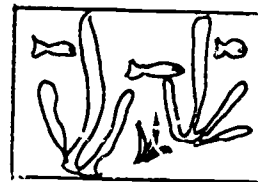
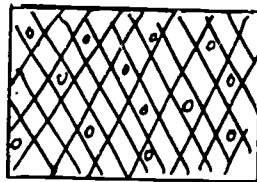
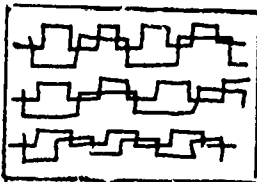
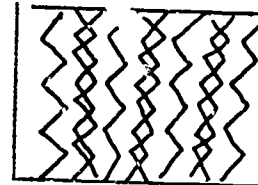
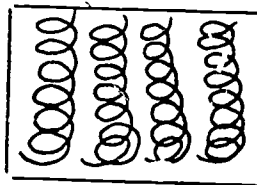
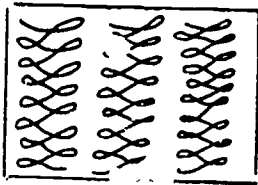
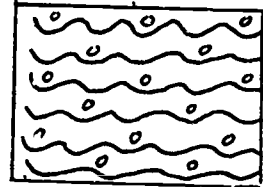
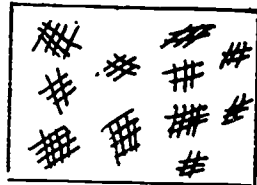
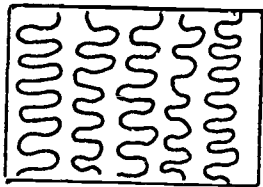
Organization of Classroom: The children should work in groups of six or less to share containers of colored starch on desks pushed together or on the floor. If classes I or II, the children should work at their desks with the teacher distributing the colored starch by putting it directly on the paper for each child. Working surfaces should be protected by old newspapers, cement bags, etc. Allow children adequate space in which to work. It may be better to have only part of the class finger painting at one time.

Procedure: Explain to the class that they are to do finger painting and show examples of the finished work. Demonstrate the procedure by pouring enough colored starch on a piece of paper to cover the entire surface when spread by hand. Draw a design or just experiment with using the fingers, hand, etc., until the children understand the method. The experiment can easily be erased by just smoothing the starch with the hand and other effects tried.

After the demonstration distribute the materials. Be sure that the children write their names on the back of their papers before beginning the work. Observe the class working and encourage those who need it and discourage them from copying from each other. Suggestions may be made for them to paint designs or subjects related to what they are studying or of special interest.

When the children have finished, place the paintings on a clean flat surface out of the wind to dry. While the work is drying the classroom should be cleaned and materials collected and put away. When the paintings are dry, they should be displayed and discussed.

Collect and save the paintings, pressing them between the leaves of a magazine or sheets of paper. If it is possible the paintings should be pressed, on the wrong side, with a warm iron and then put away. They are to be used for later lessons such as notebook covers, etc.



PAINTING, DRAWING, DESIGN ALL CLASSES

Colored Starch: Leaf and Grass Prints

Materials: Same as for finger painting, also leaves of different sizes and shapes and grasses. Not as much starch paint will be needed.

Teacher's Preparation: Same as for finger painting lesson. Each child should gather his own leaves (smaller size ones are best), and grass from the school or home compound and bring to class. Prepare finished examples.

Organization of Classroom: Same as for finger painting lesson.

Procedure: Explain to the class that this lesson is similar to the finger painting lesson and show them examples of leaf prints. Demonstrate the method to be used by brushing the colored starch on the wrong side of a leaf with a brush or a finger, and pressing down on the clean surface of paper, holding for a moment and then carefully peeling off and moving it to another space. A little practice on a piece of newspaper will show the method. The starch should be the consistence of cream. Some thought should be given to the leaf placing so that a pleasing design will result. One or several colors could be used. It is not necessary that every detail of the leaf is printed, just the bare outline and the veins giving a shadowy effect.

After the class understands what is to be done, distribute the materials and proceed with the lesson. When each child has finished three or four papers of leaf and grass prints, they should be placed in a clean dry area out of the wind. Materials should be collected and the classroom cleaned. When the prints are dry, they could be displayed and discussed and then put away between the leaves of magazines or clean dry paper and kept for use in a later lesson.

It is not necessary that the leaf print be a perfect reproduction, but that the general shape and structure of the leaf or broad blade of grass is shown. This partial print gives the suggestion of effervescence and results in very attractive designs.

PAINTING, DRAWING, DESIGN ALL CLASSESDecorated Paper - Yam/Potato Prints

Materials: Yams, cassava, potatoes; knife/razor blade; very thin starch paint, colored ink or opaque water paint; shallow tins or leaves; plain paper (7½x10 inches or 1/8th sheet of newsprint); old newspapers; small pieces of old cloth (children should bring these from home).

Teacher's Preparation: It is necessary to prepare the yam, etc., (making the sections approximately 2x2 inches, one for each child, before the lesson) because the surface must be allowed to dry for at least an hour before using. The cut sections will keep well for a day or two if they are wrapped in a damp cloth.

Prepare printing pads by folding small pieces of old cloth into pads about 3 inches square and placing them in shallow tins or a leaf. Pour a small amount of paint or dye on the pad and give it time to soak in. This can be done before the lesson. Prepare several examples of yam prints, saving the yam blocks used to show the class.

Procedure: Explain the lesson to the class and show cut yam blocks and examples of printing. Begin demonstration with Step 1.

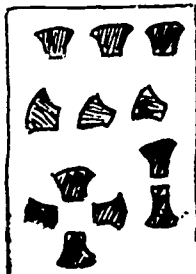
Step 1. Show the class how to cut the yam blocks with a knife or razor blade. Draw the outline of a simple design on the block (cut side). Cut away the yam around the design so that it stands up above the body of the block. Do this on two or three blocks so that the children understand the method.

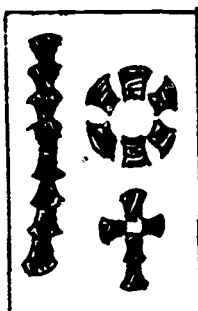
Distribute yam blocks and have the children draw and cut their designs. Each child should use his own ideas for designs.

Demonstrate printing by pressing the block evenly on a printing pad so that the entire surface of the design is covered with paint. It should not be too wet. Then carefully press the block on plain paper and carefully lift off. Repeat, first pressing the block on the printing pad, then on the paper. Print one row of the pattern with all the designs going in the same direction. Print another row with the design turned around. Print a third row with designs touching each other.



side view





This will give the children an idea that it is the overall design that is important, not just the individual print. The spaces between the prints also forms a design. Experiment with other arrangements, in circles, squares, etc. Before distributing the printing pads, add more paint to each one. After distribution of the pads and paper and newspapers, for protecting the working surface, the children should practice printing on a piece of newspaper before printing on the plain paper.

Encourage the children to be original and imaginative in the arrangement of their designs, not to copy their neighbors'.

When the children have tried out different patterns and have decided which one they like best, have them carefully print it on a fresh piece of paper. Be sure that names are on the backs of all papers; then have the children place the finished prints in a clean, wind-free area to dry. Save these papers. Collect materials, wash out pads and put them to dry. They should be saved for later lessons. Discuss the lesson.



VARIATION: (or perhaps a second lesson)

Each child using a different color or colors does an overlay pattern on some of his designs made in the above lesson. An overlay is printing another design on part of a design already printed. The teacher should experiment and then teach the lesson as above. Save the papers for use in later lessons.



Other materials which may be used for effective prints, either by carving a design on their smooth cut surfaces or by using the natural cut surface are: blocks of clay; carrots; turnips; celery; okra; banana leaf stem; onions; cucumbers; peppers. An endless variety of materials are to be found, and the act of searching and selecting develops perception and imagination. Encourage the children to look for the different materials and to experiment in using them.

PAINTING, DRAWING, DESIGN CLASSES IV - VI

Decorated Paper - Stencil Prints

A stencil is made by drawing a design on stiff paper and then cutting it out using a sharp knife or a razor blade. Color is applied thru the cut opening to the paper underneath with a stiff brush. When the stencil paper, or mask, is lifted off, it leaves a print. This is repeated to form a pattern design.

Materials: Heavy paper (cartridge or bag); pencils; razor blades or knives; plain paper; old newspapers; paint (thin strach, opaque water paint or colored ink); stencil brushes, containers for paint.

Teacher's Preparation: Cut stencil papers 3x3 inches square; prepare paint and several examples, saving the stencils used to show the class. The class should work in groups of four or five in order to share the paint.

Procedure: Expla. the lesson and show the stencils and finished papers.

Then proceed with the demonstration, step by step.

Step 1. Demonstrate how to draw a simple design in the center of the stencil paper. Then cut it out.

Distribute the stencil squares, pencils and razor blades and have the children draw designs. They should practice drawing designs until they have one that pleases them.

After the designs are drawn and cut out proceed with the next step.

Step 2. Place the plain paper on top of several thicknesses of newspaper and the stencil on top of the plain paper.

Dip the stiff brush into the paint, letting it drip so that it is not overloaded with paint. Holding the brush in an upright position, brush from the outside edges of the stencil toward the center. Be careful that the paint does not get underneath the stencil. Fig. 1.

Step 3. Carefully lift the stencil mask so as not to smear the design. Wait a minute for the paint to dry and repeat, moving the stencil to one side so that it does not touch the last print. Fig. 2.

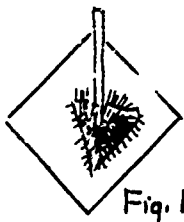


Fig. 1

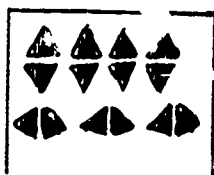


Fig. 2

When the lesson has been completed, the papers should be put in a clean, wind-free area to dry. Save them for use in later lessons.

Clean up the classroom and discuss the lesson. When the papers are dry they should be displayed.

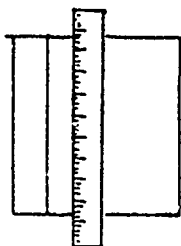
VARIATION: Stencil designs may also be applied to plain cloth which has first been washed, dried and pressed. Use paint made from market dyes. If paint is not available crayons may be used. If they are used for stencils on cloth, the cloth should be pressed with a warm iron between pieces of soft paper.

PAINTING, DRAWING, DESIGN CLASSES I - IIIBook Covers - Grid Designs Two LessonsFirst Lesson

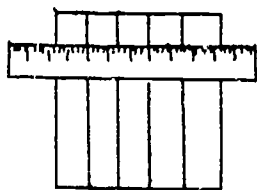
Materials: Plain paper the size of exercise books (6x8 inches); rulers; pencils.

Teacher's Preparation: Prepare paper of proper size, two sheets per child; prepare examples of grids and finished examples of book cover designs drawn in colors.

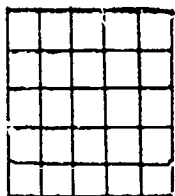
Procedure: Explain to the class what a grid is and how it is drawn, illustrating on the blackboard. (This is a ruler width grid.) Stress the need for accuracy and the careful following of directions. Show the finished grids with the designs drawn in the squares in color and pasted on the cover of an exercise book. Begin the demonstration by drawing a grid on the blackboard and have the class follow step by step.



Step 1. Draw an outline to represent the paper to be used. Place the ruler straight along the very edge of the left side. Draw a line from top to bottom on the right side of the ruler.



Step 2. Place the left edge of the ruler along the line just drawn and draw another line on the right side of the ruler. Repeat until the right edge of the paper is reached.



Step 3. Place the edge of the ruler lengthwise at the top edge and draw a line at the bottom edge of the ruler.

Step 4. Place the top edge of the ruler on the line just drawn and draw another line at the bottom of the ruler. Continue until the bottom edge is reached.

When the children understand the method to be used, distribute the materials and proceed with the lesson. Each child should make two grids. These will be used in the next lesson. When drawings are completed and names written on the papers, collect and keep until the next lesson. Gather materials and discuss the lesson.

Second Lesson

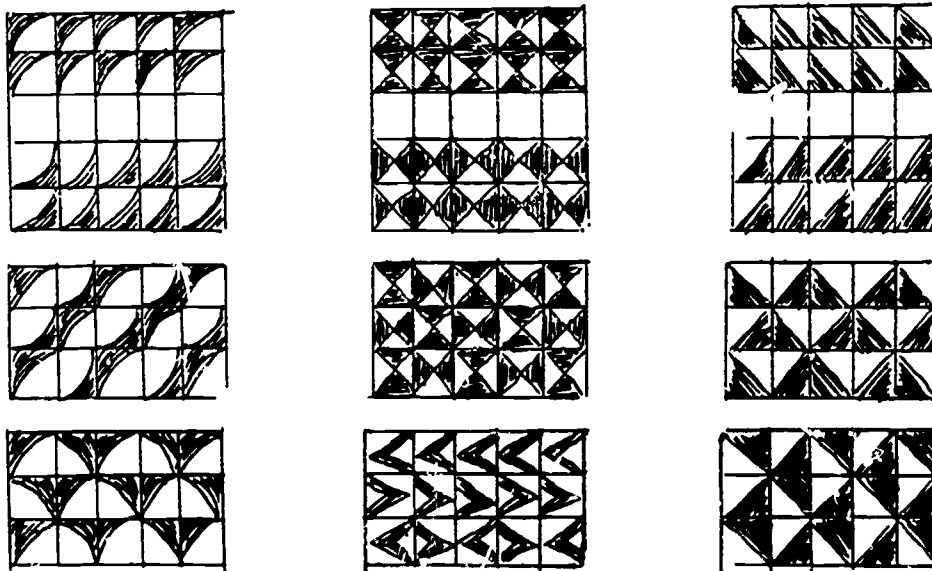
Materials: Grids from last lesson; crayons; paste. If crayons are not used, thick paint and brushes.

Procedure: Explain the lesson to the class illustrating on a previously drawn grid on the blackboard. A repeat design or pattern is to be drawn in each square. Each child is to make up his own design. They may practice on scrap paper until they have a design that pleases them, using crayons or paint. When the children understand what is to be done, distribute the grids and crayons. As the class begins the lesson, observe the work and give help where needed.

When the children have completed the repeat pattern, they should put it aside and listen to the teacher's explanation of an alternating pattern which is to be drawn in the second grid.

Again using a previously drawn grid on the blackboard, demonstrate the alternating pattern. This means using the same design but in alternating positions, in every other square. When the class understands the different procedure, the lesson may continue. As the drawings are completed they may be displayed and discussed and then pasted onto the covers of exercise books. The teacher distributes the paste while the class is working on the second drawing.

At the end of the lesson, collect materials and clean up the classroom. During the discussion remind the children that the spaces between the patterns also make up a design.



PAINTING, DRAWING, DESIGN ALL CLASSESCrayon Etching

Crayon etching is made by scratching through one or more layers of heavily applied crayon of contrasting colors to reveal colors below the surface.

Materials: Paper cement bag or other heavy paper; crayons; sharp sticks, nails or hairpins; finished examples of crayon etchings.

Teacher's Preparation: Prepare paper of approximately 10x12 inches, one sheet per child and finished examples.

Procedure: Explain the lesson to the class, showing examples. Demonstrate the method by covering surface of the paper with a fairly heavy coating of crayon in one or more colors adjacent to each other. (a candle may be substituted for crayon for the underneath layer.) Do not draw a picture. Apply a dark color of crayon over the first layer, rubbing in the opposite direction.

Scratch a picture or design with a sharp tool through the top dark layer to reveal enough of the underneath color to make the picture interesting. Use several tools for scratching - some broad, some pointed.

When the children understand the method, distribute the materials and begin the lesson.

When the pictures are completed, collect materials and display the pictures on the classroom wall for the class to enjoy and discuss.

VARIATIONS: Apply crayon to paper on one or more colors. Rub lightly over crayon with chalk dust, talcum powder or a bar of soap to make the crayon stick. The soap also keeps the crayon from chipping. Cover with a dark coat of poster paint or India ink. When dry, scratch through to reveal the colors underneath. Other ways to cover a waxy surface with paint are, (1) to dip the brush first in paint and then stroke across a bar of soap or (2) add a bit of detergent or liquid soap to the paint.



PAINTING, DRAWING, DESIGN ALL CLASSES

Wax Resist

A wax resist is made by drawing a picture or design in heavily applied light colored crayon or candle wax on light colored paper. The drawing is then brushed with a water color wash, or dipped into a dye bath. The blank areas of the paper absorb the color wash, the wax drawing stands out against the background.

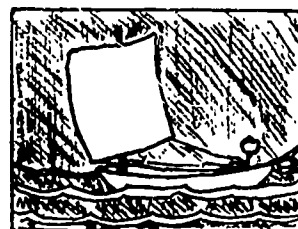
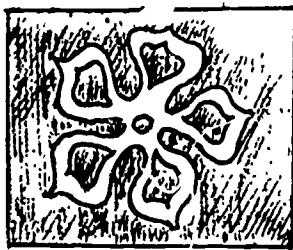
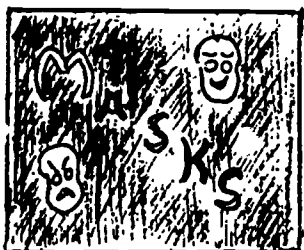
Materials: Crayons or candles; light colored paper (newsprint or other); brushes; paint (market dye, powdered paint or washing blue); large containers if a color bath is to be used, small containers if brushes are used; old newspapers; examples of finished wax resists.

Teacher's Preparation: Prepare paper of approximately 10x12 inches; prepare several examples; arrange large shallow containers of different colored water baths in convenient places on old newspapers. Arrange space to hang up pictures to drip dry.

Procedure: Explain the lesson to the class, showing examples. Demonstrate the method by drawing a picture or a design on paper in heavily applied crayon or candle wax. Dip the paper in the dye bath or brush on the color wash. Hold it up so that the paper will drip over newspapers and hang up to dry or after the surplus dye has finished dripping place the picture in a clean area to dry. If needed, make more than one picture so that the class will understand the method thoroughly.

Distribute materials and begin the lesson. Several pictures should be made by each child. Supervise the work to make sure that the crayon or candle wax is being applied heavily enough.

When the children have finished the pictures should be placed in a clean dry area out of the wind. Collect the unused materials and have the children clean up the classroom. When the pictures are dry, they should be mounted on the wall for display and discussion.



PAINTING, DRAWING, DESIGN ALL CLASSESStick Figure Drawing

Figures in action can be quickly drawn in a few lines resembling match sticks, a stroke for each limb and a circle for the head. A series of such figures may be used to illustrate stories related to school lessons or events, or to an original story idea. They also train children in the observation of how the body appears in action. The more violent the action, the more convincing the figures.

Materials: Plain paper, crayons or charcoal or colored chalk. Prepared charts.

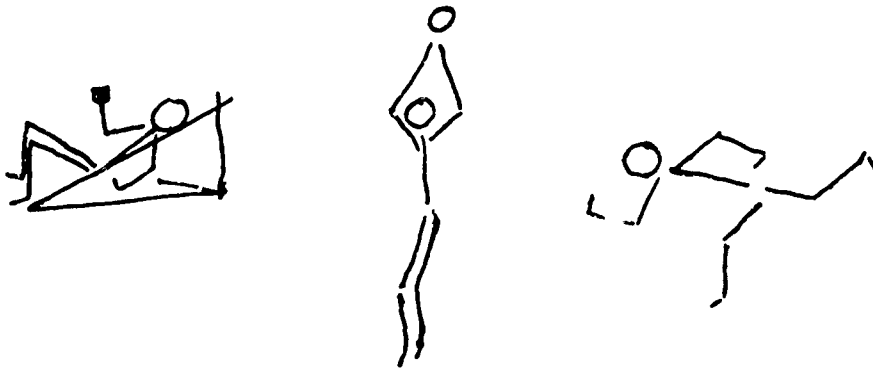
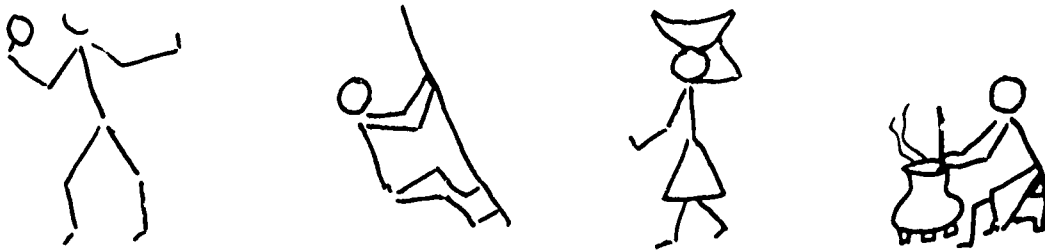
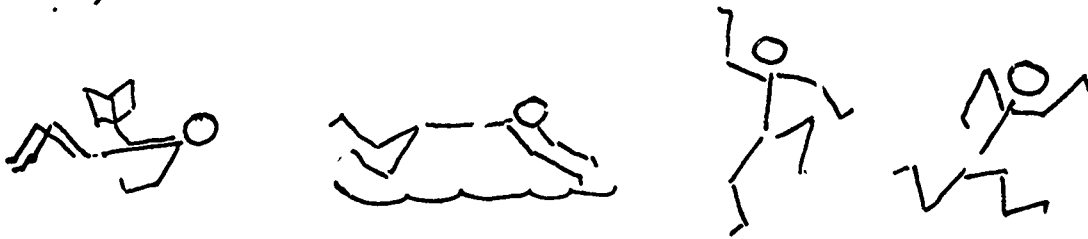
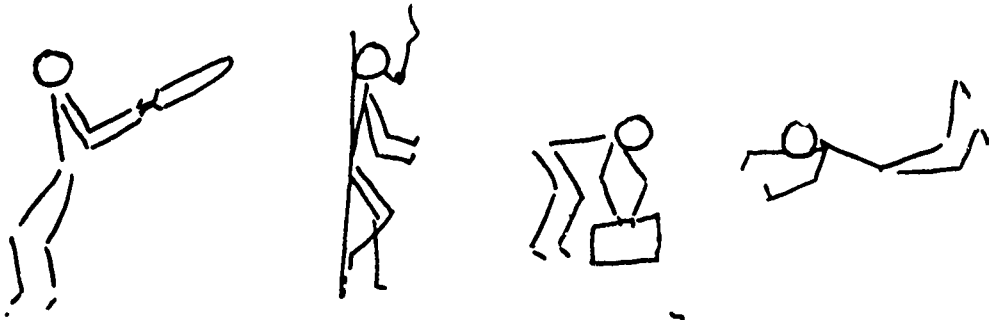
Teacher's Preparation: Prepare paper and examples or charts.

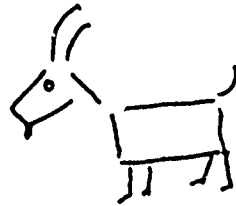
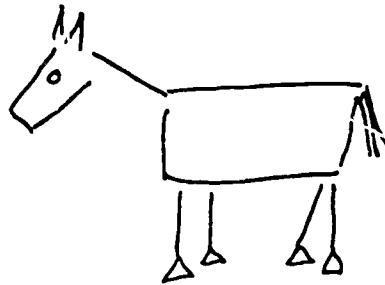
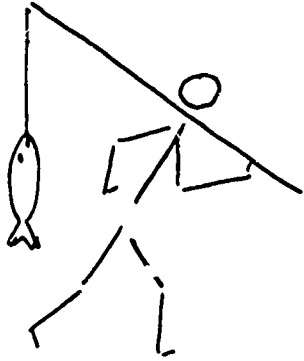
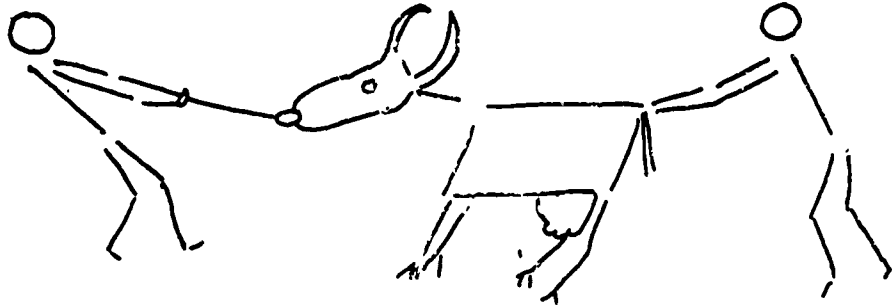
Procedure: Explain the lesson to the class and demonstrate how a person appears when running by having one child come to the front of the class, starting to run and stopping the action and holding the pose for a moment. Discuss the position of arms, legs, etc., and then draw the figure on the blackboard. Ask another child to pose as if he were throwing a ball. After discussion, draw the figure on the blackboard. Ask the class what other actions they can think of and have children assume that pose. Using the prepared chart, ask the class what actions the figures are performing. Put away the charts, distribute materials, and have the class begin practice drawing figures from models posing in front of the class. Observe the work and give assistance when necessary until the children have the idea.



Distribute another piece of paper to each child and ask him to draw one figure almost filling the paper. This should be his best effort, each figure should be illustrating a different action, and not a copy of what his neighbor is doing. When the large figures are completed, they may be displayed on the classroom wall forming a large chart. (No duplicates.) This chart may be referred to when the class is illustrating stories.







PAINTING, DRAWING, DESIGN CLASSES I - III

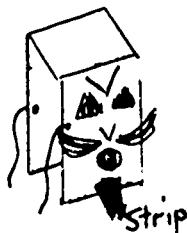
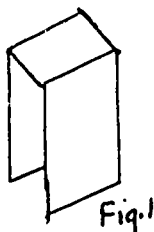
Paper Masks

These masks may be made of brown paper bags or strips of heavy paper folded at the top to give "head room" and tied together on the sides.

Materials: Each child should bring a paper bag large enough to put over his head. If these are not available use cement bag paper or other heavy paper cut into strips 8x20 inches. Scissors; string/raffia; crayons or paint; paper to use for decoration; paste; fiber to use as "hair".

Teacher's Preparation: Prepare 2 or 3 masks. Cut strips of paper if bags are not used.

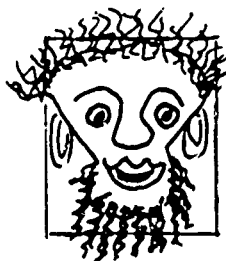
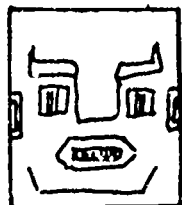
Procedure: Explain the lesson and show the masks. If strips of paper are used, fold so that there is space at the top to accommodate the width of the child's head. Fig. 1. Cut out eye and mouth holes. Decorate with paint, crayons, charcoal or colored chalk in any manner desired. Use imagination! Paste on strips of paper or fiber for hair, beards or a moustache.



If paper bags are used no folding is necessary. Cut holes for eyes and mouth, and decorate the bag. Cut off at 10 inch length.

Distribute the materials and have the children begin the lesson. Encourage them to be original in their decoration, not to copy the teacher's or their neighbor's masks.

When the masks are completed, set aside to dry and clean up the classroom. After the masks have dried, the children should put them on and parade around the school compound so that other classes may see the masks. The children should take their masks home if they are not to be used for a play or a festival. If they are to be so used, store them carefully.



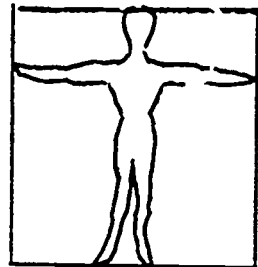
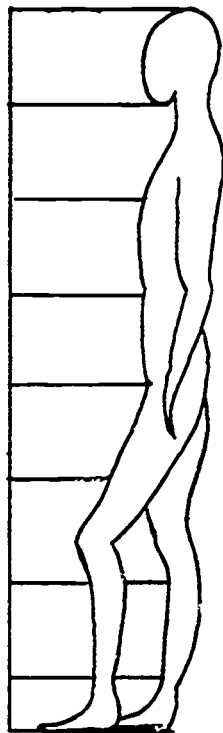
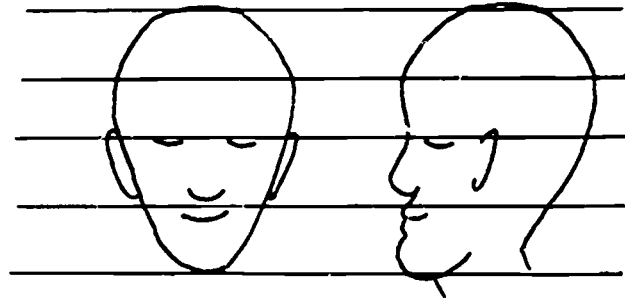
PAINTING, DRAWING, DESIGN CLASSES IV - VIPicture Painting and Drawing

General procedures and directions are similar to those for classes I - III, but subject matter, design, etc. are more advanced. Object drawing, still life and proportionate drawing may be introduced.

A good first lesson for the beginning of each new term would be an imaginative charcoal drawing on newspaper, using a chosen subject. For example, if the subject is birds, talk over with the class the habits and activities of birds: how they fly, build nests, sleep, feed their young, etc. After the discussion distribute the materials and tell the children to sketch lightly and quickly just the outline of the objects they want in their pictures. This is to help the child to think of their pictures as a whole, an entire picture, not just as a series of objects. When the sketch is done, details may be added and colored with chalk. Pictures should be displayed and discussed.

A first drawing lesson is a good opportunity to discuss being creative and original. Since children tend to copy each other in their drawings encourage them to be original in their ideas, to use their imagination to express their own ideas. A drawing is not really a child's own unless he has expressed his own ideas. Even if the class is sketching a still life, each one sees it a bit differently. The differences are to be emphasized. No two pictures should look exactly alike. Each picture should be seen as each individual child sees it.

Suggested Proportions for Human Figure Drawing Classes IV -VI



PAINTING, DRAWING, DESIGN CLASSES IV - VIDrawing: Illustrating a Story

Materials: Plain paper; charcoal or soft pencil; paints in several colors; paint containers; brushes; water in small containers.

Classroom Arrangement: Children should work in groups sharing paint and water.

Teacher's Preparation: Mix paints and put into containers, prepare paper.

Procedure: Explain the lesson to the class, then read or tell a story or folk tale or recall one they have been reading or one connected with a history lesson. Discuss the different scenes. Have the children sit with eyes closed for a few minutes so as to visualize the scenes they wish to draw. This will help them memorize the details. A list of suggested scenes may be written on the blackboard.

Distribute the materials and have the class begin to draw. The scene should be sketched lightly in its entirety before filling in details and painting or coloring with chalk or crayon.

Make suggestions as to spacing, grouping and balance if necessary.

When the pictures are finished, they should be displayed and (after cleaning up the classroom) discussed.

VARIATION

Drawing and painting a scene from memory of some event or occurrence the child himself has witnessed. Proceed as above, sketching lightly and then filling in details, etc. The children should have opportunity to tell the class about their pictures.

PAINTING, DRAWING, DESIGN CLASSES IV - VICOLOR Three Lesson Unit

Color is a subject that has to be experienced to be known and enjoyed. Reading or hearing about it is not satisfactory. Your students will have to experiment to understand what color is and how it can be used. If this unit seems a long and difficult series of lessons it is worth the effort. Learning about colors is exciting to a child. It helps him to be more observant of what he sees, to enjoy the colors around him because he is able to identify them, and to use this knowledge in making up colors and combinations of colors.

The lessons outlined call for powder paints to be used, but if paints are not available, good colored chalk or crayons can be used. When one color is superimposed over another to create a new color they should be smoothed and blended so that the new color is distinct and identifiable. The teacher should read the lessons carefully - then try all the experiments and prepare the charts suggested before he attempts to teach a class about color. This gives him a sure knowledge of what the lessons are all about.

The three primary colors, red, yellow, blue, are the brightest and most intense. When these primary colors are mixed together in equal parts, they produce the secondary colors of orange, green, violet. These are bright, but not as intense as the primary colors. When a primary and a secondary color are mixed in equal parts, the result is a tertiary or intermediate color. These are yellow-orange, red-orange, red-violet, blue-violet, blue-green and yellow-green.

These twelve colors make up the "color wheel". All other colors are tones, tints, or shades of these colors and are made by mixing in unequal parts or by adding the neutral colors of black or white.

The teacher should make the following charts as visual aids in teaching this unit. Colors mixed in the proper manner should be used for the swatches of colors on the charts.

CHART IPRIMARY COLORS




Red




Yellow




Blue

SECONDARY COLORS

Mixed in equal parts




 +  Red + Yellow =  Orange




 +  Blue + Yellow =  Green

 +  Red + Blue =  Violet
CHART IIINTERMEDIATE COLORS

Mixed in equal parts

 +  Red + Orange =  Red-Orange

 +  Red + Violet =  Red-Violet

 +  Blue + Violet =  Blue-Violet




 +  Blue + Green =  Blue-Green


 +  Yellow + Green =  Yellow-Green

 +  Yellow + Orange =  Yellow-Orange
Tones or Shades of Colors

Black mixed with any color darkens the color

White mixed with any color lightens the color

Neutral Colors Black  White  Gray (Black+White) 

The color Brown  is made by mixing all three primary colors together in equal parts, or by adding Black to Orange

are swatches of the proper color

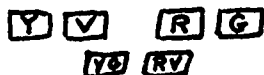
The following chart is optional. However, it is helpful to know about color combinations so as to use their effects in any art work and in home decoration and in personal dress.

CHART III

Monochromatic Colors: Tints and shades of one color. These are very effective and pleasing to the eye.



Complementary Colors: Those colors opposite each other on the color wheel and all tints and shades of those colors. These colors enhance each other, make each other more effective.



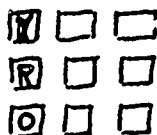
Related Colors:

These are made by mixing one color or a neutral (black, white, gray), with each of the other colors used. Example: If yellow is mixed with green, blue, gray each of the resulting colors will be related to the others. This produces a pleasing, unified effect.

Dominance, Subordination, Accent: This is a technique of using one color in a larger amount than the other colors so that it is the dominate color. A second color is used in a smaller amount and is subordinate to the first. A third and sometimes a fourth color is used in small amounts acting as accents, emphasizing the other colors by contrast.



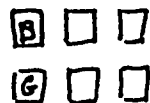
Warm Colors:



Yellows, Reds, Oranges

These are exciting colors, they "advance" - come toward the eye. Objects of warm color appear larger. Walls of a room painted with a warm color tend to advance, making the walls close in, thus the room appears smaller.

Cool Colors:



Blues, Greens

These are soothing, calm colors and recede (go away) from the eye. Objects of cool color appear smaller. Walls of a room painted with a cool color tend to withdraw, making the room appear larger.

First Lesson of Color Unit

Materials: Paper (newsprint or other plain paper) cut into 8 inch squares; powder paints in red, yellow, blue (or market dyes); water; brushes; Charts I and II. For the teacher's use: 12 glass jars or drinking glasses; strip of plain paper 3x25 inches; scissors; paste; large sheet of newsprint with a circle 11 inches in diameter drawn in the center.

Teacher's Preparation: Prepare Charts I and II. Cut paper into 8 inch squares. Draw the circle on the large sheet of paper. Collect the glass jars or drinking glasses. It is important that the containers be glass so that the class can see the colors change when they are mixed.

Procedure: Explain to the class that the lesson is to be about colors and how to make other colors from the three primary colors, red, yellow, blue. Use Chart I in explanation. Ask the children to identify the primary colors in the room. Then explain how secondary colors are made, by mixing equal parts of two primary colors. Name them, using Chart I and ask the class to identify the secondary colors in the room or the compound - trees, flowers, clothing, etc.

Begin the demonstration by lining up the 12 glasses or jars. Into the first put red powder paint, into the second put yellow powder paint, into the third put blue powder paint. Add water to each and stir. (Not too much water as the paint should be intense in color.) Have the children identify these as primary colors. Leaving some in each jar use the paint in the first three jars for the following demonstration:

4th Jar	add equal parts of red and yellow	- result,	orange
5th "	" " " " "	yellow and blue -	" green
6th "	" " " " "	red and blue -	" violet

These are the secondary colors. Have the class identify them.

7th Jar	add equal parts of yellow and orange	- result,	yellow-orange
8th "	" " " " "	orange and red -	" red-orange
9th "	" " " " "	red and violet -	" red-violet
10th "	" " " " "	violet and blue -	" blue-violet
11th "	" " " " "	blue and green. -	" blue-green
12th "	" " " " "	green and yellow -	" yellow-green

Explain to the class that these are the tertiary or intermediate colors. Use Chart II in the discussion.

Rearrange the glasses so that the colors are in order of the color wheel. Fig. 1.

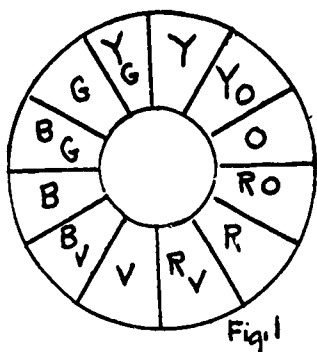
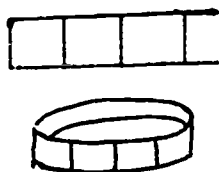


Fig. 1

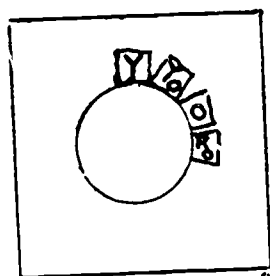


Fig. 2

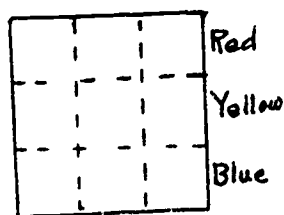


Fig. 3

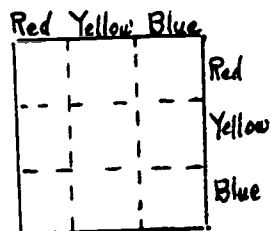


Fig. 4

On a strip of paper 3x25 inches marked into twelve 3 inch squares (ending with a strip of 0 inch), paint the colors in proper order, being careful to leave a small space between each color so that they will not run into each other. Leave the 1 inch space plain.

Discuss what you have done while the paint is drying to a damp stage. Ask and answer questions. When the strip is dry enough lap the two ends, the uncolored one underneath. This is a color circle. Hold it up so all the class can see.

Next, open it up again and cut off the yellow square and lightly paste it at the top of the circle on the large sheet of paper which should be hanging on the wall. Next, cut off the yellow-orange square and joining the lower right hand corner of the yellow square on the edge of the circle. Paste lightly. Fig. 2.

Continue cutting off the squares in proper order and pasting them around the circle. This forms the color wheel. All other colors are made from combinations of the colors of the color wheel or by darkening or lightening them.

Continue the demonstration by folding an 8 inch square into thirds each way forming 9 squares.

Paint the top row red, the center row yellow, the bottom row blue. Fig. 3. While the paint is drying tell the class that they will be doing this to discover for themselves how to make the secondary colors.

Distribute the 8 inch squares and have the children fold them into the 9 squares. Also distribute the red, yellow and blue paint. Have the children paint

the squares as the teacher demonstrated. While the papers are drying continue with the demonstration. Still leaving a small space between squares, paint over the first colors: left hand row, red, center row yellow, right hand row blue. Fig. 4. After discussing the demonstration the children should paint their papers. While the papers are drying ask questions about the new colors, the secondary colors of orange, green, violet. Using the teacher's paper have the class identify the secondary and the primary colors.

Clean up the classroom and have the children look at their own papers checking to see if they can identify the colors. Collect the papers after they are dry and save for the next lesson. Also save the paint.

Second Lesson of Color Unit

Materials: Same as the first lesson and paper 8x10 inches; cardboard templates of circles $3\frac{1}{2}$ inches in diameter.

Procedure: Display Charts I and II and review the last lesson. Demonstrate over again mixing the colors in the 12 glasses or have some of the children do the mixing. After the demonstration pass out the 8x10 papers and show the class how to fold them into 12 squares; 3 folds lengthwise and 4 folds crosswise. Fig. 1. When the papers are folded, have the children come up to the table where the paints are, in groups of 4 or 5 and paint in the 12 colors in the proper order in the 12 squares. Fig. 2. (The paint saved from last lesson may also be used in a different set of containers but set in the proper order. This still accommodate another group of children.) Remind the class to leave a small space between the squares of paint. While the papers are drying,

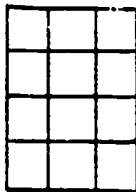


Fig. 1

Y	Y _O	O
R _O	R	R _V
V	B _V	B
B _G	G	Y _G

Fig. 2

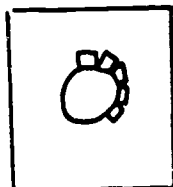


Fig. 3

have the children take out exercise books and trace from the $3\frac{1}{2}$ inch diameter templates, a circle in the center of a page. Fig. 3.

Next, the children should cut a 1 inch square from each color and lightly paste around the circle in the same manner as the teacher did in his demonstration, to form a color wheel. Label the colors by name or initials.

Collect the scraps left from the painted papers and save for the next lesson. Clean up the classroom, storing paint in tight containers and washing brushes. The paint is to be used for next lesson if extra colored papers are needed, or for a painting lesson.

Third Lesson of Color Unit

Procedure: Display Charts I and II and explain to the class that they are to copy these in their exercise books, following the page of the color wheel. Distribute the scraps of color from the previous lessons. (These should have been sorted by color and put into envelopes or between the pages of a magazine.) These scraps are to be used for the swatches of color on the charts. The teacher should observe the work and check that the proper colors are being used.

When the lesson is finished, show the class Chart III and discuss color combinations. The teacher may illustrate these using colored illustrations or advertisements from magazines. Ask the children to identify the colors and combinations in the examples displayed.

If there is time, the children should also copy Chart III, or copy it at a later time. All the charts should be left on display for a week or two for the children to study and review. Whenever color is used in a following lesson, talk about color and have the children identify it.

PAINTING, DRAWING, DESIGN CLASSES IV - VICrayon or Candle Wax Resist (Batik)

Wax resist or batik is a technique of applying a wax design to the surface of cloth, which is then dipped in dye. The portions protected by the wax resist (do not receive) the dye. When the wax is removed by pressing the cloth with a warm iron the design is displayed in a lighter color.

Materials: Crayons or candles; plain light-weight cotton cloth (approximately 12x12 inches); market dye in several colors; pans or buckets to hold the dye; pencils and paper to practice drawing the designs; old newspapers to spread around and under the dye containers; sticks for stirring the dye.

Teacher's Preparation: If the class is large, only one half of the children should do the lesson at one time. Prepare examples of batik designs. Prepare the market dyes according to the directions on the dye packages. The children should bring cloth from home, (it need not be new), if the school is unable to provide it. Remind the children to wash, dry and press the cloth before bringing it to school.

Beginning with Step 3, the class should move outside the classroom into the compound or on the veranda. Prepare a place outside the classroom in the shade where the wet batiks may be hung or spread on the grass to dry.

Procedure: Explain the lesson and show examples. Demonstrate step by step.

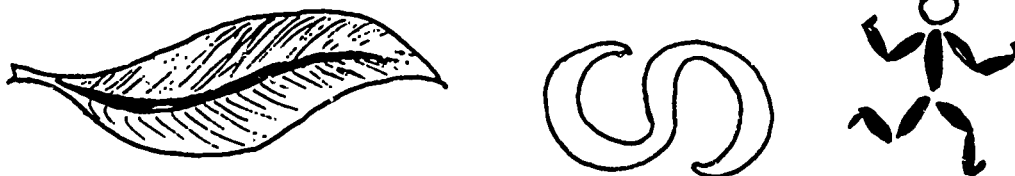
Step 1. Draw large simple designs on paper. (The children should try several designs until they decide on the one they like best.)

Step 2. Using a dark crayon or pencil, trace the design on the cloth. Go over the design, applying a heavy coat of wax. This must be thick enough so that the dye will not penetrate the wax when the cloth is dipped in the dye. Wax may also be applied to the design on the other surface of the cloth. If the cloth isn't too heavy the design will show thru and be easy to follow. Distribute the cloth, wax candles or crayons, paper and pencils. Have the children draw designs as in Steps 1 and 2.

When the children's designs have been drawn on the cloth and a heavy coating of wax applied continue the demonstration outside the classroom.

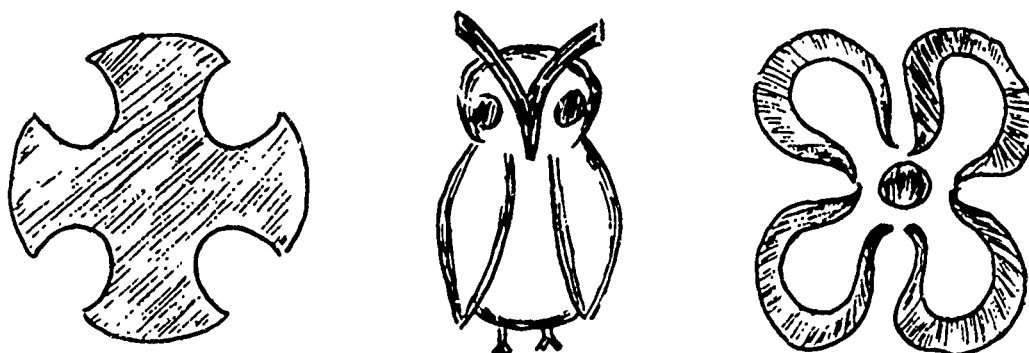
Step 3. Dip the cloth into the dye. Leave for 3 or 4 minutes stirring the dye gently with a stick. Then lift the cloth with the stick, let drip a minute or two, open up and hang up or spread on the compound grass in a shady area.

When all the children have dyed their cloth, clean up the classroom, saving the dye for the other half of the class (if only one half as participated.) When the cloths are dry, bring them into the classroom and display the designs, discussing the lesson. Ask questions as to why some designs are more distinct than others, (larger areas covered with thicker wax), etc. If there isn't to be a second lesson, the batiks should be pressed between several thicknesses of newspapers with a warm iron to remove the wax.



VARIATIONS: For a second lesson the dried batiks may be left unpressed and other designs drawn on different areas, applying a heavy coating of wax. Dip into dye of a different color. After drying, the batiks should be pressed as above.

Attractive head ties or scarves or wall hangings may be made by this technique. After the wax is removed, a soaking in warm salt or vinegar water will help to set the dye.



PAINTING, DRAWING, DESIGN CLASSES V AND VI

Compass Designs

Materials: Compass; pencils; plain paper 7½x10 several sheets per child; crayons, colored chalk or paint. If paint is used, containers and brushes.

Teacher's Preparation: Prepare several examples (large size) of different compass designs. Prepare paint if it is to be used.

Procedure: Explain to the class that they are to make designs using a compass. Show examples. Demonstrate how to hold and operate a compass if they are unfamiliar with its use. Holding the compass lightly at the top, swing easily around the point to draw a circle.

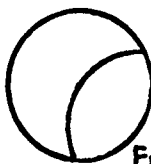


Fig. 1

Repeat this on the blackboard using chalk and a piece of string (This will take a little practice on the part of the teacher.)

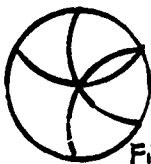


Fig. 2

Put the point any place on the rim (circumference) of the circle. Swing easily, making a half circle as in Fig. 1. Using the points where the arcs cross the rim, swing the compass to form other half circles as in Fig. 2. Continue until all the points are connected. Fig. 3.

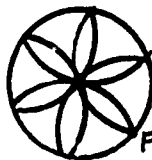


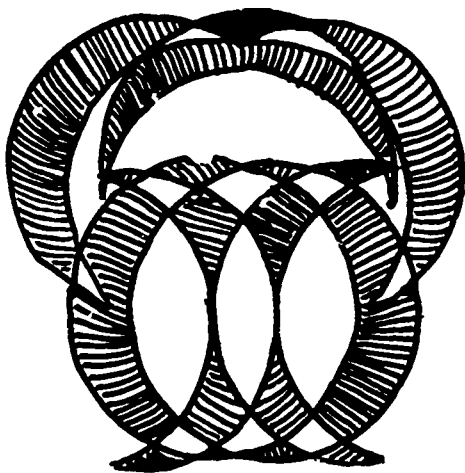
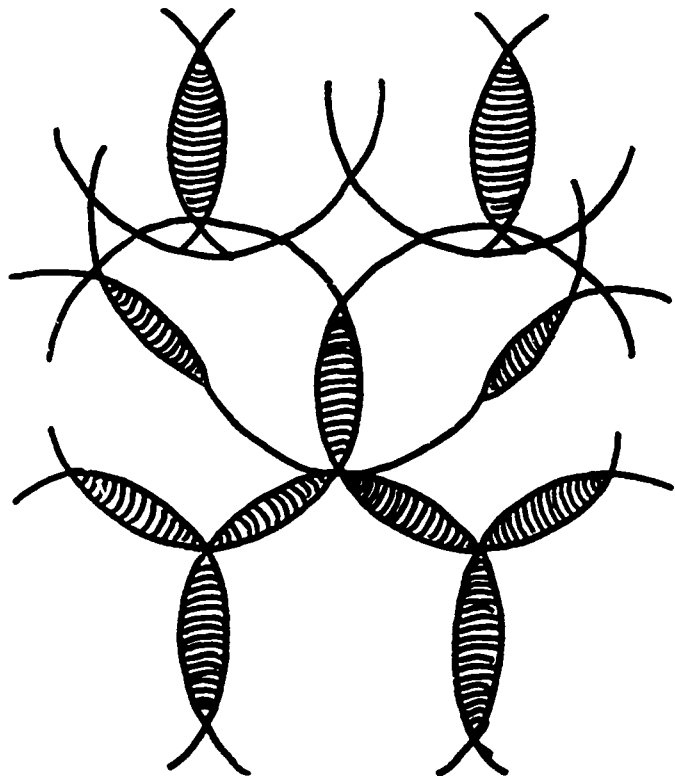
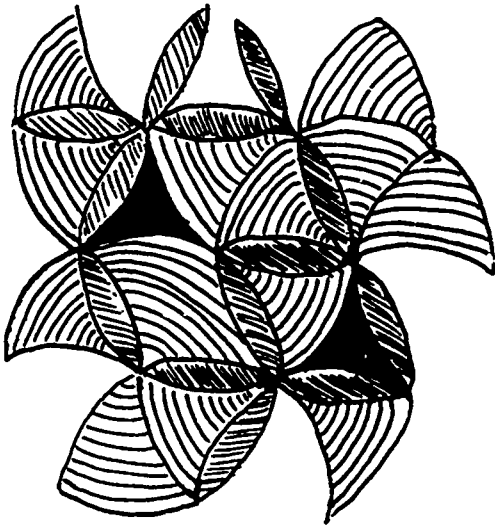
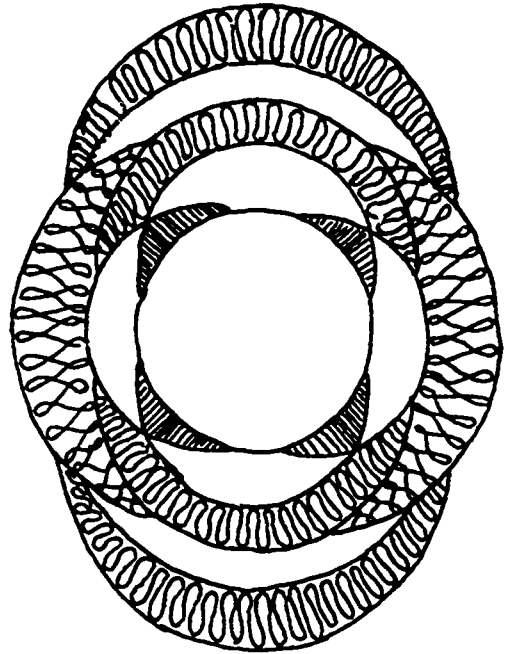
Fig. 3

Distribute the materials and have the class draw the design. Observe the work and help when necessary.

When the class has finished, show them their designs and tell them that they are to experiment with their own ideas. They may adjust the width of the compass and draw full, half, quarter circles.

After each child has made three or four designs, distribute the coloring material and have the children use their imaginations in coloring different sections of the designs. They may leave some parts uncolored or color just the outline and only small sections. This produces very interesting designs. When the lesson is completed, display the work and discuss the designs. Ask which designs are pleasing and why. There are endless possibilities in designing with a compass. If the class wishes, have another lesson using the compass.

COMPASS DESIGNS



PAINTING, DRAWING, DESIGN CLASSES V AND VI

Diorama - Group Work 1. five or more lessons

A diorama is a three-dimensional scene set against a painted background, depicting some activity, such as, village life, a market place, a festival or procession, an event in history. This is a good "end of term" project.

Materials: A large cardboard box or large sheets of cardboard; paper and pencils; clay or papier mache or mud for making figures, houses, boats, etc.; colored paper; raffia, fiber or bits of cloth; paste; small sticks and stones; scissors or razor blades; paint.

Teacher's Preparation: Prepare several figures which might be used in the scene -- people, houses, trees, etc.

Procedure--First Lesson: Explain to the class the nature of a diorama and then illustrate the construction of the background on the blackboard. Fig. 1. Show them the figures which have been prepared and how they will be used.

Ask the class for suggestions of what scene they would like to portray. When the subject has been decided upon, have the children make sketches of the scene. The class should choose the best ones and decide which features of each they want to use. Divide the class into groups of their own choosing, such as construction and painting of the background, "people makers", "tree makers", etc. Plan the size of the background and the number of objects each group will make. On the blackboard, write an outline of each group's duties, include the names of the members of the group so that each child will know to which group he belongs and just what he is to do. Tell the children to gather materials for the objects his group is to make.

Second Lesson: Construction of background: If the cardboard box is large enough, it can be cut down to appear as in Fig. 1. If large sheets of cardboard are used, they should be measured and cut to the decided size and taped or tied together to form the stage. The background should be drawn and painted on the sides, back and floor of the stage or colored paper torn to fit the drawing and pasted to the box. Fig. 2.

While the background construction is going on, the other groups should be

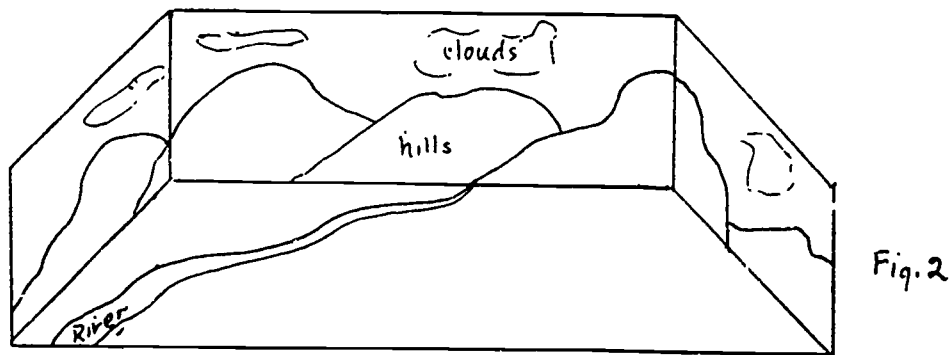
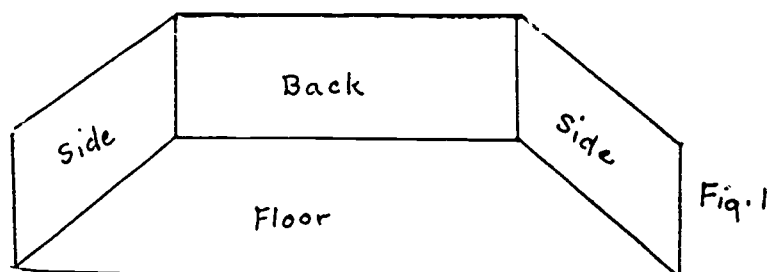
working on their assignments. Stones and small sticks may be used if appropriate. "People" should be dressed in cloth, raffia, or colored paper. Market stalls can be constructed of cardboard, raffia palm pith or balsa wood. Bicycles can be made of wire, etc. Encourage the children to use their imagination. Problems that arise should be talked over and suggestions listened to and adopted if suitable. At the end of the period the work should be placed in a safe place to dry.

Third Lesson:

The class should finish up any odds and ends that were not completed during the last lesson and touch up the background if needed.

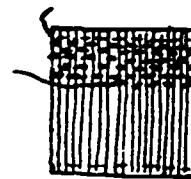
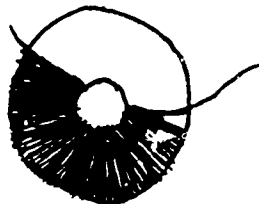
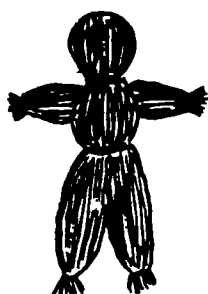
When all the work is completed, assemble the scene letting each child place his own work in the diorama. If the first arrangement does not seem pleasing, try different placements until the class is satisfied; then stand back and admire the scene.

The headmaster and the entire school--class by class--should be invited into the room to view the diorama. Keep it on display until the end of the term so that it will be included in the exhibition of craft work which should be held for parents at the end of each term.



LESSON PLANS

FIBER CRAFT



FIBER CRAFT ALL CLASSESFiber Dolls

Materials: Sisal, raffia, yarn, banana fiber, or long grass; scissors.

Teacher's Preparation: Prepare examples partially completed and completed.

Procedure: Explain the lesson to the class showing them the examples.

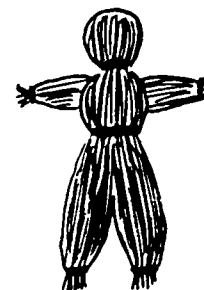
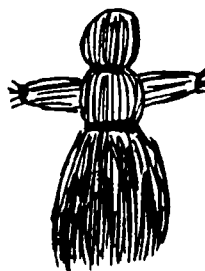
Demonstrate the procedure by taking a bundle of fiber approximately 12 inches long and of thickness desired. Bend in the center and tie about one fourth the length from the top. This makes the head. Wind a shorter piece, tying close to each end for the hands. Pass this thru the center of the body pushing it up to the tie off for the head. This piece makes the arms. Tie just below the arms for the waist. If the doll is to be a boy, separate the bottom or open end into halves and tie very close to the ends. These are the legs. Trim any odd lengths, and at the hands and feet so that they are even.



When the children understand the procedure, distribute the materials and begin the lesson. Help the children if they need help. A string or piece of the fiber may be attached to the doll so that it may be hung up.

When the dolls are completed, hang them on the wall, clean up the classroom and discuss the lesson. When school is over the children should take their dolls home.

VARIATION: Fiber animals may be made by this same method. The teacher should experiment and work out the proper lengths for the legs, ears, etc.



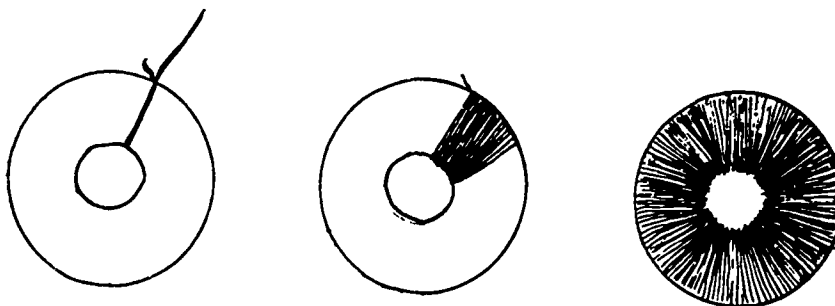
FIBER CRAFT CLASSES I - IIICircular Mat

Materials: Plain or colored fiber, raffia, sisal, grass or whatever fiber is used in the area for mat making. Cardboard circles approximately 6 inches in diameter, with a hole in the center 2 inches in diameter, one per child.

Teacher's Preparation: Prepare the cardboard circles and tie a piece of the fiber on each before distributing to the class. Prepare examples, partly completed and completed.

Procedure: Explain the lesson to the class. Begin the demonstration by taking one of the circles with the fiber attached, passing the fiber thru the center hole and over the outer edge pulling gently but firmly. Repeat putting the fiber thru the hole and over the edge, always working in the same direction and lapping the fibers. Continue the wrapping until the children understand the method; it is not necessary to complete the mat. Fasten ends by tucking under the part already wrapped and wrapping the new fiber over the last strand, holding firmly so that the new end does not stick out or become loose. When the cardboard circle is completely covered, the end of the last fiber is tucked securely behind several strands. When the class understands the method to be used, distribute the materials and begin the lesson. Observe the class working, giving help when necessary.

When the mats are completed, materials collected, and the classroom cleaned, the mats should be hung up for display and discussion, being taken home later.



FIBER CRAFT CLASSES I - III

Raffia or Sisal Ball (If not available, cotton or wool yarn may be used)

Materials: Colored or plain raffia or other fiber; cardboard circles, two per child; scissors.

Teacher's Preparation: Cut circles from light-weight cardboard 3 inches in diameter with a hole in the center about 1/2 inch in diameter. Older children could prepare these for the class. If only half of the class worked at one time, not so many circles would be needed. Prepare examples some partly and some completely wrapped, and a finished ball.

Procedure: Explain the lesson to the class, showing the prepared examples.

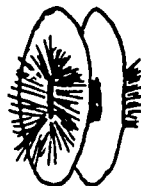
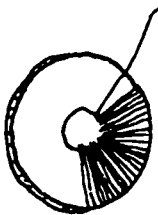
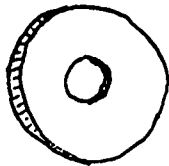
Demonstrate the wrapping by taking two circles and winding the fiber around both pieces, going thru the center opening until that opening is too full for any more fiber to go thru easily. Do this until the cardboard is completely and thickly covered. With scissors cut around the outside edge between the circles. Ease the two pieces apart a little and tie a strip of fiber firmly and tightly between the centers of the two pieces of cardboard. Pull the pieces of cardboard off and fluff out the ball.

Trim any ends sticking out to make the ball even. If it is to be hung up, fasten a string or a piece of fiber to the center tie.

When the children understand the method to be used, distribute the materials and begin the lesson, helping the children when necessary.

When the balls are finished, hang them up along a wall, clean up the classroom and talk about the lesson.

These balls in various colors make attractive Christmas tree decorations, or the children may play games with them.

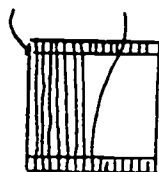
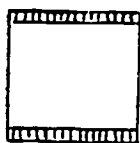


FIBER CRAFT ALL CLASSESWeaving - Simple Mat

If there are weavers in your area, take the children to visit them so that they may see how weaving is done, what types of fibers are used, and how the materials are prepared. Ask the help of the local craftsmen in teaching the classes. There may be a distinctive type of weaving and the children could learn this style instead of the simple mat produced by the following lesson.

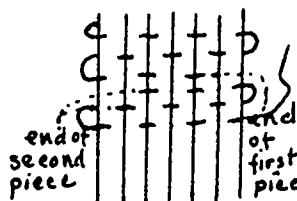
Materials: Cardboard looms approximately 8 inches square. Fiber: raffia, sisal; yarn or grass.

Teacher's Preparation: Looms should be prepared for the younger children.

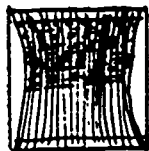


The older classes may prepare their own sometime before the lesson. On the 8 inch cardboard, measure 1/2 inch in from the top and bottom, draw a line. Measure 1/4 th inch spaces on these lines and cut slits from the top and bottom edges to the lines. If one half or one third of the class works at one time, not so many looms will be needed. Prepare examples of strung looms, partly woven mats and a completed mat. If using grass for weaving, the loom should be strung with yarn, string or raffia.

Procedure: Explain the lesson to the class. Demonstrate the stringing of the loom by tying a fiber at the top, left-hand corner and pass it thru the slit at the bottom. Passing the fiber underneath the bottom strip bring it up in the next slit and to the top where it is passed thru the second slit, back of the strip and out from the third slit to the bottom, etc. Continue until the loom has been completely strung, fastening the fiber at the last slit by tying.



Taking another fiber and beginning at the top left corner, weave over and under crosswise until coming to the other side, do not pull tightly. Then from the right-hand side, weave back, going over and under the strings opposite to the first row. Push the cross weave together so that there is no



"Bowling"
 fiber drawn
 too tightly

space between the rows. When the fiber ends, begin a new piece by inserting it a few strings back from the first and weaving in the same manner. Always keep the tension at the sides loose so that the mat lies flat and does not "bow" on the loom. Continue weaving until the children understand the method. Show them examples again. After questions have been answered, distribute the materials and begin the lesson.

Observe the work and give help when necessary. If the mats are not completed by the end of lesson time, they may be collected, put away, and finished at another session. Clean up the classroom and discuss the lesson.

LESSON PLANS
PAPIER MACHÉ



PAPIER MACHÉ ALL CLASSES

Paper Pulp - Small Figures

Paper pulp may be used as a medium for modelling similar to clay. It should be dried in the sun. The preparation of the pulp is given in Preparation of Materials section. Two full buckets of the pulp will provide twenty children with a hand-ful of pulp each. At least two hand-fuls will be needed to make the figures.

Materials: Newspapers or large leaves; water for washing hands; cassava or other starch; sticks for stirring. The paper pulp should be prepared the day before the lesson and allowed to sit over night; then the excess water should be poured off and the pulp squeezed as dry as possible.

Teacher's Preparation: Prepare the starch ready to be mixed with the pulp. Just before lesson time, ask several children to assist in mixing the starch with the paper pulp. Add 3 cupfuls of starch paste to each bucket of pulp, stirring thoroughly with a stick. The papier maché pulp should be thick enough to hold its shape when molded.

Prepare several examples of figures. They should be chunky with little detail.

Procedure: Explain the lesson to the class, showing examples. Demonstrate the method of modelling by first spreading newspapers or a large leaf to protect the working surface. Taking a hand-ful of the pulp, mold it into a simple shape, a ball, a cube, etc., working it the same as clay, until the children understand the technique. Then shape a simple figure and set aside to dry. Answer any questions asked by the class, distribute the materials and begin the lesson.

When the figures are finished, place them on clean paper or leaves and set them in the sun to dry. When thoroughly dry they should be painted.



PAPIER MACHE ALL CLASSESPaper Pulp - Puppet Heads

Materials: Newspapers; water; cassava or other starch; sticks for stirring; light-weight cardboard; old newspapers or large leaves.

Teacher's Preparation: Prepare examples of puppet heads and dressed puppets.

Prepare the paper pulp (see Preparation of Materials) the day before the lesson and allow it to sit over night; then the excess water should be poured off and the pulp squeezed as dry as possible. Prepare the starch and just before lesson time, ask some of the children to help mix it with the paper pulp. Add 3 cupfuls of starch to each bucket of pulp, stirring it thoroughly with a stick. Cut the cardboard into 2x3 inch pieces and tape or paste to form a tube to be used as the puppets "neck", one for each child. The older children may do this the day before the lesson.



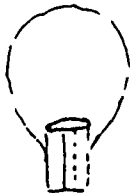
Procedure: Explain the lesson to the class and show the examples of puppet heads and dressed puppets. Begin the demonstration.

Step 1. Take a handful of the pulp and form it into a ball. Insert one of the cardboard tubes into the ball, pulling the mixture halfway down over the neck.

Step 2. Mold the face by pinching out the features. They should be exaggerated so that they may be seen easily from a distance. As it is being worked on, hold the puppet head carefully in the hand not on the finger.

Step 3. When the head is completed, lay it on crumpled paper or dry grass shaped as a nest so that the head will dry without flattening out. Do not stand on the cardboard neck.

When the class understands what they are to do, distribute the materials and begin the lesson. Observe the work and help the children with shaping the features if necessary. When the heads are completed, the children should put them

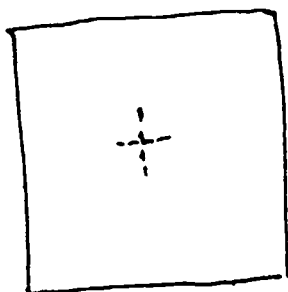


on crumples paper or in dry grass nests to dry in the sun. It will take several days for them to thoroughly dry.

Collect the materials and clean up the classroom. Discuss the lesson and make plans for painting and dressing the puppets and for using them in a play or to tell a story.

VARIATION: If sawdust is available, it may be mixed with the starch to the consistency of clay and the head and face molded from this mixture. If cracks appear as the head is drying, mix a thinner mixture of starch and sawdust and repair the crack.

Dressing the Puppets: After painting the heads and attaching hair (grass, fiber, yarn, etc.) if desired, cut a square or circle large enough to cover the hand when the finger is inserted into the neck. In the center of this, make small slashes and slip over the neck and tie securely with fiber or thread.



PAPIER MACHÉ CLASSES IV - VI

Bowls - Strip Method

Strip method papier maché is different from the pulp method in that narrow strips or pieces of newspaper are used to build up a cast over a simple mold.

Materials: Newspapers; thin starch paste; simple molds, such as small bowls



or any small container which is smooth on the outside and slightly larger at the top than at the bottom; containers for starch; buckets or pans of water for hand washing; old newspapers or large leaves; oil or vaseline; examples.

Teacher's Preparation: Prepare the thin starch paste and examples in different stages of completion. If only one-half of the class works at one time, not so many molds are needed. The day before the lesson have the class tear the newspapers into lengthwise strips one-half to one inch wide and eight or ten inches long. The children should work in groups of four or five in order to share containers of starch.

Procedure: Explain the lesson to the class and show examples. Demonstrate



the method by smearing lightly the outside of a mold with oil or vaseline and place open end down on an old newspaper or large leaf. Dip a strip of newspaper into the container of starch and lay it across the top center of the mold from one side to the other, keeping it smooth and free from wrinkles. Repeat, lapping the strips slightly until the mold is completely covered. Turn the mold and repeat the layering process with dry strips running in the opposite direction, smoothing each strip until the mold is covered with dry strips.

Repeat these two steps until at least 8 layers have been applied; always smoothing each strip to keep it free from lumps or wrinkles.

For the demonstration it is not necessary to finish the layering; do only enough so that the class is sure of the

method to be used.

It is important that the layers should be even, that is that the same amount of paper should be layered over all sections of the mold until the desired thickness is obtained. End with a wet layer. When the layering is complete turn the mold over and press down firmly so that the bottom of the bowl will be flat and even and the finished bowl will not tip.



When the children understand the technique, distribute the materials and begin the lesson. When the bowls are completed place them in a clean area to dry and harden; this will take several days. As the paper dries, it shrinks and the mold will slip out easily.



Collect materials and clean up the classroom.

After a day or two, when the bowls are nearly dry, trim off the paper where it extends over the edges of the mold; take out the mold and set aside again to completely dry.

Another lesson time should be used to paint the bowls with thick opaque paint and to add the decoration. These papier maché bowls will not hold water or liquids, but may be used as containers for any dry material.

VARIATION: Small cardboard boxes may also be used as molds, using either the strip or pulp method. The box should be covered with thin plastic or wax paper (bread wrapper) and smoothed out well and fastened lightly with paste so that it may easily be removed when the papier maché is dry. Paint and decorate as desired.

CLAY - PAPIER MACHÉ CLASSES IV - VI

Masks Three Lessons

First lesson: making a clay mask. Second lesson: using clay mask as model covering it with papier maché (strip method). Third lesson: removing papier maché mask from clay model and decorating it. The paper mask may be worn for a play or a festival.

First Lesson - Clay Masks

Materials: Clay, enough for each child to make a slab approximately 1/2 inch thick, 8 inches long and 6 inches wide, with some left over to make features. Newspapers or large leaves; water in containers; small pointed sticks.

Teacher's Preparation: Prepare a clay model mask and two papier maché masks. Paint and decorate one, leave the other unpainted. Have several children wedge and prepare the clay, forming it into balls of the proper size so that each child will receive one ball.

Procedure: Explain the lessons to the class, showing them the clay and



Fig. 1

papier maché masks. Begin the demonstration by taking a ball of clay and pinching off a piece about the size of a fist. This is to be used to build up the features. Place on newspaper or a large leaf and flatten the clay into a slab about 1/2 inch thick, 8 inches long and 6 inches wide. Fig. 1.



Fig. 2

With a sharp stick mark off in sections as Fig. 2. This may be illustrated on the blackboard. These marks locate the features which are to be build up.



Fig. 3

Send the slab of clay over crumpled newspaper which has been dampened (not wet) and formed into an oval shape. Fig. 3. Smooth the clay down over the sides. Fig. 4. Make exaggerated features, and an imaginative face rather than a realistic one.

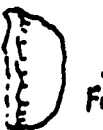
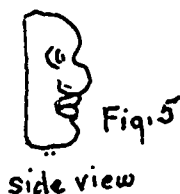


Fig. 4

Taking the pinched-off piece of clay, use it to build a nose



lips, chin. Carve out the eyes and build up eyebrows.

Fig. 5. Smooth the clay with water.

After the features are shaped, set clay aside and distribute the materials. The class should begin to make their masks.

Work should be observed and help or suggestions given where necessary.

When the clay masks are completed, have the children write their names on the side of the masks and place them on newspapers or leaves in a protected area. Cover the masks with a dampened (not wet) cloth or newspapers, or plastic. The masks should be kept slightly dampened until the next lesson. They should dry to a "leather" hardness, not to the completely brittle stage. Leave the crumpled newspapers inside the masks to help hold their shape.

Clean up the classroom and discuss the next lesson--papier maché masks.

Second Lesson - Papier Maché Masks

Materials: Newspapers or leaves; clay masks; vaseline or oil; newspapers torn into 1/2 inch widths for the papier maché; thin starch in wide, shallow containers; prepared unpainted mask.

Teacher's Preparation: Prepare the thin starch paste and put into containers. Have the children tear newspaper into strips for the papier maché. The class should work in groups of 4 or 5 to share the starch.

Procedure: Show the class the unpainted papier maché mask and explain the lesson. Begin the demonstration by applying a thin coating of oil or vaseline to the clay model. Dip a strip of newspaper into the starch and place it lengthwise on the clay mask. Press down to fit into the features. Repeat, lapping the first strip. (See lesson on papier maché - strip method.) Continue until the mask is covered. For the second layer place dry strips going in the opposite direction, again pressing paper into and around the features, until the mask





Fig. 6 Side view

is completely covered with dry strips. The third layer is starch wet strips place in the direction of the first layer. Fig. 6.

Repeat the layering, wet then dry, until at least eight layers have been applied.

The teacher may stop the demonstration when the class understands the method to be used.

Distribute the clay masks, being sure that each child receives his own; oil; the starch; strips of newspaper; leaves or papers to protect the working surface. Children should begin to cover their masks. Observe the work, making sure that the proper method is being used. When the children have completed the papier maché masks, set them in a protected area to dry. Clean up the classroom and discuss the next lesson--the painting and decoration of the paper masks.

Third Lesson - Decorating Masks

Materials: Masks, raffia or fiber to make side ties; sharp instrument for punching holes at the sides of the masks for ties; thick opaque paint; brushes; paste for sticking on grass or fiber for hair; razor blades or scissors for cutting out eye holes and trimming edges; the painted and decorated paper mask.

Teacher's Preparation: Prepare the thick opaque paint in several colors. (see Preparation of Materials), and cut the ties in 12 to 14 inch lengths.

Procedure: Display the prepared mask and discuss mask decoration. Tell the children that they can paint and decorate their masks in any color they wish; attach hair; cut away the paper maché strips on the edges. Let their imaginations run wild! Distribute the materials and have the children take out the crumpled newspaper; remove the paper mask from the clay mold. Put the clay masks in tight containers and add water to moisten the clay for future use.



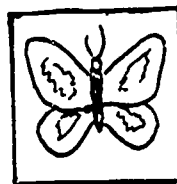
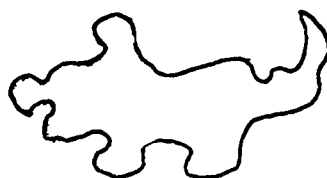
Help the children to cut out eye and mouth openings; give suggestions for decoration if necessary. When the masks are completed, they should be set in a clean place to dry. When dry, punch holes in the sides of the mask and attach the string or raffia so that the masks may be tied at the back of the head.

Hang up the masks or place them in a display area after the classroom is cleaned up.

Discuss with the class uses for the masks. A play? A festival? Or just to be worn for the fun of it.

LESSON PLANS

CLAY CRAFT



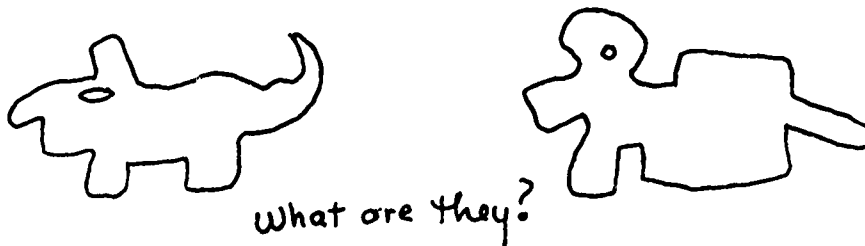
CLAY CRAFT ALL CLASSES

Figures: Imaginary or Representative

Materials: Clay, enough so that each child has two large handfuls; three or four buckets or pans of water; newspapers or large leaves; small containers for water, one per group; finished examples.

Teacher's Preparation: Clay should be prepared, (older children may prepare their own several days before the lesson), divided into portions of the proper size and stored so that it will not dry out. Papers or leaves should be gathered and examples prepared. Sharpen small sticks.

Procedure: Explain the lesson to the class, that they are to create either imaginary or "real" animals from the clay. Encourage them to experiment with the clay--squeeze it, pound it, roll it, pinch off small pieces and roll into balls, stick them together, etc., in order to get the feel of the clay. This can be demonstrated to the class, at the same time showing them how to attach pieces firmly together by scratching both surfaces with the sharp sticks and applying a small amount of water to the scratched surface. Then firmly press together. Bits of clay may be smoothed over into the joinings. After making the demonstration figure, other examples may be shown and then put away so that the children will not copy them. After the class understands what is expected, distribute the materials and begin the lesson, observing the work and giving help when needed. The finished figures should be placed on clean paper or leaves and set in a shaded place to dry. Do not place in the sun. When thoroughly dry, they should be fired, if possible, or painted. After cleaning up the classroom, discuss the lesson, letting the children who made imaginary animals tell about them. If some of the figures are not complete, they may be wrapped in damp newspaper or fresh damp leaves and completed another day.



CLAY CRAFT ALL CLASSESPinch Pots

If clay is not available, adobe mud or papier mache pulp may be used. These should not be fired.

Materials: Clay, enough so that each child has an amount as big as his two fists. Three or four buckets or pans of water; newspapers or large leaves on which to work the clay; small, pointed sticks; examples.

Teacher's Preparation: For the younger children the clay should be prepared (see Preparation of Materials) and divided into portions of the correct size and stored so that it will not dry out. Papers or leaves should be gathered. Prepare several examples of pinch pots.

Classroom Arrangement: The class should work in groups of 4 to 6 so that two groups could share one bucket of water. The children should work at desks pushed together, on the floor, or the school veranda.

Procedure: Explain the lesson to the class and show them examples of finished pots. Demonstrate the method of working the clay by kneading it and then rolling it into a ball between the palms of the hands. Set the ball down on paper or a leaf, placing the thumbs on the center at the top, press down into the ball while fingers are cupped around the outside. Turn the ball, slowly pinching inward, keeping the thickness of the side uniform. Gradually work the center hole wider until the desired shape is formed.



Show the children how to scratch designs on the outside with a pointed stick.

After the children understand the method to be used, distribute the materials and begin the lesson. Observe the work and give help where needed.

The finished pots should be placed on clean paper or leaves and set in a shaded place to dry. Do not place in the sun. When thoroughly dry, the pots should be fired, if possible.

Ask the local potters for their help in preparing proper firing facilities. If the pots are not fired, they should be painted and then used for any purpose except to hold liquid. The papier mache or mud pots cannot be fired.

The older children may try other shapes, such as those illustrated.

VARIATION: Instead of putting any surplus clay back into the containers the children may make small beads. By passing a fine wire or small twig thru them they may be strung on string or yarn when they are thoroughly dry and have been painted.

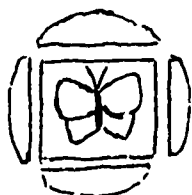
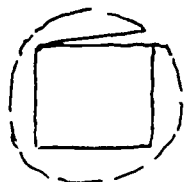


CLAY CRAFT ALL CLASSESSimple Tiles or Plaques

Materials: Clay, enough so that each child has an amount the size of his two fists; three or four pans or buckets of water; newspapers or large leaves; small sharp sticks; finished examples.

Teacher's Preparation: The clay should be prepared and divided into portions of the proper size and stored against drying out. Paper and leaves should be gathered. Prepare several tiles or plaques. Have small containers for water. The children should work in groups of 4 or 5 to share the water.

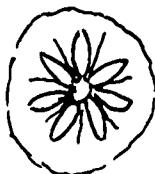
Procedure: Explain the lesson to the class and demonstrate the method of working the clay. Taking a portion of clay, roll it into a ball and then flatten it with the palm of the hand to a thickness of a little less than half an inch. Smooth it out until there are no ridges. Make into a square by cutting off the circular parts with a knife or sharpened stick. Save the cut-off clay, roll it into a ball and return it to the container.



Scratch a design onto the surface of the square and pierce the two top corners so that a string may be attached and the tile hung up. When the tile is completed, turn it over into the palm of the hand and peel off the paper or leaf. Place it right side up on a clean paper or leaf in a shaded place to dry. When thoroughly dry, the tile may be painted and fired.

When the children understand the method to be used, distribute the materials and proceed with the lesson. If the surface of the tile becomes dry while the children are working, it may be smoothed off with a little water. When tiles are finished and in place to dry, clean up the classroom and discuss the lesson.

VARIATION: Instead of cutting off the rounded edges, the tile may be left round and the hand pressed firmly down on the surface making a hand print. Or the edges may be turned up and the disk made into a shallow dish. When dry paint and decorate it.



RESOURCES

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