SENIOR FIVE FINE ART PAPER FOUR (STUDIO TECHNOLOGY)

Continuous

PAPIER-MACHE

This is a material that is made from paper pulp and glue, which can be molded when wet and painted when dry. Waste papers can be put to use inform of Papier-Mache.

Papier-Mache can be used alone for small pieces of both ceramics and sculpture or reinforced with an armature for big pieces and for areas of tension, or casted, this material can be painted or polished in the interest of the artist and can produce interesting art work such as mask, but it can be used in the outside environment.

Possibilities of Papier-Mache

- It is a cheap material since it can be prepared from waste papers which can be easily accessed.
- It is a light material, it can be used for pots, vases, bowels etc.
- Finished work in papier Mache can be painted.

Limitations of papier Mache

- It requires a long preparation process in order to be used.
- It cannot survive in a moist environment.
- It requires enforcement for big pieces and areas of tension.
- Paper pulp cannot be used alone, one needs glue as well and armature sometimes.

How to prepare papier Mache

- Tear the available papers (such as newspapers, magazines or toilet papers) into smaller strips.
- Soak the strip in water for some time until it softens. The time depend on the quality of paper used, the harder the longer it takes. (if the paper used is so hard you can boil it water first).
- When the paper softens it is crashed into paper pulp. You can use a piece of wood or hand blender to crash the paper in a container into paper pulp.
- Squeeze out the excess water and leave the pulp with just enough moisture, not too dry and not too moist. The colour of the paper pulp largely depends on the type of paper used. Papers with more wordings and pictures will create coloured pulp compared to papers with no words.
- Then the pulp can be mixed with glue ready to be used. One may use cassava flour, but it takes longer to dry, wood glue can be used for better results.
- When working with papier Mache, add one layer at a time and let it dry before adding another layer.

LEATHER WORK

Leather is a material made from hides and skins of animals by removing flesh, hair and tanning to render it soft and flexible when drying.

Materials and tools used in leather work

- Ruler
- Work Board
- Rotary punch
- Divider
- Wood stamp
- Knives
- Raw hide mallet
- Grooving and edging tools
- Stitching tools
- Thong

LEATHER PROCESSING

This is the process of changing skin, hides and kip from its original raw material to leather. The followings are some of the steps taken to process leather: -

- Skinning. This is the removal of the outer protective covering of the animal's hides and skin. This should be done carefully to avoid cutting through and some damages.
- Washing. This is done to remove blood stains, dirt and other impurities.
- Liming. The skin is soaked in lime to soften it and loosen the hair.
- Dehairing and flashing. This is the process of scrapping hair off the skin and removal of unwanted flesh.
- Cleaning bath. This is the stage where the skin is soaked in a solution of chemical to neutralize traces of lime and any other impurities.
- Washing. This is the second washing for a thorough cleaning by use of fibrous brush that marks the end of cleaning process.
- Cunning (tanning). This is the process of soaking hide and skin in a chemical substance called tannin or chromium in a large container for some time until the tanned material gained a stable state.
- Drying and compressing. After cunning, the skin becomes spongy during drying and compressing process, it is aired in a drying room with free circulation of air and temperature. When it's partly dry, skin is passed through rollers to compress and give it firmness of texture.
- Finishing. This is a process where leather is given an artificial grain. A cow hide may be given the grain of reptile skin. Such leather is referred to as corrected grain leather.

 Dying. Finished leather which is ready for use is measured as required taking in consideration areas with scars, blemishes and irregular shapes and to avoid wastage.

Techniques used for decorating leather

There are several techniques used for decorating leather and these include: -

- 1. Stippling, this is the technique of leather decoration where patterns are created by use of small dots placed in different parts using a single point tool.
- 2. Malting, this is a technique similar to stippling but differs in that tools with different points are used to place the dots that form the pattern.
- 3. Stumping, this is a technique of leather decoration where patterns are made on leather piece by pressing a dump leather piece with patterned metal on a flat surface
- 4. Incising, this is a decorating technique where pattern are incised on the surface of a leather piece.
- 5. Modeling, this is a decorative technique made by raising parts of on the leather surface.
- 6. Embossing, this is a decorative technique made by raising parts of leather from the underneath.
- 7. Tooling, this is a decorative technique made by pressing lines on the surface of leather.

Possibilities of leather

- Leather is a flexible material
- Leather is strong and durable material
- Leather is available every where
- Leather resist rough weather condition
- Article made from leather like shoes and bags are expensive hence fetching more cash for craft industries.
- Skin and hide are cheap to obtain

CEMENT

Cement is a fine, soft powdery type substance which is made from a mixture of elements that are found in natural materials such as limestone, clay, sand and shale. When cement is mixed with water, it can bind some and gravel into a hard-solid mass concrete. In order for cement to be used in three-dimensional art (such as sculpture). Cement has to be mixed with sand and water, stones and needs an armature in order to stand stronger.

Possibilities of cement

- Articles made in cement last for a long period.
- It is a strong material which can withstand different weather conditions.
- It requires much time for one to make an art work in cement.

• If cement is not mixed in the right ratios, art work in cement can easily break or develop cracks.

WOOD

Wood is a hard-fibrous material that forms the main substance of the trunk or branches of a tree or shrub. Wood is used in various ways as furniture, to make masks, musical instruments or canoes but it can also be used as a material in sculpture. Wood has a pattern that largely depends on the nature of the tree from which it has been got.

There are many other materials from the environment that can be used in three dimensional arts such as plant fibers. But always remember that such material have to be prepared well before the process of forming a given art work. Each material, such as plant leaves and fibers may have to be dried or soaked in water in order to be used in a particular article.

COLLAGE

Collage was developed from an old French word "coller" which means "to stick", or to paste down. In our context, collage refers to creation of an original art work, build up by gluing together pieces of originally unrelated images and text. (or parts of images and text).

The sources of text and images use for collage are typically called from commercial printed materials. Most often magazines, newspapers and books.

Materials and tools

To make an art work in collage, you need the following materials in place,

- 1. Papers (magazines, newspapers and posters etc.)
- 2. Glue (this can be prepared from cassava flour or plant sup)
- 3. A hard surface (such as old boxes, card boards and plywood)
- 4. Pencils and rubbers.
- 5. Coloured pencils.

Technique

- Collect different newspapers, magazines and posters.
- Like any other form of art, it is a good idea to begin with making sketches for the suggested idea on paper. You can go ahead to suggest the tones or colours to be used in the collage.
- Using a pencil, transfer the sketches on to the hard support, such as a cardboard or plywood.

- Tear small pieces of papers according to the required tones and/or colour. Tearing is preferred to cutting the pieces of paper with a pair of scissors in order to create an interesting texture in the art work.
- Carefully apply glue to the hard surface as you apply the torn pieces of paper, following the composition you have already sketched on paper. Apply glue to small areas as you paste the pieces of paper, never apply glue to the entire hard surface.
- When you complete the composition, trim the unwanted parts off your article, you may go ahead and frame it in order to look more impressive.

MOSAIC

A mosaic is a picture or pattern produced by arranging together small colored pieces and hard materials, such as stone, tile, or glasses.

Materials and tools used in mosaic

Historically, it is clear that broken stones and glasses commonly known as tesserae were the basic materials used in the mosaic during the early Christian period and the Middle Ages.

However, the basic materials needed include: -

- 1. A hard surface such as a block of wood, ply wood or a wall surface is the work is big.
- 2. Glue, wood glue or any other tough glue.
- 3. Knives / razor blade or cutters.
- 4. Pencil and rubber.
- 5. The hummer to crush the stone or glasses into smaller particles.
- 6. Paper for sketching.
- 7. Assorted objects (tesserae) such as broken glasses, stone, seeds, plant fiber etc. (sometimes tesserae is pre-painted)
- 8. Frames
- 9. Nails.

Technique

- 1. Collect and prepare the necessary materials.
- 2. Make sketches of the composition for your mosaic on paper and suggest the colors you are going to follow.
- 3. Using a pencil, transfer the hard support, such as cardboard and ply wood.
- 4. Carefully apply glue to the hard surface as you paste the tesserae following your sketch.
- 5. When you complete the composition, trim off the unwanted parts from your article.

6. You may go ahead and frame the art work using wooden or plastic frame in order to look more impressive.

Key factors to consider in collage and mosaic

The approach used in both collage and mosaic are basically the same, however, in mosaic, hard and heavy materials are used compared to the papers used in collage,

The following aspects should be considered when making either a collage or mosaic.

- (1) Creativity. Ability for someone to come up with something new. Creativity is judged by the way one combines the elements and principles of art together to create a unique or impressive composition in a given art work.
- (2) Composition. The ability to put together, to arrange or organize the elements of art in a coherent manner, following the principles of art. A composition is more impressive if it has got some dramatic qualities in the way subjects are arranged to create unity and variety.
- (3) Colour / tone. The colour and tone in collage and mosaic depend on the materials used.

The art work can be monochromic or produced in several colours, the ability for one to create contrast, perspective and building forms using the available colours contribute to proper use of colour / tone.

- (4) Use of materials. Materials are unique and can produce different effects in a given art work depending on how they have been used in both collage and mosaic, the tesserae used create a unique texture and its consistence depend on how pieces have been glued together on a hard surface.
- (5) Finishing. What makes an art work look complete, in craft, there must be some unwanted features that have to be got rid of before one declares the work complete. These may be extensions outside the work space or overflows of glue etc. in simple terms, finishing may simply be referred to as neatness in a given art work.
- (6) Individual style. Quite often there are general and acceptable ways of using of a given materials depending on its possibilities and limitations. However, one may come up with a unique way to make his or her work stand out more prominently compared to others, this is sometimes referred to us personal quality.

SCULPTURE

Sculpture is the art or practice of shaping representatives or abstracts forms. In the round or in relief, especially by modeling clay, chiseling stone, carving wood or by casting metal or plaster, or casting in metal.

Sculpture has existed from the pre-historic period, through the ancient civilizations, the middle ages, to the modern and contemporary period. Throughout the different

civilizations, sculpture has served utilitarian and religious purposes, as well as abstracts and decorative functions.

Sculpture belongs to the three-dimensional arts, following the definition of sculpture, it is clear that there are many materials that can be used in this area and as such there are several methods and techniques that can be used in sculpture,

The materials include clay, wood, stone, paper, cement, plaster, soap, fiber, glass among others, choosing a material to use should largely depend on the possibilities and limitations.

Types of sculptures

1. Relief sculpture. This refers to the type of sculpture that is partially carved into or out of another surface; these sculptures rely on a base or plane to support them and are two-dimensional art forms. Therefore, relief sculpture is not two dimensional because in order to see the images properly, there has to be variations in depth, although at a lower scale compared to sculpture in the round.

There are three types of relief sculptures alto, bas, and sunken.

- (i) Alto relief (high relief). This is a type of relief sculpture that is almost completely carved from its surface, its highly shaped, with very little of the structure touching the base or plane. In fact, it could possibly stand-alone if the base or plane were removed.
- (ii) Bas relief (low relief) this is the type of relief sculpture that barely extends past the base, for examples the images reflected on the coins (fish, cow, and crested crane)
- (iii) Sunken relief (intaglio) is the type of relief sculpture that is carved into the surface, rather than out of it. This type of sculpture was greatly practiced by Ancient Egyptians.
- 2. Architectural sculpture. This is the type of sculpture shaped by an architect or sculptor in the design of a building, bridge, mausoleum or others.
- 3. Sculpture in the round. This is a type of a free- standing sculpture in which the figures are presented in complete three-dimensional forms and are not attached to a flat background.

Functions of sculptures

The major functions that sculptures serve include: - spiritual, cultural, monumental, academics, and these can be discussed as follows.

- 1. Spiritual. Sculptures that have religious related themes or sacred things are the types that are used in churches and mosques for religious beliefs and functions.
- 2. Cultural. Sculptures often depict themes related to the beliefs, customs, practices, and social behaviors of a particular nation or group of people.
- 3. Monumental. This is when sculpture is made to commemorate an event or the existence of some one great. Such sculptures are usually big in size and significantly seen in the area where it is placed.

4. Academics. This is when sculpture is made for studies, simplified to suit the artist's interpretation of elements and principles of art and design. Such sculptures may be either in abstract or expressionistic.

Making a sculpture piece in clay

There are two methods you can use, additive and subtractive methods.

The hand is the basic tool you can use in clay sculpture.

However, other tools can also be used and these are tools that can be made locally using wires, and small sticks.

- (a) Additive method. This is a method commonly used in sculpture where you begin with a small piece of clay and you keep on adding other pieces as you form the require composition.
- (b) Subtractive method. The subtractive method can be used in clay by first pilling up a lump of clay and letting it to harden for some time. Then you start carving the clay until you obtain the required form.

However, it may not be easy to use one method strictly, but rather to use both additive and subtractive methods. Clay is a flexible material that allows both additive and subtractive methods to be used.

Subtractive method can be used alone when working on wood, wax, stone and soap.

KEY FACTORS TO CONSIDER WHILE MAKING SCULPTURE

Making sculpture is such an interesting activity. But one needs to be acquainted with the basic factors to consider besides the elements and principles of art and design.

These factors include:-

- 1. Message to be communicated through the sculpture piece.
- 2. Creativity, the ability to put in new ideas.
- 3. Composition, proper arrangement of parts or different objects.
- 4. Structure.
- 5. Materials.
- 6. Style.
- 7. Individual technique.

CERAMICS

Ceramics refers to the art of making and decorating pottery, technically, ceramics are those things made from materials which are permanently changed when heated.

Pottery is generally considered to be containers made from clay. In this context our emphasis is going to be put on pottery, where clay is the main material.

Pottery can be made using pinch, coil, slab or by using a wheel method.

(a) Pinch method.

This is a method where one uses a thumb and forefinger in the process of forming the clay shape, pinch pottery is the most basic clay assembling method which can be used by students with ease and interest.

Steps to follow when using pinch method

- (i) Begin with a small ball of clay, wedge and knead it to make sure that it is plastic enough (with no cracks), then insert your thumb in the middle of the clay ball.
- (ii) Then carefully pinch up the walls of your pot as you keep turning the pot around. Keep the thickness of the walls consistent as you slowly make your way to the top.
- (iii) You can work on the brim of your pot by making it protrude more than the rest of the pot. You can flatten the bottom of the pot in order to give it support.
- (iv) You can adjust on the shape of your pot according to your interest and add decorations when your port is still wet. When you are through with the forming activity. Your article should be kept covered to dry slowly before the firing process.

(b) The coil method.

This is a method in which you make coil and keep joining them until the required form is got. Make sure your clay is plastic and flexible; make sure that you work on a smooth surface.

Steps to follow in coil method

- (i) Begin by making a uniform slab, and cut it into a circular shape that forms the base of your pot.
- (ii) Roll clay in your hands and on a flat surface into small coils of the same thickness.
- (iii) Add the coils to the base of pot and press the inner sides of the coil to merge them on the base of the pot.
- (iv) Add more coils to the article as you form the walls of your pot.

 Seal all the gaps from the inner side of the pot with your finger.

 This is done at this stage because it would be difficult to seal these gaps when the pot is completed.
- (v) When the required shape and height of the pot has been obtained, smoothen the outer surface with a tool. You may add a decoration when the pot is still wet.

(c) The slab method.

This is a method in which slabs are used to make pottery. Angular and cylindrical shapes suit this method better than any other methods.

Assuming you have already prepared clay, make slip (liquid clay) which is used to bind the slabs together.

Steps to follow in slab method

- (i) Sketch the shape of the pot you want to make on a paper, using a pencil and ruler.
- (ii) Prepare a flat surface to work from and lay it with a polythene material. Get a small lump of clay and flatten it in your hands. Then place on it the flat surface and smoothen it further with a roller. The consistence of the clay can be achieved by placing long ruler on either side of the slab and rolled.
- (iii) Using a ruler and a knife, cut the slab in the different sizes you want. The ruler helps you to get straight edges of the slab. Make sure the slabs are right angled.
- (iv) Let the slab harden a bit by disposing them for some time, then add slip to the edges of the slab you want to join. At this level you should have got all the slabs you need for your ceramic article.
- (v) Assemble the slabs together to form your article. And then lay a coil over the inner joints of the slabs to seal off the gaps.
- (vi) When you are finished with the article. Smooth out the edges with a wet paper towel or a piece of cloth, then you can add handles and decorations on the sides of your articles.

Once you have completed your hand-built slab piece, you will need to dry it thoroughly before firing it.

It is important to dry the piece slowly and evenly in order to avoid wrapping and cracking. A good way to dry your piece is to cover it evenly with newspaper tent this will allow the moisture to escape slowly.

The slower the piece dries the better. At this level your article is referred to as "green ware"

How to fire ceramics articles

Before firing your article, make sure that it dries completely as a green ware, you can fire your article using either of the following ways: -

- > Fire your pottery in a kiln, this can be electric, firewood, or oil kiln.
- > Using a pit fire clay, a traditional method of firing pots.
- > Smoke firing in a dust bin.

Firing pottery using a pit fire clay

- > Begin by digging a pit large enough to accommodate your pots and all the materials you will use as fuel.
- > Fill the bottom of the pit with a thick layer of saw dust.
- > Add your pots facing different directions.
- > Build up layers of saw dust paper and dry wood around your pots.
- > Light your fire from the top and allow to burn. Then allow your pots to cool the same amount or longer as the heating process.
- > When everything is cool, you can dig up the fired pots and clean them up. This level is often referred to bisque level.

PRINTING

Printing refers to the surface resist process of reproducing texts and images, typically with ink on paper, cloth, or any other material, on the local market, printing is done on paper, metal, walls, t-shirts, clothes, caps and many other materials.

There are many types of printing, but in this topic, we are going to look at stencil printing, screen printing, and photo emulsion as means of printing patterns on clo

Preparation (the design process)

- > The preparation of patterns begins with identifying the source of inspiration, which may be from objects picked from nature and artificial word. You may be inspired by the textural patterns, shapes and colure on these objects.
- > The object is simplified, rearranged to make a pattern clearly showing positive and negative. In so doing one follows balance and rhythm in order to make interesting patterns. The patterns are enclosed in square or rectangular shapes with right angles to form a motif. The edges of the motif have to be carefully balanced in order to ease the printing process.
- > It is such a great idea for you to go through various stages of sketching and planning before coming up with the final motif. This helps you to produce an interesting pattern that is well though about and skillfully rendered. It also reflects you as an organized person.

➤ When you are sure about the pattern you have developed (with positives and negatives well balanced). You should think about how you are going to transfer the design on to the fabric. Transfer may be either by use of a stencil, a graphic film, or by photo emulsion.

A. Stencil and screen printing

Stencil printing is an art technique used to transfer a design to a surface by cutting shapes or patterns in paper (as stencil), and printing it on another surface.

To print a pattern on a given surface, the designer applies paints or inks through the open areas of the stencil.

Materials and tools required

- > A motif
- ➤ A stencil (a hard paper such as manila, transparence) etc.
- > Razor blades or cutters.
- > Sponge /squeegee.
- > Screen (a fine mesh stretched on a rigid frame).
- > Cloth washed and ironed or any other surface to be printed on.
- > Printing paste or ink.
- > Masking tape.

Technique

- (a) Place the paper with your motif on a flat surface table.
- (b) On top of the motif, place your stencil (in case of a transparence is used) or simply trace the pattern on the stencil (in case the a hard paper is used)
- (c) Cut out the positives on the stencil using a cutter or razor blade, the stencil should be wider than the size of the motif in order for it to be easily handled. Intricate (very complicated) designs may be more complex to cut, in such a case use suspender if you are going to use a mesh.
- (d) Place the stencil on the cloth on a flat surface.
- (e) Put some printing paste on the sponge and press it on to the stencil so that the ink passes through the gaps.
- (f) Continue printing (side by side of the motif) until the entire cloth is covered.
- (g) Fix the stencil (upside down) on the back side of the screen on the mesh using a masking tape.
- (h) Place the screen on the cloth and print with printing paste and squeegee.
- (i) After printing, get the stencil off the screen and wash it immediately.

Photo Emulsion

Instead of a stencil or a graphic film, one can use photo emulsion. Photographic emulsion is a fine suspension of insoluble light-sensitive crystals in a colloid, usually containing gelatin.

After preparing you motif on paper and making your screen ready. You can prepare positives on a transparency using photo-copier.

Prepare a solution of photo emulsion and spread a thin layer on the screen. Let the solution dry in a dark place.

Put the screen upside down, on top of a block surface, then put your transparency with positives on screen and cover it with a glass block.

At this stage expose the screen to light. The light causes the emulsion to harden and bind to the screen. Where the light strikes the screen, the emulsion will bind making a solid layer and where the light is blocked (under the positives) the emulsion remains water soluble.

After exposing the screen, you spray down the screen with water, washing off the emulsion only in area of positives, this clear area is where ink will be passed through the screen when you print.

Colour separation

Multi-colour designs look interesting if all the colours are well balanced and harmoniously organized. If you plan to print with more than one colour you need to prepare more than one stencil or graphic film on photo emulsion screen, depending on the number of colours.

The same material can be printed with different colours on the same cloth (double printing) to create an interesting pattern. The second printing can be placed upside down, or displaced by a few millimeters. In double printing, the second colour has to be stronger than the first and harmonious with each other.

FACTORS CONSIDERED IN TEXTILE PRINTING

- Creativity how the design develops from a given source of inspiration.
- Line and shape. The organization and simplicity of shapes and the use of several qualities of lines to create a pattern colour: This includes choice and harmony.
- Balance in terms of space, shapes and colour.
- Rhythm(flow) ability to create movement in the design.
- Craftsmanship. The registration of the motif without creating unnecessary lines in the design and neatness.
- Usage, printed patterns may be suitable for dresses/shirts, curtains, curpets etc.

SUMMARY

In the printing exercise, one may use a stencil, a graphic film or photo emulsion, stencil printing is beside, but for more complicated designs a graphic film and photo emulsion would produce wonderful results. It would be a great idea for the learner to practice with the three methods of printing for textile decoration in order to complete favourably in the cut field.

TIE AND DYE

Tie and dye refers to a bound resist process of dyeing textiles which are made from woven fabric usually cotton typically using bright colours.

It is a modern version of traditional dyeing methods used in many countries throughout the world.

METHODS USED IN TIE AND DYE

These are basically two methods that are used in tie and dye and these include gathering and folding stitchery/sewing.

A Gathering and folding

This is a method in which the cloth is folded, tied and dipped in the dyes. The cloth can be folded to form pleats, stripes, circles, or spirals. These can be discussed as follows:

(i) Pleats

Lay the cloth on a flat surface and fold it into small folds (pleats). This can be done following the length of the cloth on diagonally from one corner of the cloth. Then tie the cloth accordingly

Leave space

(ii) Stripes

Lay the cloth on the flat surface, gather the cloth following its length and tie it.

Leave space

(iv) Circles Leave space

Pull up a point on your cloth and twist it clock wise. It forms an ant hill form. Then tie it from the base upwards. This can be done at several points on the cloth according to your interest. Leave space
(iv) Spirals At the middle of the cloth pinch a point and twist it to form a cut as shown. The tie the entire cloth. Leave space
Circular patterns can also be created using found objects such as stones and bottle tops. If you are to use this method. Collect assorted objects and wash them with water. Arrange the found objects on a flat surface according to their different sizes. Creating an interesting/pattern. Then put a cloth on top of the objects and tie them. Leave space
B-stitchery/sewing For this method you begin y sketching the required pattern on paper with a pencil, and then you trace the sketch on to the cloth with the help of either a carbon paper or tracing paper and pencil. Leave space

Get a sizeable needle with a thread and saw the pattern, the threads should be left hanging at the beginning and the end of each stitch. Big threads such as nylon threads create better effects in the pattern.

These stitches can be pulled and tied at different intervals.

Materials and tools needed

- Cloth/cotton cloth is considered more suitable for tie and dye.
- Flat iron or iron box.
- Found objects such a clean stones or bottle tops.
- Sauce pans.
- Dyes such as dylons.
- Nylon threads or rubber bands or raffia.
- Needles
- Salt

TECHNIQUE

- (a) Wash the cotton cloth to get rid of starch and dirt.
- (b) Dry the cloth and iron it to get rid of unwanted folds.
- (c) Follow a method of your choice from those already discussed and tie your cloth, make sure the knots are tight.
- (d) Mix dye with water in a sauce pan according to the instructions on the packet of the dyes.
- (e) Boil the water and add the mixture of dyes.
- (f) Dip the cloth in the water and boil for about 30 minutes
- (g) Remove the cloth and dry it in a cool place, avoid drying the cloth under sunshine.
- (h) When the cloth dry tie it further in the areas you want to retain the dye and dip it in another dye.
- (i) Dry the cloth again and go through the same process for the third colour
- (j) Finally, when the cloth is totally dry, untie it carefully and rinse it in water to get rif of excess dye.
- (k) Dry the cloth, iron it and then your cloth will be considered ready.

Take Note:

Always begin with light colours such as yellow and orange if you are going to use more than one colour in your design. Follow the right colour combinations for brilliant designs.

BATIK

The word batik originates from the Javanese "tik" and means to dot. Batik is both an art and a craft, which is becoming more popular and well known in the west as a wonderfully creative medium. The art of decorating cloth in this way, using wax and dye, has been practiced for centuries.

Batik is a "wax resist" process for making designs or patterns on fabric.

Hot wax is applied to portions of the fabric and penetrates the cloth. After the wax dries, dye is applied to the fabric. Wax prevents (resists) the dye from spreading to those areas of the fabric that have been waxed.

Method

To make a batik article, selected areas of the cloth are blocked out by brushing or drawing hot wax over them and the cloth is then dyed.

The parts covered in wax resist the dye and remain the original colour. The process of waxing and dyeing can be repeated to create more elaborate and colourful designs. After the final dyeing the wax is removed and the cloth is ready for wearing or showing.

Materials and tools

The materials needed for batik include some or all the following:

- (a) Cloth
- (b) Basin, water and soap
- (c) Brushes (in different sizes)
- (d) Tjanting tool
- (e) Wax blocks
- (f) Sauce pan
- (g) Heat source
- (h) Dyes (such as dylons)
- (i) A flat surface as a work area
- (j) Papers such as old news papers
- (k) Flat iron or iron box
- (l) Pencil, rubber and papers for drawing

TECHNIQUE

Remember the importance of making sketches in all forms of art. Hence always begin with a sketch or sketch representing the composition for your batik article.

- (a) Lay your cloth on a flat surface.
- (b) Transfer your sketch on the cloth by use of a pencil.
- (c) Melt wax in a container using the heat source.
- (d) Using a brush or tjanting tool apply wax to all lines you would like to maintain white.
- (e) Using a big brush, apply a light colour to the entire cloth.

- (f) Spread out the cloth to dry. Do not expose the cloth to direct sunshine to avoid the wax from melting during the drying process.
- (g) When the cloth is dry, apply more wax to places where you would like to retain the second colour .
- (h) Follow step (e) and (f) for the the third colure, remember to follow the right clour combination as the case for tie and dye.
- (i) When you are done with the design you want, apply wax to the whole cloth and then crackle the article when the wax cools . crackling is when you create cracks in the wax on the cloth and paint the cloth with a dark colour.
- (j) Remove the wax from the cloth by squeezing and cresting the cloth and then follow the next step to get rid of the excess wax.
- (k) Lay several papers on a flat surface and put the cloth on top. Then cover the cloth with other papers and iron it, keep changing the papers until all the wax is removed.

WEAVING

Weaving is the art of interlacing yarn (thread) to make a piece of fabric called a web. In this case, the lengthwise yarns are known as Warp Threads and the crosswise yarns are called Weft Threads. The warp is strung under tension. Yarn used for weaving may be of a number of fibers such as wool, cotton, silk, metallic, plastic, synthetic threads.

Frame or ground loom are usually used for weaving and are either horizontal or vertical.

Weaving can be done by hand or by machines, machines used for weaving are called Looms

Eg. A spring loom, electrical looms and weaving frame.

METHODS

There are many types of weaves you can be familiar with. But at this level we are going to focus on the plain weave, satin weave, and the jacquard weave.

(a) Plain weave. This is the simplest of all weaves, each weft yarn goes alternately over and under one warp yarn. Each warp yarn goes alternately over and under each weft yarn.

- (b) Basket weave. A basket weave is the amplification in height and width of a plain weave. Two or more yarns have to be lifted or lowered over and under two or more picks for each plain weave point.
- (c) Twill weaves. Twill weave is characterized by diagonal ridges formed by the yarns which are exposed on the surface.

 This may vary in angle from a low slope. To a very steep slope. Twill weaves are more closely woven, heavier and stronger than weaves of comparable fiber and yarn size.
- (d) Satin weave. In satin weave, one warp yarn is folded over four or more weft yarns. Then tied down with one thread resulting in a smooth face.
- (e) **Jacquard weave.** The jacquard weave combines aspects of the plain, twill, and satin weaves. Many decorative fabrics are made by the jacquard technique.

Materials

- (a) A loom or weaving frame.
- (b) Strip of paper (these can be used by learners as a substitute for yarn for for purposes of practice)
- (c) Yarn such as threads sold in shops, raffia, sisal etc
- (d) Nails
- (e) pair

familiar with the elements of art because in order to observe and utilize them, one has to utilize the human sense of sight to a great extent.