

INTRODUCTION TO STUDIO TECHNOLOGY PGISLI

STUDIO TECHNOLOGY:

The term studio technology comes from two words ie;

Studio:

Is a workplace for an artist, in schools it is referred to as an art room.

Technology:

The scientific application of knowledge, techniques and skills to execute materials while producing artwork.

Therefore Studio Technology is the preparation and experimentation of tools and materials for an artwork.

Tools:

Are objects/implements made to serve a particular purpose, such objects after working hardly remains part of the work.

Materials:

These are substances from which an artwork is produced.

Examples of Tools and Materials that can be found in a studio:

Tools:

- | | | |
|---------------------|---------------|--------------|
| - pencil. | - scissor. | - chisel. |
| - Razor blade. | - Awl | - Mallet. |
| - Coloured pencils. | - Needle. | - Rasp. |
| - Rubber. | - Cutter. | - Flat iron. |
| - pens. | - Looms. | - e.t.c. |
| - painting brushes. | - Gloves. | |
| - Buckets. | - Eye goggles | |
| - Knives. | - Axe | |

Materials:

- Fabric / cloth.
- Papers.
- Sisal
- Raffia.
- Banana fibres.
- Clay.
- Ink.
- Paints
- Leather.
- Stones.
- Wood.
- plastics.
- Water.
- Dyes.
- Glue.
- Grass.
- Sand.
- Cement.
- Metal
- etc.

Qualities of a good studio:

- A good studio should be lockable every after use.
- A good studio should have enough windows to let fresh air in and out. (ventilation)
- It should have enough light.
- Good studios must be free from cob webs.
- A good studio must be mopped / cleaned every after use.
- It must be well furnished.
- A good studio should have enough space for display.
- Studios always have rules and regulations followed.

Other questions that can arise in line with studio.

Qn 1. Why is it important for every school to have a studio / Art room?

Qn 2. Give some of the disciplines followed while working in a studio.

Qn 3. How can you take care of a studio.

Importance of Tools and Materials in Art:

- Tools and Materials are medium of expression.
- Help learners to develop practical skills.
- They help in the development of sense of touch through practice.
- Help in development of learners creativity.

ART AND CRAFT:

- Art is the study of creative skills.
- Art is the act of expressing ones feelings or ideas to the public.
- The skill or technique that is used to express, create 2D and 3 dimensional articles.
- Art is the visual, performing and literal means of communication in the society.

Type's | Categories | Forms of art:

- Visual | line art: This is perceived and appreciated by the sense of eyes / sight.
- performing art: This is the art of acting using the body parts or face to convey the message. e.g Music, Dance and Drama.
- Literal art: This is the art of reading and writing.

Different disciplines | fields in art and Design.

- | | |
|--------------|-----------------------|
| - Drawing. | - Tie and dye. |
| - painting | - Batik. |
| - Sculpture. | - Mosaic and collage. |
| - Weaving. | - puppetry |
| - Graphics | - etc. |

Reasons for studying art:

- For communication purposes e.g. performing & visual art
- preservation of goods, value and culture.
- Beautification of environment.
- Relaxation of minds.
- Improvement of skills and feelings.
- Creation of new designs.
- Source of employment.
- Can be used for political change.
- It can be used to raise awareness for a large variety of causes, etc.

CRAFT:

An object that has been skillfully produced by hand, especially in a traditional way.

Craftsmanship: The skills which an artist uses with tools and materials to execute a task.

Types of crafts with examples:

- **Fashion Crafts:** These are crafts meant to adorn/beautify our bodies e.g. Earrings, Necklaces, Bangles, Anklets etc.
- **Function Crafts:** They are crafts made for use in our daily life e.g. Pots, mats, Baskets, hats, sandals etc.
- **Decorative Crafts:** These are made for purely aesthetic reasons / for decoration purposes. e.g. Sculptures, Wall hangings, Batiks, Collages, Paintings etc. [4]

- Textile Crafts:

These crafts involves the treatment of fabrics. e.g Batik, Tie and dye, Fabric printing, Embroidery, Applique etc.

Functions / Uses of Crafts in the society today.

- ⇒ Crafts such as baskets are used during traditional ceremony e.g Kwanjula & Kulingira.
- ⇒ Craft making is a form of employment.
- ⇒ Domestically they serve various purposes such as cooking, storage etc.
- ⇒ They are sold to earn income.
- ⇒ Crafts also furnish our homes e.g flower vases, pots, chairs, wall hangings etc.
- ⇒ Some crafts serve as souvenirs for tourist.
- ⇒ They also show ones ideas, feelings and creativity.
- ⇒ Crafts also occupy our leisure which would rather be wasted and turned into something useful. etc.

Craft production process:

- Decide on the type of craft that you want to make.
- Develop the idea / theme by researching.
- Further develop the idea by sketching to the final stage.
- Get the necessary tools and materials and should be enough for the intended craft.

- Following the elements and principles, execute the work.
- Finish the craft making it ready for this purpose.

SKETCH:

- A quick free hand drawing that is not considered as finished work.
- A hand drawing often used in the making of a more refined work.
- A quick free hand drawing that lacks details. etc.

SKETCHING:

The process of drawing capturing essential form, volume, light and colour to be used in the making of a more refined artwork / craft.

Importance of sketching:-

- Saves time.
- Helps communicate with client.
- Creative mobility.
- Shows originality.
- Recording Ideas.
- Sketching allows adjustments and evaluation (practicability).
- Concept development.

ELEMENTS OF DESIGN:

These are building blocks / tools / ingredients of visual arts which helps one to create an artwork.

ORT

They are basic things / properties needed for creating an artwork.

On the other hand;

A design refers to the art of making and arranging patterns to make decorative artwork.

Importance of elements of design:

Elements act as building blocks, so without them an artwork cannot be created.

Elements of design also determine the success or failure of any given artwork.

They form a basic visual language that is technical used by artists world wide.

Elements also provide way for other people to react towards any artwork.

They include:

- Space
- Lines
- Sp
- shape
- Form
- Colour
- Tone/Value
- Texture
- Structure



! SPACE:

- This is the area within and around any object.
- The area where one expresses him her self.

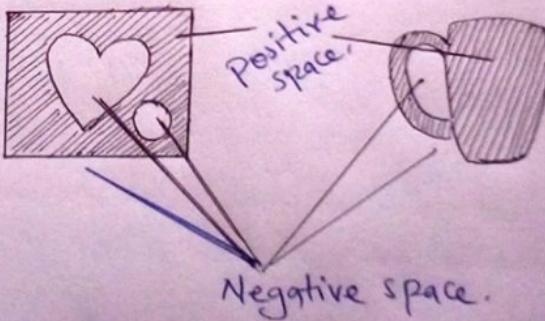
Qn: Give and illustrate the two types of space?

Positive space:

- This is the shaded or area that is covered by the artwork (subject matter).
- Is the used space.

Negative space:

- This is the unshaded or area that is within or around an artwork.
- This is the unused space.



Qn Give the importance of space to an artist?

L LINE:

- Is a moving point-
- Is a contour made by two planes meeting.
- Any mark dragged in a desired direction.
- Is a mark made by an object when the point of contact is made to move on a surface.

Types of lines:

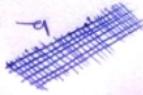
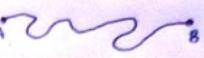
- Dotted lines
- Curved lines
- Spiral lines
- Zig Zag lines
- Coiled lines
- Slanting lines
- Horizontal lines
- Vertical lines
- Broken / Dashed lines - - - - -
- Imaginary / implied lines
- e.t.c.



N.B All the above can either be thick or thin lines

Qn: Give and illustrate the importance of lines to an artist.

- Lines are used to enclose shape
- They can show the effect of the dark and light in a drawing

- Lines create textures on a given surface. 
- They can create mood / character 
- Lines also show movement and direction. 
- Lines can suggest weight 
- They can be used to create patterns 
- Lines can create depth. 
- Lines also define forms of objects 

Qn: Explain how an artist could use lines and dots in a composition.

- Ex - An artist can use dark and lighter lines to show the effect of light on objects.
 - An artist can repeat lines to create patterns as designs in a composition etc.
 -
 -
 -

3) SHAPE:

- This is a flat enclosed line.
- Is the outside appearance of an object measured only by height and length.

Types of shapes:

a) Geometric / Mechanical / Artificial / Regular shapes.

These are shapes constructed with the aid of geometric instruments or tools e.g. Compass, Ruler, protractor etc.

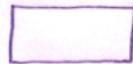


Examples of regular shapes:

- Squares



- Rectangles



- Triangles



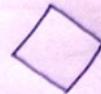
- Circles



- Oval



- Diamond



etc.

b) Organic / Natural / Irregular shapes,

These are free formed shapes derived from natural objects. They are God made shapes.

Examples:

- Stones



- Fish



- Leaves



- Flowers



- Humans



etc.

Uses of shapes:

- They represent objects.
- Shapes can suggest movement.
- Symbolize different ideas.
- They can create illusion of depth and space.

4) FORM:

- This is the roundness of an object measured by length, width and height.
- This is a 3 dimensional (3D) object.

Qn: Mention and illustrate any three examples of geometrical and organic forms.

a) Geometrical forms.

- Cube



- Cuboid



- Pyramid



- Cone



- Cylinder

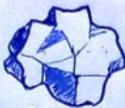


- Sphere



b) Organic forms.

- Stones



- Humans



- Flowers



- Fish



etc.

Qn Explain the difference between Shape and Form.

Shape is two dimensional measured by height and length where as on the other hand Form is three dimensional measured by ~~height~~ height, length and width.

Shapes



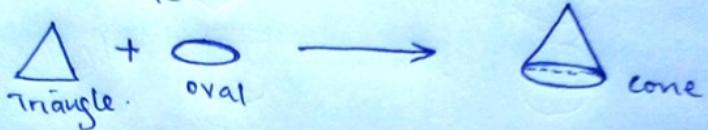
Forms



etc.

Qn: What is the relationship between shape and form?

The relationship between shape and form is that from a combination of shapes, we get form. For example a combination of triangle and oval, we get a cone



5) TONE / VALUE:

Tone is the lightness or darkness of a surface and

Value is the degree of lightness or darkness of a surface. These are achieved by shading and tinting.

Shading: Refers to the process of darkening a surface with a particular medium.

Qn: Illustrate any four types / methods of shading techniques.

a) Blending: This is achieved by rubbing pencil strokes close to one another while varying pressure.



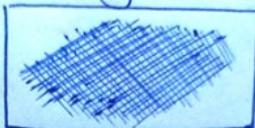
b) Hatching:

This is where closely related lines are drawn in one direction.



c) Cross Hatching:

This relates to hatching but with lines moving in two different directions



d) Stippling:

In this method, dots are used for toning.



e) Scribbling:

This is achieved by moving a drawing tool in circular motion / direction to achieve a tangle of balls that shows tones.



6) COLOUR-

- This is the appearance of an object created by the quality of light it reflects to the viewer's eyes.
- This is a form of light energy that has wavelength.
- The sensation caused in the viewer's eyes as he/she looks at an object.
- The property that is only seen by the sense of sight.
- Is what our eyes see after light bounces back from the surface of an object.
- e.t.c.

Types of Colours:

a) Primary Colours:

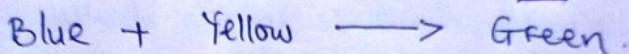
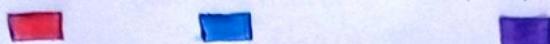
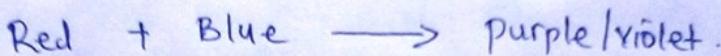
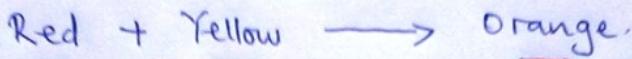
- These are mother's colours of all colours.
- They are colours which cannot be got by mixing other colours.
- These are natural colours that are mixed in their right proportion to get other colours.

They include;

- Red → 
- Yellow → 
- and • Blue → 

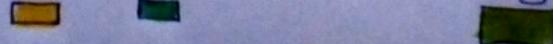
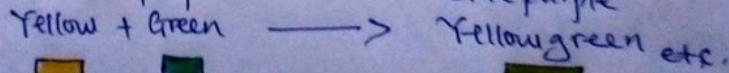
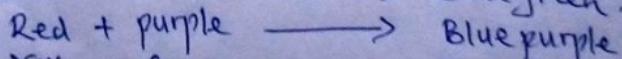
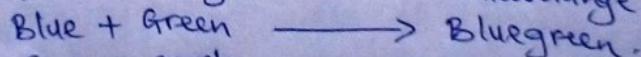
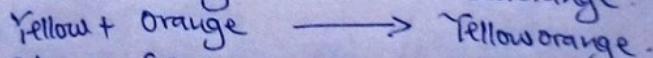
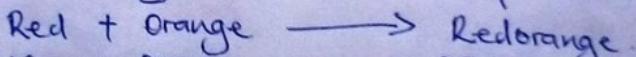
b) Secondary Colours:

These are obtained after mixing two primary colours in equal amount. Example;



c) Tertiary Colours / Intermediate Colours:

These are colours got after mixing one primary and one secondary colours. Example:



Properties of Colours:

a) Hue: - This is a name of a colour.

- A property that makes it different from other colours e.g. Red, purple, yellow etc. are different hues.

b) Intensity / Saturation:

This is the brightness or dullness of a colour. E.g Yellow and Blue.

c) Value:

This is the lightness or darkness of a colour.

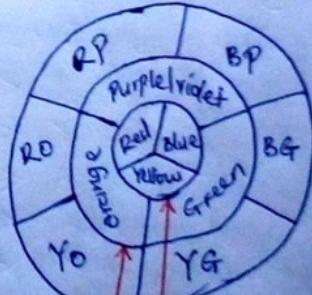
Colour wheel:

- This is a practical guide for colour mixing.
- A chart of colours from which an artist can make a choice.
- A circle/ chart showing primary, secondary and tertiary colours.

Illustration:



[DR]



Key

P - primary Colours.

S - secondary Colours.

T - Tertiary Colours.

Yo - Yellow orange.

RP - Red purple etc.

Qn: Define the following terms as used in Colour.

i) Complementary Colours:

- These are two opposite Colours on a Colour wheel. e.g Blue and orange, Red and green etc.

ii) Colour scheme:

- Is a plan for organising and arranging Colours on a Colour wheel.

iii) Analogous / Adjacent Colours:

- These are two neighbouring Colours on a Colour wheel. e.g

Red and Redorange, Blue and Bluegreen etc.

iv) Monochromatic Colours:

- These are tints and shades of any one colour.

- Colours obtained from a single colour. e.g Monochromatic red, Monochromatic blue

Classification / Categories of Colours:

a) Warm / Hot Colours:

- These are associated with heat Examples Red, Yellow, orange etc.

b) Cool / dull Colours:

- They are associated with Calmness and tends to move away from the viewer. Examples, Blue, Green, .

Qn: Define the terms below;

i) Neutral Colours:

This is a tint and a shade or white and black.

ii) Shade:

The dark value of a colour got by adding black to any colour.

iii) Shading:

The process of darkening a colour done by adding black.

iv) Tint:

The lighter value of a colour got by adding white to any colour.

v) Tinting:

The process of lightening a colour done by adding white.

Uses of Colours:

- They express ideas and feelings.
- describe form.
- Create illusion of depth.
- Can give emphasis.
- Suggest movement.
- Can change meanings socially and culturally.
- Used to arouse emotions, etc.

importance of Value:

- Illusion of depth.
- Suggest movement.
- Modeling on a surface.

7) TEXTURE:

- This refers to the surface quality of any object.

- This is the smoothness or roughness of any surface.

Types of Textures:

- Actual / Tactile textures:

These are textures that looks the way they look and feels even when touched with our hands.

- Visual textures:

This bases on memory of how things fell. It is seen and interpreted as smooth or rough with a sense of sight.

- Natural / Stimulated textures:

This related to the natural appearance of object being presented.

- Abstract textures:

This presents textures on an article but may not relate to the natural appearance of object represented.

- Artificial textures:

These are designed and created by humans with specific tools for beauty.

- Glyptic textures:

These appears on object in relation to the material being used.

Texture can be created by additive or subtractive methods.

8) STRUCTURE:

This is the general appearance of the object according to its inner mass. It is achieved by combining forms.



- Robotic structure of a human.

MODEL QUESTIONS:

Qn: What do you understand by elements of design?

b) What is the importance of elements of design in art?

Qn: Define Colour as an element of design

b) Distinguish between hue and value.

c) How can you use colour and value in printing.

Qn: Differentiate between two dimensional (2D) and three dimensional (3D) forms.

Qn: What is tactile texture?

b) What is the importance of texture in crafts.

Qn: With the aid of illustrations, explain the difference and relationship between shape and form.

Qn: Explain the relationship between primary, secondary and tertiary colours.

Qn: What is the difference between primary colours and tertiary colours.

Qn: List the elements of design.

Qn: Explain the elements of art.

PRINCIPLES OF DESIGN:

These are guidelines that artists use to arrange and organise the elements of design.

They include:

- Balance.
- Unity.
- Variety.
- Emphasis
- Harmony.
- Movement.
- Rhythm.
- Proportion and scale
- Perspective.
- Pattern / Repetition

1) BALANCE:

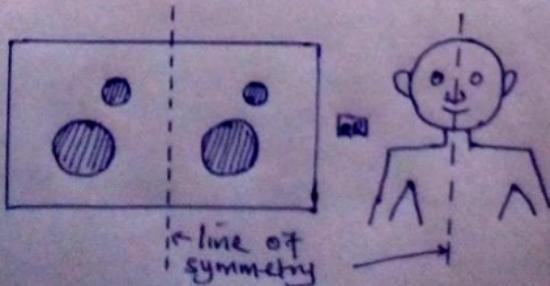
- This is where an artist arranges elements in an artwork such that one side does not look heavier than the other.

- This is the state of equilibrium between the designed elements.

Types of balance:

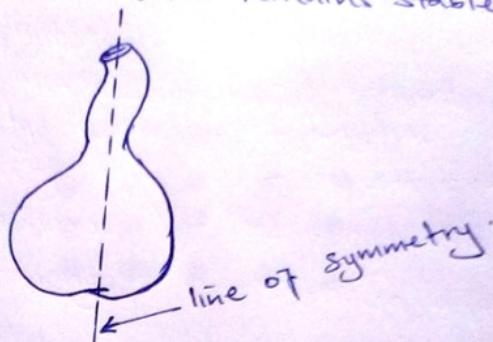
a) Symmetrical balance:

The equal distribution of elements in an artwork if an imaginary line is drawn in the centre.



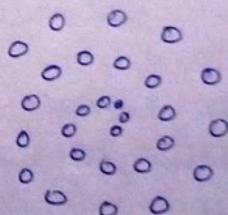
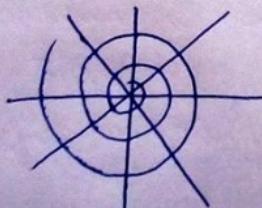
b) Asymmetrical balance:

This is the unequal distribution of elements in an artwork if a line of symmetry is drawn in the centre but the work remains stable.



c) Radial balance:

This is a type of balance where elements are distributed from the centre, thus appear to be moving in circular motion. Eg Basket.



Qn: Show how you can use balance in making of crafts.

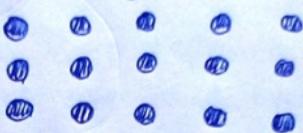
Eg - Using bigger shapes on one side are balanced by bigger shapes on opposite side to create symmetrical balance or by many other smaller shapes for asymmetrical balance.
- etc.

2) RHYTHM :

Is a movement in which elements are repeated regularly.
Rhythm can be achieved in three ways;

a) Repetition:

This is where elements are repeated at regular intervals.



b) Alternation:

The elements are repeated but this time changes position.



Alternating line.

c) Progression:

Is where elements change / vary in size every time they are repeated.



Qn: Briefly explain how rhythm and movement can be achieved in any artwork.

3) MOVEMENT:

This is what our eyes follows in a composition.



Eyes move along the line as they trek from point A - B.

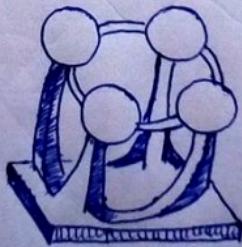
4) PATTERN

This is a repeated element, single unit or object over and over the composition.



5) UNITY:

- This is the togetherness between designed elements and principles of design that agree to work as a whole.

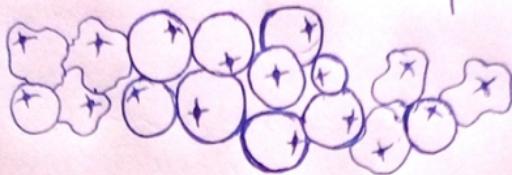


or

- This is the wholesomeness seen in a composition. E.g. scattered objects will have no connection and therefore no unity, however unity will be achieved if they are brought as one.

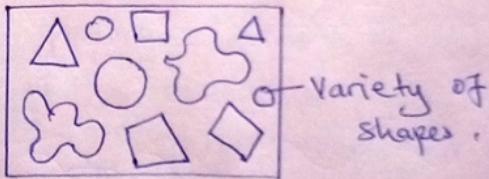
6) HARMONY:

This refers to the use of similar elements such as lines, shapes, textures, colours etc. that brings togetherness and visual satisfaction in a composition.



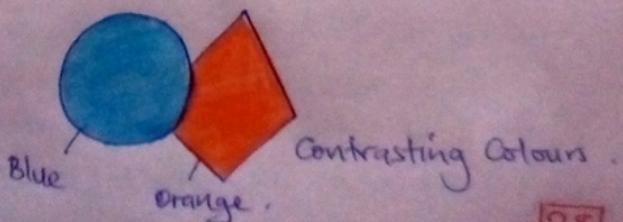
7) VARIETY:

This refers to the use of different properties of elements such as shape of different size, colour, lines etc.



8) CONTRAST:

This is the difference between designed elements such as colour, lines, textures, values, size etc.

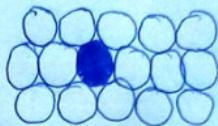


9) EMPHASIS / DOMINANCE:

This is stressing out particular areas in a composition more than others.

This can be achieved by;

- Using contrasting colours and shapes.
- Exaggerating forms and shapes.
- Also distorting some parts while keeping others normal.



10) PROPORTION AND SCALE:

Proportion refers to the relationship of one part of the artwork to another in terms of size, location/placement and amount. Scale on the other hand is the comparison made basing on the standard.

11) PERSPECTIVE:

- This is what creates depth in an artwork.
- The technique used to create an illusion of space in two dimensional arts.

Types of perspective:

(i) Linear perspective.

(ii) Aerial / Atmospheric perspective.

i) Linear perspective:

This works on a principle that near objects appear bigger and taller then becomes smaller and shorter as they move away from the viewer's eyes.

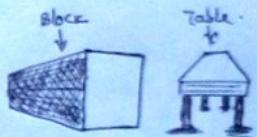
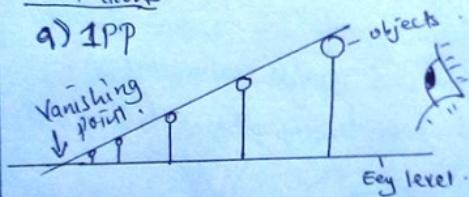
The nearer the objects the bigger and becomes smaller as they recede from the viewer's eyes.

Types of linear perspective:

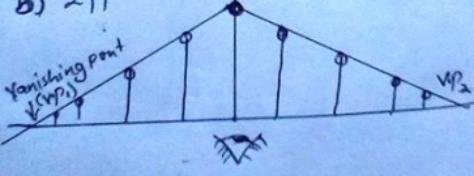
- One-point perspective (Has 1 vanishing point)
- Two-point perspective (Has 2 vanishing points)
- Three point perspective (Has 3 vanishing points)

Illustrations

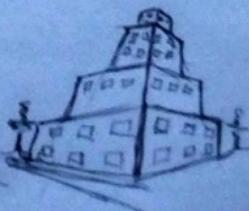
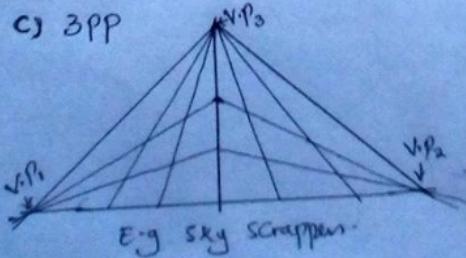
a) 1PP



b) 2PP



c) 3PP

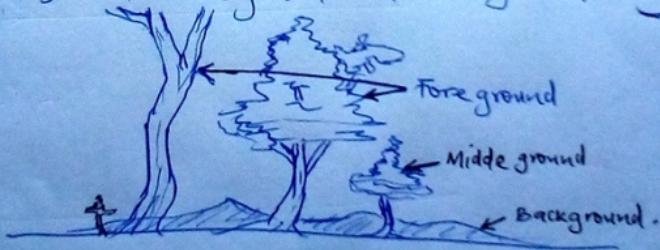


ii) Aerial / Atmospheric Perspective:

This works on a principle that near objects are more defined, clear and brighter and tends to fade as they go further from the viewer's eyes. This is caused by the atmospheric particles that affect their appearance.

How to use perspective in Crafts:

- Overlapping objects.
- Making near objects bigger than those which are far.
- Using cool colours in background and warm colours in foreground.
- Drawing objects basing on the knowledge of foreground, middle ground and background. E.g



Importance of principles of design:

- principles of design help to organise the elements of design during the process of making an artwork.
- They help the artist in the planning of his/her artwork.
- principles also add to the technical language used in art and design.
- They helps to establish a way of appreciating a given artwork.

QUESTIONS POSSIBLE:-

Qn: What are the principles of design?
⇒ List the principles of design.

Qn: Define the term balance as a principle of design
⇒ With illustration, explain asymmetrical balance.
⇒ List three types of balance.

Qn: What is repetition?
⇒ How can you use repetition in craft making.

Qn: Mention and illustrate the three ways of achieving rhythm.

Qn: List down the two types of perspective.
⇒ Explain the meaning of atmospheric perspective.

Qn: Define the term emphasis?
⇒ Show how emphasis can be achieved.

Qn: What are the categories of lines? Describe them.

Qn: Of what importance are the principles of design?

