

PENANG SANGAM HIGH SCHOOL
P.O.BOX 44 RAKIRAKI
HOME ECONOMICS
YEAR 11 (week 14)

Strand	Clothing and Textiles
Sub strand	Fiber decoration (cont from week 13)
Content learning outcome	1. Define structural and surface design. b. Identify various methods of basic and traditional fabric decoration c. Classify and discuss methods of applying color on fabrics.

Dyes and Pigments

- Dyes and Pigments are substances that impart colour to a material.
- The major difference between dyes and pigments is solubility.
- Dyes are usually soluble, or can be made to be soluble, in water.
- Pigments are generally not soluble in water, oil, or other common solvents.
- Once a dye is dissolved in water, the material to be dyed can be immersed in the dye solution.
- As the material soaks up the dye and dries, it develops a colour.
- To apply pigments to a material, they have to be first ground into a fine powder and thoroughly mixed with some liquid, called the dispersing agent or vehicle

Methods of applying color to fabrics

Colour is applied to fabric by different methods of dyeing for different types of fiber and at different stages of the textile production process.

These methods include Direct dyeing; Fiber Dyeing, Yarn Dyeing and Fabric Dyeing.

<p>1. Fiber Dyeing: Fiber Dyeing is the method of dyeing fibers before blending with other colours to give fancy yarns or fabrics. Note: This is used for special purposes only.</p> <p><i>Fiber dyeing: In fiber dyeing, the dyeing takes place at the fiber stage before they are spun into yarn.</i></p>	<p>2. Yarn Dyeing: Yarn Dyeing is the method of dyeing yarns in forms of hanks or packages dyeing. This will give Scottish's style fabrics, carpet with many colours and styles. Note: This is used in hand loom weaving in the Northern and North-eastern parts of Thailand.</p> <p><i>Yarn dyeing is nothing more than adding color to the yarn that has been used to create a garment or item, or adding color to yarn that will soon be used in knitting or crocheting projects.</i></p>	<p>3. Fabric Dyeing: Fabric Dyeing is the method after weaving, knitting, or non-woven to make fabrics. This is very popular method of dyeing as the dyed fabrics will be processed further to garment industries very easily. Dyeing forms of the fabric dyeing can be used in 2 ways: ☐ Open width form using the fabrics to spread without any creases and dye them. ☐ Rope form using the fabrics with the form like a rope (many creases and look like —a rope) <i>Dyeing is the application of dyes or pigments on textile materials such as</i></p>
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Mordant

- The mordant is a chemical binding agent that adheres well to both the fibers and the dye.
- A mordant is a substance used to set dyes on fabrics by forming a coordination complex with the dye which then attaches to the fabric.
- A mordant is always a polyvalent metal ion.
- The resulting coordination complex of dye and ion is colloidal and can be either acidic or alkaline.

Importance of Mordant Dyes

- ✓ This is done for getting the binding action of the chrome.
- ✓ They are mostly used for wool which gets a good colour fastness after treatment with mordant dyes. They are also used for cotton,
- ✓ linen, silk, rayon and nylon but are less effective for them.
- ✓ Mordant dyes require less time
- ✓ Mordant has high production
- ✓ Has easier shade matching and dyeing is carried in one stage.

Activity

1. Describe the three methods of applying colour to fabric
2. Define the term Mordant.
3. Discuss two importance of Mordant in fabrics.