



INTERMEDIATE APPARE PRODUCTION

NTQF LEVEL II

Learning guide #19

Unit of Competence: Develop Pattern from a Block
Using Basic Pattern making Principles

Module Title: Developing Pattern from a Block
Using Basic Pattern making Principles

LG Code: IND IAP2 M06 LO1-LG 19

TTLM CODE: IND IAP2TTLM06 09 2019

LO1: prepares workstation



Instruction Sheet

Learning Guide 19

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics –

- OHS practices
- Pattern making tools and equipments
- Material Selection pattern planning
- Set up workstation and set

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to

- Set up Workstation and seating according to OHS practices and specifications for work.
- set up *Patternmaking tools and equipment* ready for use
- identify and follow *OHS practices* and workplace practices for dealing with hazards



Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described in number 1 to 7.
3. Read the information written in the “Information Sheets 1” “Information Sheets 2” “Information Sheets 3” “Information Sheets 4”. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
4. Accomplish the “Self-check 1” “Self-check 2” “Self-check 3” “Self-check 4”
5. Ask from your teacher the key to correction (key answers) or you can request your teacher to correct your work. (You are to get the key answer only after you finished answering the “Self-check 1” “Self-check 2” “Self-check 3” “Self-check 4”).
6. If you earned a satisfactory evaluation you can proceed to Learning Guide #20
However, if your rating is unsatisfactory, see your teacher for further instructions or go back to Learning Activity
7. don the “lap test” Submit your accomplished Self-check. This will form part of your training portfolio.

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Information Sheet-1

Occupational safety and health (OSH)

1.1 Occupational health and safety (OHS)

Introduction

Occupation: “Occupation” is the kind of job a person performed at his or her place of work. These jobs are described in many ways. Some are patternmaking, sewing, finishing, etc.

A pattern is a **blueprint** for constructing a garment. It is an outline, a template to create shape. A pattern creates all of the components of a garment needed to form a complete unit of clothing. A pattern, regardless of size or shape, includes important markings necessary to sew the pattern pieces together so that they fit precisely. These markings include: **darts, seam allowances notches and punch holes for trims, pocket, button, and buttonhole placement.**

In simple words “It is a **diagrammatic representation of the garment used for reproducing garment to fit a specific figure.**”

Developing a pattern is not an easy task. So, if you want to make your own garments, the first essential is to make up a MASTER PATTERN to your key measurements. Use this as a basis from which to work out any desired variations.

You could, for instance, make master patterns for a skirt, blouse, dress and trousers, or for such features as a sleeve and collar.

These basis patterns could then be adapted to design a wide range of garments.

1.1.1 Standard operating safety procedures

- Protection equipment: including personal protective equipment (PPE) for ears, eyes, face.
- Protective clothing,
- Protective shields and barriers shall be provided.



- Before doing work that requires the use of PPE, the trainee must be trained.
- ❖ When PPE is necessary:
 - What type PPE is necessary
 - How to properly done, doff, adjust and wear PPE
 - The limitation of the PPE &
 - The proper care, maintenance, useful life and disposal of the PPE
- ❖ Way to learn and understand safety
 - 1) *Accidental experience*: experiences which were caused by accidents.
 - 2) *Safety education*: a method which makes us aware of dangerous situations to avoid accident or injury.

1.1.2 **Personal safety protective equipment**

Personal safety protections include:

- Eye and face protection
- Hearing protection
- Respiratory protection
- Wearing apparel

1.1.3 **Safe materials handling**

- Keep the materials in well manner
- Use the material as enough as required.

1.1.4 **Equipment/machine safety**

- Every morning the trainees wipe and clean the equipments.
- After work, they have to wipe, clean and cover the equipments.

1.1.5 **Personal responsibilities for safety**

- Observe all, before, safety precautions related to your work.
- Report unsafe conditions or any equipment or materials you think might be unsafe.



- Warn others about the hazards.
- Report any injury or ill
- Wear protective clothing
- Be safety consuls
- Always inspect equipment and associated attachments for damage before using.
- Safety precautions *concerning* people
 - During working, wear appropriate protective clothing properly.
 - Never remove safety device or safety covers from equipment
 - Be careful of high clothes. Never touch switches with wet hands.
 - When an accident occurs, it should be reported immediately to proper authority.
- Safety precautions *concerning* facilities
 - Facilities must be adequately illuminated, clean, neat and dry.
 - Keep the area organized so that there are no obstacles lying around the floor.
 - The equipment and floor should be free from dust and any chipping.
 - Work benches must be strong.

1.1.6 **Ergonomic arrangement of work place**

Ergonomic is a science which is used for arrange the work place.

Ergonomics on the hand:

- Combine all of the issues to improve workers efficiency and well being
- Maintain industrial production through the design of improved work places.

OHS & Ergonomics applications:



- To satisfy the needs of changing local people's attitudes.
- To change local work methods
- To change the traditional ways of doing things.

Therefore, OHS & Ergonomic applications are a major source of work place improvement.

1.1.7 Material Handling

Organization is the key to make quality and accurate patterns with a professional finish. This is especially important with your tools and equipment.

You do not need a lot of expensive equipment, but good tools, well organized and maintained, are very important.

As with any work shop, the secret of a good planning is to have everything you are likely to need within easy reach, with first priority for articles that are in constant use.

Have a WASTE BASKET handy, so that the floor is kept tidy and the work surface uncluttered with unwanted bits and pieces.

Working on the principle of "A PLACE FOR EVERYTHING, and EVERYTHING IN ITS PLACE", you can adapt these ideas to suit the equipment you already have or can easily obtain.

Exercise: Practice the 5'S "Japanese housekeeping system" in your pattern making area.

Note that: 5'S means:

1. Seiri –sort
2. Seiton -systemize
3. Seiso - sweep
4. Seiketsu - standardaize
5. Shitusuke – sustainable



1.1.8 Pattern making Tools and Equipments

The equipment you need for pattern making consists of:

- a. A tape measure,
- b. Pins,
- c. A tracing wheel,
- d. Medium-size scissors,
- e. A ruler at least 60 cm (24") long,
- f. An L-square or a set square,
- g. An awl or stiletto,
- h. Tissue paper



Self-Check -1	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. What is Ergonomics mean **(2 point)**
 - a. Keep the materials in well manner
 - b. Use the material as enough as required
 - c. **a science which is used for arrange the work place**
 - d. all

2. What is defining of **OHS? (2 point)**
 - a. **Occupation, health and safety**
 - b. Occupation, safety and health
 - c. Safety, Occupation and health

3. One of the following is not pattern making equipment **(2 point)**
 - a. A tape measure
 - b. Pins
 - c. A tracing wheel
 - d. Medium-size scissors
 - e. **Non**



Note: Satisfactory rating - 3 points

Unsatisfactory - below 3 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____

Date: _____

1. _____
2. _____
3. _____



Information Sheet-2

Setting up workstation and seating

1.2 Setting up workstation and seating

Workstation and seating should be set up according to OHS practices and specifications for work. **It includes:**

- standard operating safety procedures during developing patterns
- personal protective equipment ex. Wearing work wear
- safe materials handling ex. Use pin cushion for pins
- equipment or machine safety ex. Proper place for dummy
- Personal responsibilities for safety
- ergonomic arrangement of workplaces ex. Drawing table should be 45° inclined



Self-Check -2	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Workstation and seating should be set up according to OHS practices and specifications for work includes(5 points)

Note: Satisfactory rating – 2.5 points Unsatisfactory - below 2.52 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____

Date: _____



Information Sheet-3

Set up patternmaking tools and equipment

1.3 Set up patternmaking tools and equipment

Set up Patternmaking tools and equipment

The equipment you need for pattern making consists of:

- i. tape measure,
- j. Pins,
- k. A tracing wheel,
- l. Medium-size scissors,
- m. A ruler at least 60 cm (24") long,
- n. An L-square or a set square,
- o. An awl or stiletto,
- p. Tissue paper and
- q. Brown or white wrapping paper.

Pattern making tools

When fashion designers, patternmaking designers, or pattern makers, produce their draping design, or alter the patterns and garments, the professional pattern making tools are needed:

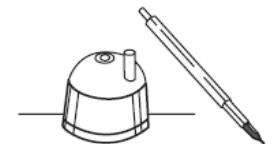
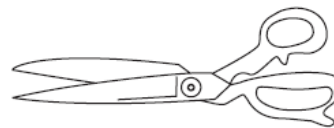
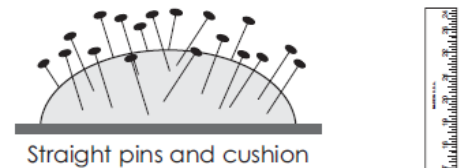


PATTERNMAKING TOOLS

To work efficiently, the patternmaker must have the proper tools and supplies. To communicate effectively in the workroom and to minimize errors due to misunderstanding, the patternmaker should know and understand terminology. This chapter introduces tools, supplies, and definitions of terms used in industry.

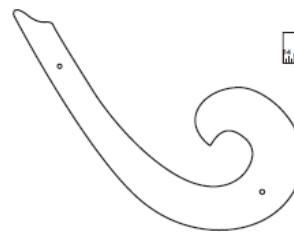
The professional patternmaker arrives on the job with all tools required for patternmaking. Each tool should be marked with an identity symbol and transported in a carrying case. Tools may be purchased from apparel supply houses, art stores, department stores, and yardage stores. Specialized tools, such as a rabbit punch used to punch pattern holes for hanger hooks, are generally supplied by the manufacturer.

1. *Straight pins:*
 - ___ Dressmaker silk #17 for draping and fittings.
2. *Straight pin holder:*
 - ___ Pincushion, or magnetic holder for wrist or table.
3. *Scissors:*
 - ___ Paper scissors.
 - ___ Fabric scissors.
4. *Pencils and pens:*
 - ___ Mechanical pencil and sharpener. (Use #4-H lead for pattern work.)
 - ___ Red and blue colored pencils to identify pattern changes. Black, green, red, and blue felt-tip pens for pattern information.

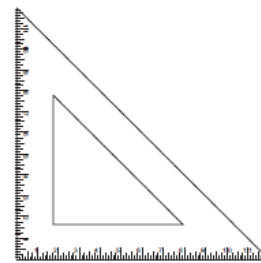


Mechanical pencil and sharpener

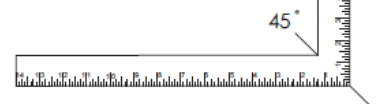
5. *Rulers:*
 - ___ Flex general rule— $1/2 \times 12$ -inch (very accurate).
 - ___ 36-inch ruler.
 - ___ 18×2 -inch plastic rule (flexible for measuring curves).
 - ___ Tailor's square— 24×14 -inch metal ruler with two arms forming a 90° angle that measures, rules, and squares simultaneously.
 - ___ Triangle with measurements to square lines.



French curve



Square/triangle



Vary form curve



Hip curve rule

6. *Curve rules:*
 - ___ French curve, Deitzgen #17 is one of several curves used for shaping armhole and neckline.
 - ___ Sleigh curve, shapes necklines, armholes and other curves, pockets, collars, and cuffs.
 - ___ Hip curve rule to shape hipline, hem, lapels.
 - ___ Vary form curve to blend and shape armhole necklines.



Sleigh curve



**Self-Check -3****Multiple choice**

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Which one of the following is pattern making tool? (3 points)
a) Tracing wheel b) set squire c) pencil d) hip curve e) French curve **f) all**
2. Which one of the following is not pattern making tools (3 points)
a) scissor b) ruler c) tape measure d) tracing wheel **e) fabric**
3. Which one of the following is use of French curve? (3 points)
a) Shaping arm hole b) shaping neck line c) shaping hip **d) both a&b**

Note: Satisfactory rating – 4 points

Unsatisfactory - below 4 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____

Date: _____



Information Sheet-4

workplace practices for dealing with hazards

1.4 workplace practices for dealing with hazards

Safe work practices are generally written methods outlining how to perform a task with minimum risk to people, equipment, materials, environment, and processes. Safe job procedures are a series of specific steps that guide a worker through a task from start to finish in a chronological order.

In order to control workplace hazards and eliminate or reduce the risk, you should take the following steps:

- identify the hazard by carrying out a workplace risk assessment
- determine how employees might be at risk
- evaluate the risks
- Record and review hazards at least annually, or earlier if something changes.

The most common workplace hazards include safety hazards like slip-and-falls or electrical hazards. But there are also ergonomic workplace hazards, environmental, chemical and others.



Self-Check -4

Choice the best

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Which one of the following is the most common workplace hazard?
(3point)
 - a. ergonomic workplace hazards
 - b. environmental
 - c. chemical and others
 - d. slip-and-falls or electrical hazards

2. Which of the following step is not used to control workplace hazards and eliminate or reduce the risk? **(3point)**
 - a) identify the hazard by carrying out a workplace risk assessment
 - b) determine how employees might be at risk
 - c) evaluate the risks
 - d) Record and review hazards at least annually, or earlier if something changes.
 - e) None of the above



Note: Satisfactory rating – 3 points

Unsatisfactory - below 3 and 4 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____

Date: _____



Operation Sheet 1

planning and preparing for work

OPERATION TITLE: planning and preparing for work

PURPOSE: Enable to plan and prepare for work before making pattern

EQUIPMENT, TOOLS AND MATERIALS: -

TOOLS: _pattern blocks, _scissors, ruler square rule, marker pens, whole punch, pin fashion triangle, French curve

CONDITIONS OR SITUATIONS FOR THE OPERATION: - given necessary tools & equipment's. You are required to perform the following within 30 minutes

PROCEDURE:-

Step1 -Set up work station

Step 2 -Select and lay out materials

Step 3-Set up &ready pattern making tools and equipment's

Step 4- Plan basic pattern according to quality standards work place practices

Step 5-Practice the 3'S "Japanese housekeeping system" in your pattern making area.

PRECAUTIONS:-

- Select appropriate work station, tools &equipment's

QUALITY CRITERIA:-

- Planning and preparing work station correctly.
- ergonomic arrangement of workplaces ex. Drawing table should be 45° inclined



LAP Test 1	Practical Demonstration
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Name: _____

Date: _____

Time started: _____

Time finished: _____

Instruction:

Select and arrange working area, equipment and

TASK 1: Set up work station

TASK 2: Plan basic pattern according to quality standards work place practices

TASK 3: Practice the 3'S "Japanese housekeeping system" in your pattern making area

TASK 4: Select and lay out materials

TASK 5: Set up & ready pattern making tools and equipment's



Reference

- 1) Complete Guide to Sewing; THE READER'S DIGEST ASSOCIATION LIMITED; 1987.
- 2) Helen Joseph-Armstrong Patternmaking for Fashion Design, 5th Edition 2009
- 3) Metric pattern making book
- 4) EOS Level II; UOC 5; Version 2011 G.C.
- 5) Untitled hand outs.