



# INTERMEDIATE APPAREL PRODUCTION

## NTQF LEVEL II

### Learning guide-42

**Unit of competence:** prepare embroidery design

**Module title:** preparing embroidery design

**LG CODE:** IND IAP2 MO11-LO1-LG-42

**TTLM CODE:** IND IAP2 MO11 TTLM 0909V1

**Lo1:** identify client design brief



## Instruction sheet

## Learning guide #-42

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

- Determining specifications of embroidery design
- Identifying available software programs
- Identifying garment considerations
- Identifying machine requirements

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** –

- Determine *Specifications* for embroidery design.
- Identify Available software programs
- Identify *Garment considerations*
- Identify *Machine requirements*



## Information sheet-1

## Determining specifications of embroidery design

### Learning instructions:

1. Read the specific objectives of this learning guide.
2. Follow the instructions described in number 3 to 8.
3. Read the information written in the “information sheets 1”. 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” **in page -8.**
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).
6. If you earned a satisfactory evaluation proceed to “information sheet 2”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to learning activity #1.
7. Submit your accomplished self-check. This will form part of your training portfolio.



## **Determining specifications of embroidery design Embroidery design formats**

That breaks down some of the different types of embroidery designs that are available. Now let's take a quick look at the embroidery design format. It is important to know what machine and model number you have in order to use the correct design format. Different embroidery machines require different embroidery design formats which are proprietary to that sewing machine company, and different models of machines may use a different design format. The sewing machine company will share what format works best for the model of machine you own. Be sure and write it down so you have that information handy when you download or purchase designs.

### **What is a Fashion Spec Sheet?**

A SPECIFICATION SHEET commonly referred to as "Spec Sheet," is produced to provide essential details to ensure the correct execution of your designs into professionally finished garments. It should be given to the factory whenever a sample needs to be made and when you issue a docket. This will enable the factory and the production staff to know exactly what is supposed to happen with the construction and trims for each style.

### **Why is a Fashion Spec Sheet Important?**

A Spec Sheet is also useful as a resource document for purchasing materials and trims, and in future years it could be referred to in order to revisit a vintage design.

The Fashion Spec Sheet also puts you in a position of financial security. If the factory chooses to ignore any of the information on the Sheet, and do their own thing, they will be at fault. In the event that this should occur, you will be in a stronger position to ask for your money back or to seek legal aid.



It includes detailed technical drawings, also known as flats, along with construction notes, finished garment measurements, fabric yields and material and trim details.

Cuttings of fabrics and trims should also be attached to the Sheet.

Some designers even choose to also include the measurement grades between sizes as well as the detailed size gradation for the garments.

### garment product Spec Sheet have

- **SKETCH:** Front and backline drawing with the measurement details for the garment. Drawn by hand or computer.
- **FABRIC DETAILS:** Swatches, Product code, Fiber content and supplier details.
- **Poms (Points of Measure)\*:** The various size measurements of the required item. The POM will be used to check that the measurements are correct on the finished garment.
- **PRINT INSTRUCTIONS:** Information regarding the type of print on the garment and its placement.
- **EMBROIDERY INSTRUCTIONS:** Information regarding the type of embroidery, its size and placement.
- **STITCH INSTRUCTIONS:** Details of stitch type, thread to be used, and stitch length.
- **GARMENT WASHING INSTRUCTIONS:** Details of wash finishes for items such as denim garments.
- **ACCESSORIES INSTRUCTIONS:** Trim details, fastenings required with product codes, fiber content and supplier details.
- **LABEL INSTRUCTIONS:** Placement details for brand logo labels and care labels.
- **COMMENTS SECTION:** Used by the factory to make a note of anything related to the construction of the garment.



## **Color**

Sometimes, you know exactly what color fabric you want, but you might not be able to find that color in a suitable fabric. Or sometimes, you might know exactly what fabric you want, but it only comes in colors you don't want to work with!

In any case, color is a consideration. For most of my embroidery, I'm pretty darned dull when it comes to color choices. I like white, off-white, oatmeal and other "natural" colors for linens, and with silks and the like, I tend to go with lighter colors.

Occasionally, though, I might choose a deep, dark, or vibrant background for a project, but I don't normally like stitching on very dark fabrics. Part of the reason for this is the whole blogging thing. It's more difficult to photograph projects on dark backgrounds, and when demonstrating techniques, it's much easier to see what's going on, on white backgrounds.

## **Dimensions**

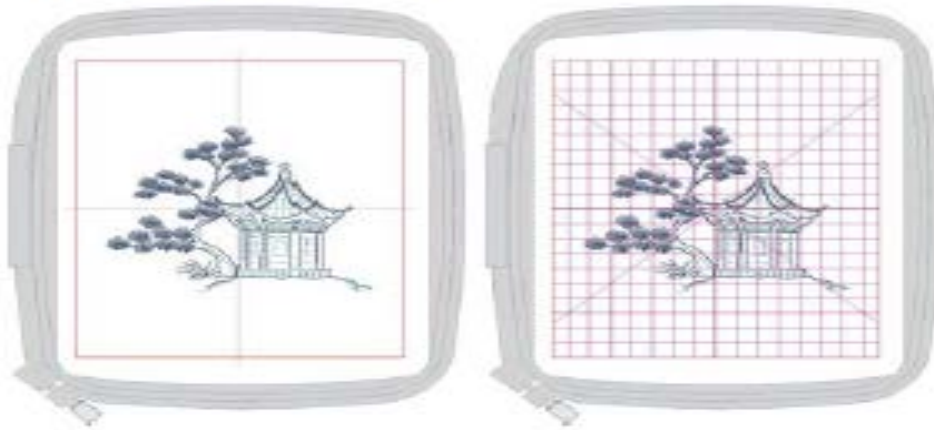
### **Hoops, grids & rulers**

Fabrics should be hooped before stitching out on the machine. embroidery software gives you a wide range of standard factory-supplied hoops to select from. Grid lines help you accurately align or size embroidery objects.

Whenever you create a new design, a single hoop representing the one you attach to your embroidery machine appears by default in the design window. As you position objects, the hoop position adjusts automatically so that it is always centered around objects in the window. See also selecting hoops.



- ▶ Click the **Show Hoop Template** icon to toggle hoop template display.



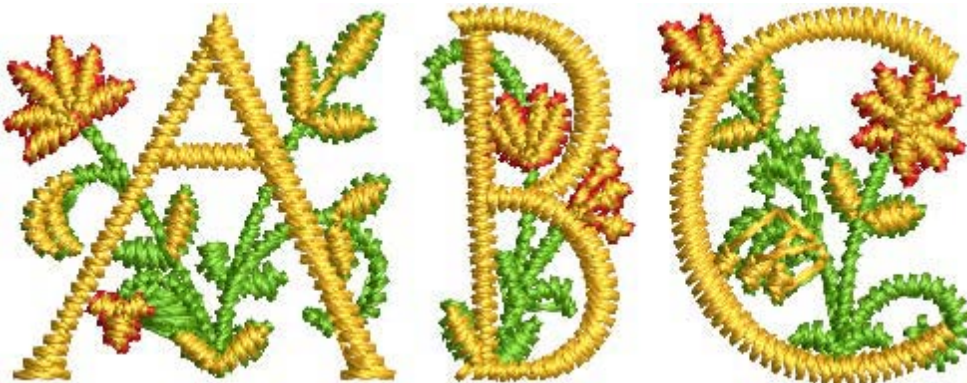
## Stitch type and size

1. **Stitch type:** three basic stitch types are available with lockstitch machines – run, satin and tatami (weave). Embroidery software provides many variants of these.

## Font

### Fancy fonts

Embroidery software includes a number of fancy fonts such as **creative cross** and **secretgarden-caps**. These fonts include multiple colors and miniature designs. See adding fancy lettering for details.



## Minimum and maximum sizes



For the best results when stitching, do not exceed the maximum or minimum recommended sizes. Note, however, that recommended heights refer to upper case letters. Most embroidery alphabets are digitized from an original truetype font (fill), some of which have lower-case letters – e.g. *A* and *c* – which are about 70% the height of a capital letter. As a result, these letters may be too small to embroider neatly at minimum sizes. You may need to increase the size of the lower-case characters to suit the embroidery.

### Patterns fill:

Pattern fill is a decorative fill stitch with which you can fill closed object objects. You can also create special or three dimensional effects.

<b>Self-check -1</b>	<b>Written test</b>
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**Directions:** answer all the questions listed below. Use the answer sheet provided in the next page.

1. What is specification sheet?
2. Why is a fashion spec sheet important?
3. What do you need to create a garment product spec sheet?

**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_





<b>Information sheet-2</b>	<b>Identifying available software programs</b>
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**Learning instructions:**

2. Read the specific objectives of this learning guide.
8. Follow the instructions described in number 10 to 12.
9. Read the information written in the “information sheets 2”. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
10. Accomplish the “self-check 1” **in page -12.**
11. 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 2).
12. If you earned a satisfactory evaluation proceed to “information sheet 2”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to learning activity #1.
13. Submit your accomplished self-check. This will form part of your training portfolio.



## Computer embroidery

- Embroidery is a craft by using a needle, thread or yarn is sewn on to a base material or fabric to create a pattern. This is done by computer operated machine; it involves the use of special threads available in many colors that help to produce various beautiful patterns. There are two types of computer embroidery machine as single head needle machine and multi head needle machine

### Types of embroidery software exist and how to pick the best one

If you have decided to get embroidery software but have no clue on what type, this list of embroidery software types might help you out. With so many types, picking the one that will meet your requirements and budget can turn into a challenge. Here are the main types.

- **Digitizers**

This type of software is designed to convert the image to embroidery file free ready for stitching. It digitizes (translates) the vector format into a stitch format ready for use.

- **Lettering**

The lettering type, also known as monogramming software is specially designed to create optimized stitching fonts. Some of them might combine lettering with different modules, while others focus on one thing at a time. I recommend that you choose a specialist.



- **Victories**

This type of software is designed to digitize (translate) a bitmap picture into a victories picture (a vector format). This means that the image goes through a linear transformation which makes it ready for digitizing. Last but not least is the editing software take a look.

- **Editors**

This type of software will give you access and control of the creative part of the design where you can begin fresh and develop all the digitizing, vectoring and the final stitches. So, before you purchase embroidery software, decide which type do you want and need.

## **Example of embroidery software**

1. Stitch era is an advanced embroidery design software:
2. Bernina embroidery software:
3. Brother else embroidery lettering monogramming software
4. Amazing designs applique it embroidery machine software.



<b>Self-check -1</b>	<b>Written test</b>
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**Directions:** answer all the questions listed below. Use the answer sheet provided in the next page.

1. What are the two types of computer add embroidery machines?
2. What are the best performance criteria of embroidery software?
3. List out the embroidery software's?

**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_



## Information sheet-3

## Identifying garment considerations

### Learning instructions:

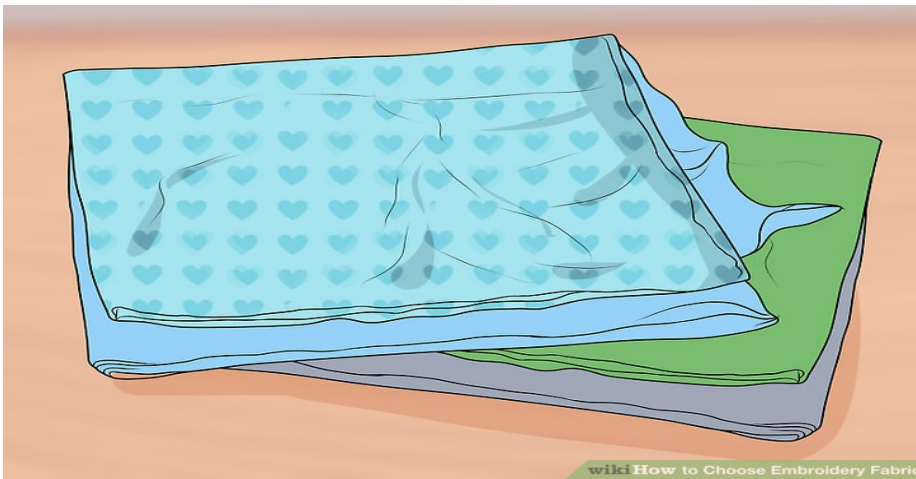
1. Read the specific objectives of this learning guide.
2. Follow the instructions described in number 13 to 21.
3. Read the information written in the “information sheets 3”. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
4. Accomplish the “self-check 1” **in page -21.**
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 3).
6. If you earned a satisfactory evaluation proceed to “information sheet 4”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to learning activity #1.
7. Submit your accomplished self-check. This will form part of your training portfolio.



## Identifying garment considerations

There are many embroidery fabrics to choose from. The type of fabric that you need for embroidery will depend on the type of embroidery you are undertaking. The following guide has some features to look for when seeking fabric for your next embroidery project.

### Things to consider when choosing the fabric: stitching



#### **Consider the weight of your project as a whole.**

The fabric must be able to support the overall weight of your project. Lightweight fabric will likely pull and stretch if it has heavy yarn beading and ribbon on it. A heavier weight fabric would be needed for design involving wool, beading and similar heavier stitching mediums. For example, a design featuring a bunch of ribbon embroidered flowers would be heavier than a design of simple cross stitched flowers. If items such as buttons, bows, beading or other extraneous elements are to be added, you will need strong fabric that can hold its shape well.



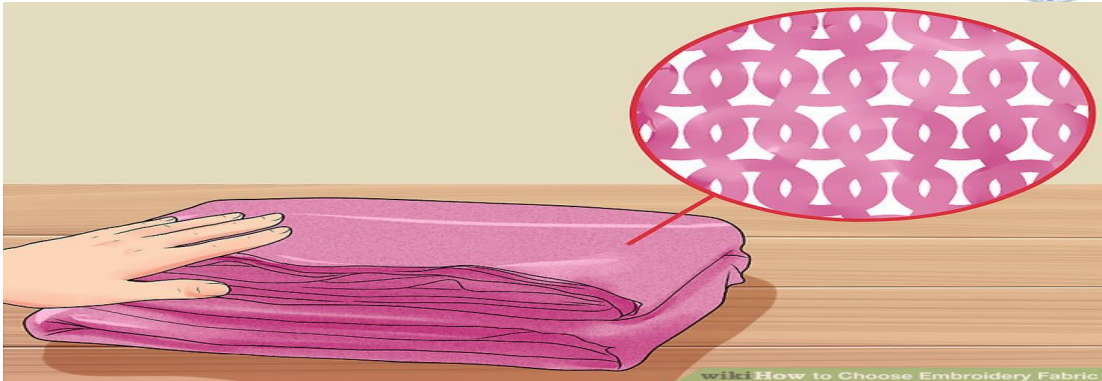
- For example, a delicate and lightweight fabric would work best for whitework, while a heavier fabric would be ideal for a long-stitch with wool.

1.



**Consider the weight of the thread (cotton, yarn, silk, ribbon, etc.).** The fabric must be able to support the weight and width of the thread you are using. When selecting the fabric, bear in mind the following:

- The fabric should not permit the thread to show through to the front of your project. The only exception to this is where you deliberately want this effect but that is a rare occurrence.
- A delicate thread can be lost in a too heavy a fabric, while a heavy thread can cause a fragile fabric to pull apart or dominate the fabric too much.
- The weave of the fabric must be able to withstand the pressure of the thread's width passing through it
- Avoid stretchy fabrics that can distort your design.



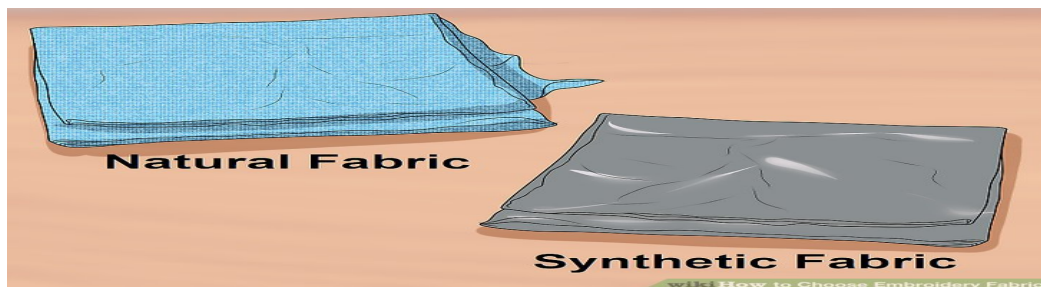
**Check the strength and durability of the fabric's weave.** The weave of the fabric must be strong enough to hold the threads in place and not be too overwhelming for the threads. Be alert to "thread count". This refers to the fabric's weave and determines the ability of the fabric to permit a needle to thread through it without difficulty. It is much easier to do a stitching project on fabric with loose weave than one with tight weave. Fabrics with loose weave include cotton, muslin, linen, (used most often for cross-stitch or embroidering projects rather than as clothing or sewing fabric) and even some repurposed fabrics as flour and feed sacks. You are looking for the lower thread count; if you want to understand this better, think about how high thread count is considered valuable for sheets—such a fabric would make it hard to embroider on the fabric.

- Looser weaves will be less able to hold the threads but will be ideal for larger threads. Cotton, wool and linen are close weaves that are suitable for embroidery with thread or ribbon.
- Full weave fabrics usually allow you to do stitching that doesn't show holes or gaps between the stitching. For many projects, this is an important requirement for neatness and continuity.
- Tighter woven, fine fabric such as silk or voile may be more suitable if you're doing thread painting style embroidery, allowing you to highlight all of the stitches clearly.





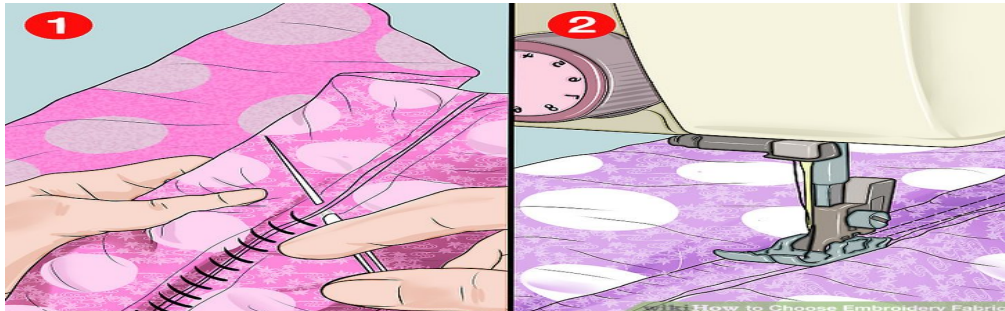
- Some fabrics will "drown" a thread if they have too high a plush. Contrast the weight of the thread with the plushness of the fabric to ensure that this is avoided *before* commencing a project. This will help you to avoid having to unpick hours of work.
- Use richer fabrics such as velvet for heavier threads. Such fabric is ideal for ribbon work.



**Choose between natural and synthetic fabrics.** While this is a personal choice dependent on your own embroidery style, many stitches prefer natural fabrics because they tend to be easier to work with. For example, cottons, linens, wools and muslins feel good to the touch and have good give when pushing the needle through them. Synthetics can be harder to work with, harder to push the needle through and less enjoyable to touch as you work on them. Synthetics can also be abrasive on fine threads. That said, it is down to what you need for the project and how comfortable you are using different fabric types; it's best to experiment and find your preferred mediums.



## Stitching



Determine what type of stitching you'll be using most. Consider whether you will be making simple stitches or elaborate ones that build up in weight and size? The type of stitch has a definite impact on the type of fabric needed. The more elaborate stitching, such as ribbon flowers, the more the need for a heavier fabric backing to support the weight of the finished stitch Consider the following:

- If using ribbon, many strands of thread at once, wool, etc., then you are using heavy thread or stitching mediums and the fabric will need to be stronger to accommodate the stitching. If using aide cloth, the count must be coarser (in the lower count levels around 7 to 12).
- If using single strands of cotton or embroidery thread, the fabric can be lightweight and even delicate. If using cloth, the count can be much finer, even up to 28 if the thread is very delicate.
- Are you hand stitching or machine stitching? If using delicate fabric for embroidery, you are usually better off with hand stitching, while using a heavier weight fabric for machine stitching embroidery projects

There are many embroidery fabrics to choose from. The type of fabric that you need for embroidery will depend on the type of embroidery you are undertaking. The following guide has some features to look for when seeking fabric for your next embroidery project.



- **color**

Logo embroidery adds a one-of-a-kind custom touch to any garment. Hobby clubs, organizations, small businesses, and corporations can all benefit from this type of apparel. It will help members of a company stand out at a trade show, identify various teams at a tournament, or give all the members a sense of belonging and solidarity, no matter what kind of group they belong to. When arranging for logo embroidery, there are several important points to consider.

## **2. Logo embroidery uses a variety of stitches to create a high quality design**

When envisioning the finished product, it's important to consider the way a design will look once it has been translated to embroidery. Large areas that are a single color will be covered with a fill stitch. This stitch is smooth and flat. Smaller areas, such as lettering, are typically covered with a satin stitch that has a rounded shape. Fine details are added with a walking stitch. Keep the limitations of these stitches in mind and choose an embroidery design that can be translated well using these three stitch types.

## **3. The fabric of choice will have a major impact on how the embroidered apparel looks**

The best fabrics for embroidered garments are sturdy and thick without deep pile. Twill fabrics and standard outerwear materials work well. It's best to avoid fabric like fleece or terry cloth that has a deep pile, as this can obstruct the embroidered images. It will lose much of its sharpness and clarity in this type of fabric. Soft fabrics like silk or rayon are more difficult to embroider because a high number of stitches are required to stabilize the embroidery and provide

a quality image.



#### **4. The function of the garment plays an important role in determining the best materials**

Embroidered apparel for corporate wear, such as polo with a company logo, can be embroidered with rayon. This fiber is smooth and sleek, making it the ideal choice for upscale designs. If the apparel will be used for a sports team, scouting group, or other activity that's harder on the garment, it's best to opt for polyester thread for logo embroidery. This choice is much more durable.

#### **5. The location of the embroidery is vital in designing a garment that will serve its purpose**

Traditional embroidery in the upper corner of a shirt is a common default selection. However, it's important to consider the precise purpose of the apparel. If the shirts are for a gardening club or volunteer group who serves food at a shelter, these individuals are likely to wear an apron that may cover the carefully chosen embroidery. In this case, it may be better to move the design to the back of the shirt, or embroider a sleeve. If the apparel is for a group that participates in outdoor activities, a jacket or other type of outerwear may get more attention than the shirt worn underneath.

#### **6. Specialty thread can make all the difference**

The purpose of the apparel and the logo will help determine if and when specialty thread is appropriate. This choice doesn't work for all garments, but it can make a big difference when used correctly. For a younger group, neon, rainbow, color changing, or glow-in-the-dark thread can offer an exciting addition to the embroidery design. Consider the thrill of glowing shirts on a group camping trip, or the excitement of a young garden group at rainbow thread in all the colors of a stunning flowerbed. Metallic or reflective thread can give certain pieces of embroidery an upscale look that's sure to stand out. When using specialty thread, keep the embroidery design extra simple so the



thread itself can really stand out.

With these considerations in mind, designing high quality, custom logo embroidery is easier than ever. The right design will create a new favorite garment for everyone in the group.

<b>Self-check -1</b>	<b>Written test</b>
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**Directions:** answer all the questions listed below. Use the answer sheet provided in the next page.

1. What are fabric considerations?
2. What is the consideration of threads?
3. Why many stitches prefer natural fabrics?

**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_



## Information sheet-4

## Identifying machine requirements

### Learning instructions:

8. Read the specific objectives of this learning guide.
9. Follow the instructions described in number 23 to 28.
10. Read the information written in the “information sheets 4”. Try to understand what are being discussed. Ask your teacher for assistance if you have a hard time understanding them.
11. Accomplish the “self-check 1” **in page -28.**
12. 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 4).
13. If you earned a satisfactory evaluation proceed to learning activity #2.
- 14.”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to learning activity #1.
15. Submit your accomplished self-check. This will form part of your training portfolio.



## Thread type

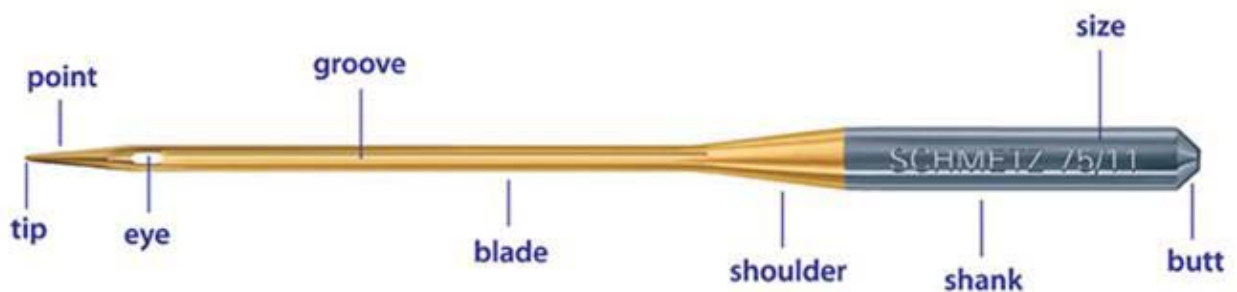
### Different types of embroidery threads:

- Different types of embroidery threads in use are
- Rayon threads,
- Polyester threads,
- Nylon threads,
- Cotton threads,
- Cotton-wrapped polyester,
- Metallic threads,
- Laminate or flat threads and silk threads:

## Needles

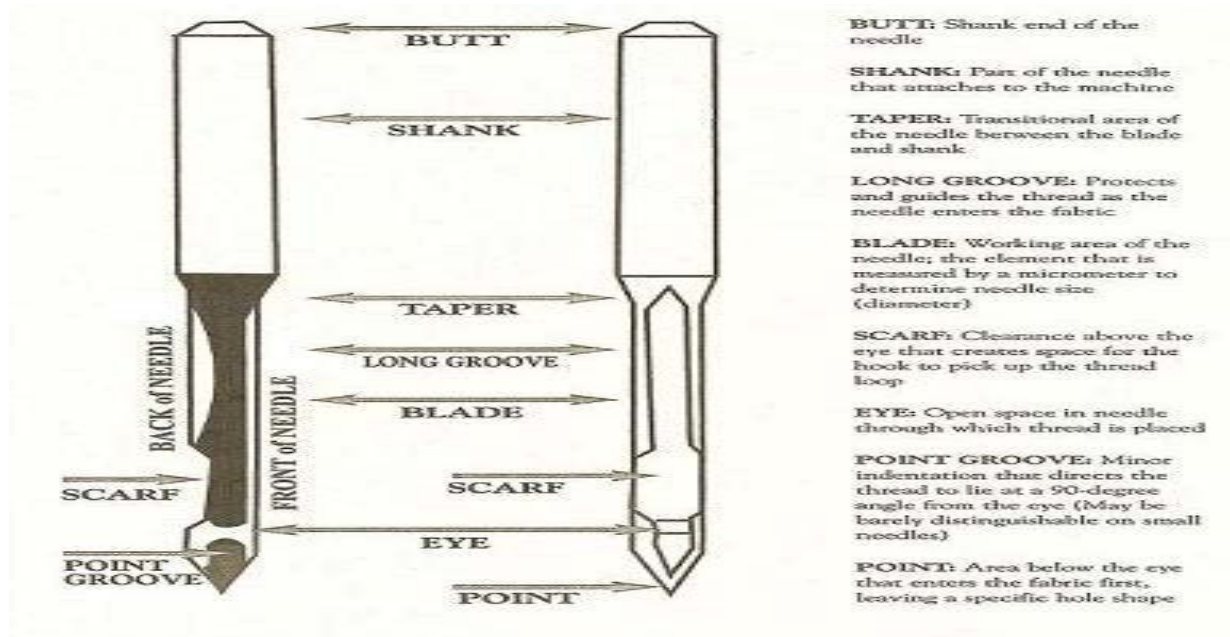
### Types of needle used to swing different fabrics

Select the type of needle based on the INDtile construction (i.e knit vs. woven), and the needle size is determined by the thickness of the thread and the weight of the fabric used for swing.





There are two needle sizing system: American and European. American needle sizes range from 8 to 19, and European sizes range from 60 to 120. Higher the number larger the blade of the needle.







Needle	Fabric Uses	Sizes	Description
Machine Embroidery	For embroidery	70/10 – 90/14	Machine embroidery needles have a larger eye and specially designed scarf that protects the thread against breaking or shredding, even when stitching dense designs. Use for machine embroidery with rayon, acrylic or specialty threads.
Metallic	For use with metallic threads	80/12	Metallic needles are designed especially for use with metallic threads. This needle features an even larger eye than the embroidery needle, a fine shaft and a sharp point to prevent thread breakage and shredding. It has a special, large-groove scarf designed to protect the thread and to prevent skipped stitches. It's also ideal for use with monofilament thread.

### Determining the right needle for a thread

Here's a quick way to determine if the thread and the sewing machine needles are compatible:

1. Take half a meter of the thread being used on the machine and thread it through the eye of a loose needle.
2. Hold the thread vertically with the needle at the top.
  - If the needle is too big, it will drop to the bottom of the thread
  - If the needle is too small, it will stick at the top of the thread
  - If the needle is the right size, it will slowly spiral to the bottom of the thread



## Embroider stitches:

- The stitches are grouped into four types, each offering different effects and uses for embroidery:
- **Outline** – used for outlining the elements of your design
- **Border** – used to secure edges and to add Natural dimension to your design
- **Detached** – used to create decorative details or in mass to fill in open areas of the design
- **Filling** – used to create shading or to solidly fill in a design area

## What is the best thread to use for machine embroidery?

- What's the best thread to use for machine embroidery depends on your taste and project. Let's review all the embroidery thread types, so you can pick the proper thread according to your personal preferences.

### Rayon

This is the most popular and cheap machine-embroidery thread on the market! It is very easy to find and even easier to use. You have hundreds of hot colors to choose from when it comes to rayon embroidery. Made of organic cellulose, rayon threads have a smooth touch and a luxurious sheen but lose shine fast!

### Polyester

We have mentioned in our best sewing machine threads article that polyester threads represent one of the strongest threads. Besides, they are easy to use, shiny and



vibrant! However, they will not fade fast as rayon threads. On the contrary, they will last more, since they are bleach-resistant and fade-resistant.

If you are embroidering something that will require constant washing like towels, clothing or linens, buy a polyester thread. Trilobal polyester threads are the strongest – they are made of numerous filaments. And their triangular form boosts their light even more than the rayon and polyester embroidery threads.

## Cotton

Cotton threads represent the ultimate natural fibers! And the best cotton thread is made of long-staple Egyptian cotton that is nearly free of lint and exceptionally strong! Most cotton threads provide better matte finish than rayon and polyester. They are great for redwork, quilting, cross-stitch and bean stitch.

## Silk

Another natural fiber that you need to know about when it comes to embroidery threads is silk – stable and strong. It has a unique shine and provides a luxurious finish. It is favorite of crafters who prefer hand and machine-embroidered decorative designs at 100 wt. (extremely fine) – the stitches nearly disappear.

## Specialty threads

Specialty threads have the power of making every embroidery project spectacular. If you are into stitch painting, crafting in Stile art or quilting you should definitely keep these threads in mind. You can choose between metallic, variegated, clear nylon monofilament, and light-sensitive or solar-activated threads.

Metallic embroidery threads: they look stunning but can also be fussy. Some threads remain flat rather than round, while others contain holographic fibers. Lowering the



stitching speed, using a large topstitch needle and reducing the tension are some of the many ways to avoid a headache with a metallic thread.

<b>Self-check -1</b>	<b>Written test</b>
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**Directions:** answer all the questions listed below. Use the answer sheet provided in the next page.

1. What are the most embroidery machine requirements?
2. List out different types of embroidery threads?
3. What are the embroidery machine needle sizes?

**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_



# INTERMEDIATE APPAREL PRODUCTION

## NTQF LEVEL II

### Learning guide-43

**Unit of competence:** prepare embroidery design

**Module title:** preparing embroidery design

**LG code:** INDIAP2 mo11-LO2-LG-43

**TTLM code:** INDIAP2 mo11 TTLM0909v1

**Lo2:** create design



## Instruction sheet

## Learning guide #-43

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

- OHS practices
- Creating and preparing design concept
- Reviewing designs
- using appropriate tools and equipment's
- Developing design concept
- developing design specifications
- storing , organizing and protecting designs

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 –**

- Create and prepare Design concept for presentation.
- Review Designs against brief and with client, and modified as required to gain approval for development.
- Develop Design concept using appropriate *tools and equipment* and according to *OHS practices*.
- Develop Design specifications to guide productionstore, organize and protect Designs



## Information sheet-1

## OHS practices

### Learning instructions:

1. Read the specific objectives of this learning guide.
2. Follow the instructions described in number 32 to 39.
3. Read the information written in the “information sheets 1”. 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” **in page -39.**
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).
6. If you earned a satisfactory evaluation proceed to “information sheet 2”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to learning activity #2.
7. Submit your accomplished self-check. This will form part of your training portfolio.



## **When using this machine, basic safety precautions should always be taken, including the following:**

**Read all instructions before using.**

**DANGER** - To reduce the risk of electric shock:

1. The machine should never be left unattended while plugged in. Always unplug the machine from the electrical outlet immediately after using and before cleaning.
2. Always unplug the machine before you change the light bulb.

Replace the bulb with same type rated 15 watts.

**WARNING** - To reduce the risk of burns, fire, electric shock, or injury to persons:

1. Do not allow this machine to be used as a toy. Close attention is necessary when the machine is used by or near children.
2. Use this machine only for its intended use as described in this manual. Use only accessories recommended by the manufacturer as contained in this manual.
3. Never operate this machine if it has a damaged cord or plug, if it is not working properly, if it has

Been dropped or damaged, or dropped into water. Return the machine to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.

4. Never operate the machine with any air openings blocked. Keep ventilation openings of the

Machine and foot control free from the accumulation of lint, dust, and loose cloth.

5. Never drop or insert any object into any opening.
6. Do not use outdoors.





7. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
8. To disconnect, turn the machine switch to the symbol “□” position which represents off, then remove plug from outlet.
9. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
10. Keep fingers away from all moving parts. Special care is required around the machine needle.
11. Always use the proper needle plate. The wrong plate can cause the needle to break.
12. Do not use bent needles.
13. Do not pull or push fabric while stitching. It may deflect the needle, causing it to break.
14. Switch the machine to the symbol “□” position to turn it off when making any adjustments in the needle area, such as threading needle, changing needle, threading bobbin, or changing presser

#### Foot and the link

15. Always unplug the machine from the electrical outlet when removing covers, lubricating, or when making any other user servicing adjustments mentioned in the instruction manual.
16. This sewing machine is not intended for use by young children or infirm persons without supervision. (For Australia and New Zealand only)
17. Young children should be supervised to ensure that they do not play with this machine

#### **Safety rules in the lab**



- Don't carry pins or needles in your mouth, use pin cushion
- Don't use sewing machines before you get complete instruction
- Machine needle may break, don't lean too cloth
- Don't place a sewing machines cord where someone may trip on it
- As you guide fabric keep you finger away from the needle
- Unplug the cord when you are finished the sewing machines
- Rest a hot iron on its heel when you are not using it
- Don't leave the iron on the fabric

#### Cut work pressing & preparation

Pressing Cut work to smooth away unwanted creases and crush marks and prepare front panel, back panel, sleeve, collar etc. For use

## Sewing machines

A sewing machine is a powerful piece of equipment that most sewers simply can't do without. Just imagine trying to make a king-sized quilt, or trying to sew your child's Halloween costume completely by hand.

So sewing machines are fast and convenient. They can also be dangerous if you don't take the proper precautions while using them.

Here are some sewing machine safety tips that you should keep in mind.

### **Make sure your sewing machine cord is in good shape**

Most people don't really pay attention to the cords of their appliances. They just plug them in and go. However, using an appliance with a damaged cord is never a good idea. So, before you get busy sewing, spend a few minutes inspecting the cord of your sewing machine to make sure it's in good condition.



Do you see any fraying? Are there any nicks or cuts in the cable? Are the prongs loose or bent? If the answer to any of those questions is “yes,” then you need a new cord. Luckily, replacement cords for most sewing machines are relatively inexpensive, and easy to find. To keep your cord in good condition, make sure it stays straight and untangled. Don’t sit anything on top of it, and make sure it isn’t in an area where it might be stepped on.

### **Unplug after every use**

After you’ve finished using your sewing machine for the day, unplug it. This might seem like a hassle, but it’s a simple safety precaution that you should make into a habit.

You should also unplug your sewing machine before performing maintenance tasks, like oiling or cleaning it.

When unplugging your sewing machine, never grab the cord by the cable and yank it out of the wall. Do this often enough, and your cord will have to be replaced sooner rather than later. Instead, grab the plug and pull it gently out of the wall socket.

### **Pull your hair back**

A sewing machine has a lot of parts which move at incredible speeds when the machine is in use. And if you let your long, flowing hair hang loose while sewing, it can easily get caught in one of those rapidly moving parts. All it takes is for you to lean a little too close to your machine, and your hair could end up getting caught in your sewing machine.

This is never fun the solution? Pull your hair back before you start to sew. It’s the easy way to avoid an unfortunate “hair vs. Sewing machine” incident.

### **Watch your fingers**

When sewing on a sewing machine, your fingers can be pretty vulnerable, especially if you aren’t paying as much attention as you should. So the first of using a sewing



machine is to always pay attention to what you're doing. Let your mind wander for even a moment, and you could end up needing a bandage or two.

If you have to look away from your sewing machine for any reason (like you want to see what your suspiciously quiet toddler is up to) completely stop what you're doing first before glancing away.

Don't let your fingers get too close to the feeder. If you really feel like there needs to be something holding the fabric close to the feeder, use something else. The erasers of a couple of pencils can be safe substitutes for your fingers. Chopsticks will also work if you have any on hand.

Sew at a slow, steady pace. Trying to move too fast, and rush things, could end in a trip to the first aid kit.

To be on the safe side, unplug the sewing machine before threading the needle. If unplugging every time you want to thread the needle seems too inconvenient, at least turn the machine off. Even if you're sure the machine is off, make sure your feet aren't anywhere near the pedal.

### **Protect your eyes**

Wearing protective eyewear to sew might seem a little extreme. But imagine this. You're sewing a seam when you accidentally sew across a straight pin you didn't realize was in the way. The straight pin breaks, and the sharp, pointy end goes flying...straight up towards your face.

When something like that happens, you'll be glad you were wearing eye protection. And the good news is that you don't need a pair of thick, clunky goggles to protect your eyes. You can find protective eyewear that looks more or less like regular eyeglasses. You can even get prescription safety glasses.



## Some quick sewing safety tips

- Don't sew across pins. As a pin nears the presser foot, stop the sewing machine long enough to remove the pin.
- Make sure you're using the proper needle for the fabric you're sewing. A needle that isn't the right size or thickness for the job could end up breaking.
- Pay attention to the way your sewing machine sounds. If it starts making strange noises, or seems louder than usual, it might be time to have it checked by a pro.
- Make sure there's enough light. Using a sewing machine in poor lighting can lead to mishaps.

## Maintenance of embroidery machines

- Handle materials, machinery, equipment and tools safely and correctly
- Use correct lifting and handling procedures
- Use materials to minimize waste
- Maintain a clean and hazard free working area
- Maintain tools and equipment
- Carry out running maintenance within agreed schedules
- Carry out maintenance and/or cleaning within one's responsibility
- Report unsafe equipment and other dangerous occurrences
- Ensure that the correct machine guards are in place
- Work in a comfortable position with the correct posture
- Use cleaning **equipment** and methods appropriate for the work to be carried out.
- Dispose of waste safely in the designated location
- Store cleaning equipment safely after use
- Carry out cleaning according to schedules and limits of responsibility



## Safety measures

- When in doubt, ask the instructor.
- Report any injuries or accidents immediately to the instructor. Also, report any breakage to a tool or m/c to the instructor. If the equipment does not operate properly, notify the supervisor immediately.
- Wipe up any oil spilled on the floor immediately to prevent anyone from slipping. Keep aisles clear at all times.
- Operate only the machines you have been trained to operate and when the instructor or supervisor/ assistant is present.
- Operate machines only with permission.
- Always inspect the m/c before starting to work. Be sure it is clean and threaded correctly, with no loose threads on the pulley belt and all guards in place.
- Make only adjustments you have been trained to perform
- When sewing on a power m/c, wear low shoes & close-fitting clothing. Avoid loose fitting sleeves, sweaters, jewelry, ties, and ribbons when operating the machine. If your hair is long, tie it back.
- Always practice proper posture to reduce fatigue, help prevent accidents and increase efficiency. If possible, adjust the chair height so that your feet rest flat on the floor.
- Do not pull your chair forward or toward while operating the machine.
- Use both hands to raise & lower the machine head.
- Always keep your head above the table.
- Keep your feet off the treadle when you are setting or threading the needle.
- Turn off and unplug the machine when you are away from it for more than few minutes.



<b>Self-check -1</b>	<b>Written test</b>
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**Directions:** answer all the questions listed below. Use the answer sheet provided in the next page.

1. List the instruction of machine before using?
2. How do you to use the machine safely?

Score = \_\_\_\_\_

Rating: \_\_\_\_\_

**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**



## Information sheet-2

## Creating and preparing design concept

### Learning instructions:

1. Read the specific objectives of this learning guide.
2. Follow the instructions described in number 40 to 43.
3. Read the information written in the “information sheets 2”. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
4. Accomplish the “self-check 2” **in page -43.**
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 2).
6. If you earned a satisfactory evaluation proceed to “information sheet 3”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to learning activity #2.
7. Submit your accomplished self-check. This will form part of your training portfolio.





## Creating and preparing design concept

**Embroidery**: is one of the oldest and beautiful ways to decorate fabrics, which began when prehistoric man joined leaves and grasses together for decorating his body. The man's basic needs for food, shelter and clothing arose the craft of intertwining or weaving fibers and grasses into coarse fabrics, baskets and containers.

## Creating and preparing design concept

Digitized embroidery design files can be either purchased or created with industry-specific embroidery digitizing software. Embroidery file formats broadly fall into two categories. The first, source formats, are specific to the software used to create the design. For these formats, the digitizer keeps the original file for the purposes of editing. The second, machine formats, are specific to a particular brand or model of embroidery machine, they contain primarily stitch data (offsets) and machine functions (stitch, trims, jumps, etc.) And are thus not easily scaled or edited without extensive manual work. However, because these files easy to decode, they serve as easy exchange formats, with some formats such as tajima's .dst and melco's .exp being so prevalent that they have effectively become industry standards and are often supported directly by machines built by rival companies, or through provided software to convert them for the machine.



## **Effects of garment design:**

Garment design has a significant effect on moisture transfer, through its effect on the amount of body surface area covered, the looseness or tightness of fit, the wind penetration and the ventilation through the openings.

## **Design of high-performance garments**

The garment design has an impact on the wearer's comfort. Fit is a key element in design to avoid hindering mobility. No matter how well engineered the fabric is, it cannot be regarded as the best if there are fit problems. The design is expected to conform to the body shape and synchronize with the body movement to avoid limiting performance. Fit designs that enable a range of movements when stretching and bending improve mobility and provide overall comfort (das &alagirusamy,2010). Garments intended for performance should not impair dexterity, cause heat exhaustion or physical distress. The design should also be stylish to encourage the wearer to use the garment and comply with the health and safety regulations. Product development for protective clothing has grown at a steady pace yielding a range of high-technology products such as body mapping technology for sportswear.

Appropriate design features enhance physiological comfort by reducing the build of heat and moisture around the skin (performance apparel markets, 2012). A comfortable design requires a holistic approach that considers the necessary design components for high performance such as sizing, ventilation, seam technology, and body mapping technology. Some of the techniques used to control temperature and promote comfort include ventilation flaps, high collars, adjustable cuffs, and mesh panels (performance apparel markets, 2013).



<b>Self-check -2</b>	<b>Written test</b>
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**Directions:** answer all the questions listed below. Use the answer sheet provided in the next page.

1. What are the embroidery file format categories?

**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_



## Information sheet-3

## Reviewing designs

### Learning instructions:

1. Read the specific objectives of this learning guide.
2. Follow the instructions described in number 44 to 45.
3. Read the information written in the “information sheets 3”. 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” **in page -46.**
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).
6. If you earned a satisfactory evaluation proceed to “information sheet 4”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to learning activity #1.
7. Submit your accomplished self-check. This will form part of your training portfolio.



## Editing designs

Once a design has been digitized, an embroiderer can use software to edit it or combine it with other designs. Most embroidery programs allow the user to rotate, scale, move, stretch, distort, split, crop, or duplicate the design in an endless pattern. Most software allows the user to add edit quickly and easily. Often the colors of the design can be changed, made monochrome, or re-sorted. More sophisticated packages allow the user to edit, add, or remove individual stitches. Some embroidery machines have rudimentary built-in design editing features.

## Loading the design

After editing the final design, the file is loaded into the embroidery machine. Different machines require different formats that are proprietary to that company. Common design file formats for the home and hobby market include .art, .hus, .jef, .pes, .sew, and .vip. Embroidery patterns can be transferred to the computerized embroidery machines through cables, cds, floppy disks, usb interfaces, or special cards that resemble flash or compact cards.

Due to some commonality between the controllers and the software manufacturers, some of the formats are headers and additional information surrounding similarly encoded stitches. .tap is a .dst file without the header. .exp file stitches are very close to .jef, .shv and .sew but without the surrounding data about thread color and hoop positioning. .10o is encoded in the same manner as .f01, .gt, .dsb, .dat, .inb and .u01 but with different headers and surrounding information



<b>Self-check -3</b>	<b>Written test</b>
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**Directions:** answer all the questions listed below. Use the answer sheet provided in the next page.

1. List out common design file format?
2. List out the embroidery patterns transfer way of mated?

**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_



## Information sheet-4

## Using appropriate tools and equipment's

### Learning instructions:

1. Read the specific objectives of this learning guide.
2. Follow the instructions described in number 47 to 55.
3. Read the information written in the “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 4” **in page -55.**
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 4).
6. If you earned a satisfactory evaluation proceed to “information sheet 5”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to learning activity #2.
7. Submit your accomplished self-check. This will form part of your training portfolio.



## Computer



### Personal computer (PC) specifications

Check that your pc meets the system requirements. Check CPU/RAM as well as hard disk space. The table below provides minimum system requirements.

Component	Minimum	Recommended
CPU	Intel® Core 2 Duo or AMD Athlon™ 64	3GHz + Latest 64-bit (x64) multi core processor

Component	Minimum	Recommended
Operating system	‡ Windows® 7 (32-bit or 64-bit Editions) with latest service packs installed.	Windows® 10 (64-bit Edition) or Windows® 8.1 (64-bit Edition), with latest service packs.
Browser	I.E. 9.0 or Later	I.E. 11.0 or Later
Memory	4 GB	8 GB or more
Hard disk size	80 GB	256 GB or More (Solid State Drive)
Free disk space	† 40 GB	60 GB or More
Graphics card	Support for Highest Color (32bit) and resolution (1366 X 768)	Support for DirectX 9 graphics with: WDDM Driver 1GB of graphics memory (non-integrated) Pixel Shader 2.0 in hardware bits per pixel Dual Monitor Capable
Monitor	¥ 1366 X 768 screen resolution	Dual monitors capable of displaying 1920 X 1080 screen resolution
Mouse	USB mouse	USB mouse
USB port	Required for software installation.	
Sound card	Required for online video help.	
Internet connection	Required for product activation and registration. Internet connection may also be required during installation in order to download Windows features such as .Net Framework 3.5.	





## Software programs

### Embroidery software

1. **Stitch era**:-is advanced embroidery design software.

Its features include:

- Built-in vector drawing and import of vector art
  - Bitmap tracing (translation to vector drawings) and import of raster files
  - Conversion of vector graphic parts (lines and fills) to corresponding stitch sections (both automatic and semi-manual)
  - Advanced stitch section editing/configuration, e.g. Changing fill patterns, reordering, thread colors, stitch editing, etc.
  - Stitch by stitch editing
  - Lettering
2. **ART link 8**:-is a basic software program that allows you to open an embroidery design, make basic adjustments, and write the design directly to your embroidery machine or to a removable device, such as a USB stick.
  3. **Sophie sews**:-is my favorite software because it provides all essential tools to make a design from scratch unlike other software. Plus, conversion of a design into the embroidery machine instruction is also quite easy in it.
  4. **EOS** is another free embroidery digitizing software for Windows. This software allows you to create new as well as edit existing embroidery designs. To create a new design, this software provides a starting node on the canvas from where you can start placing threads from one point to another through the mouse. To accurately create the design, you can enable some helping tools like **Ruler**, **Scrollbar**, and **Zoom In/Out** from the **Tools Menu**.
  5. **Ilcom truesizer** is yet another free embroidery digitizing software for Windows. This software helps you to view and edit embroidery designs contained in embroidery machine files of various formats such as **EMB**, **Inbro**, **Tajima (DST)**,



**Data stitch** (STX), **Nova** (DSN), etc. To view embroidery design, this software offers various viewing modes such as **true view** (to view the original design), **Show Stitches** (to only view stitch point), **Needle Point** (to view needle points), etc.

6. **Embroider Modder** is a **free open source embroidery digitizing software** for Windows. It is one of the simplest software to view and create embroidery designs. Plus, slight editing like *adding text over an existing or on a completely new embroidery file, insert stitches, delete stitches*, etc. Can also be performed. However, it does not provide other features to make more adjustments on an existing design. The good thing about this software is that it supports various input and output embroidery machines compatible formats such as **KSM, HUS, PXS, EXP, PES**, and more.

## Hardware peripherals such as scanners, printers

You'll need a **printer** to print off the PDF patterns, and a **scanner** will come in amazingly handy if you decide you like to make your own patterns.



**Light tablets** are my preferred method of transferring embroidery patterns. They allow for much more accurate drawing than you get from a sunny window or homemade light box



## Paper, pens

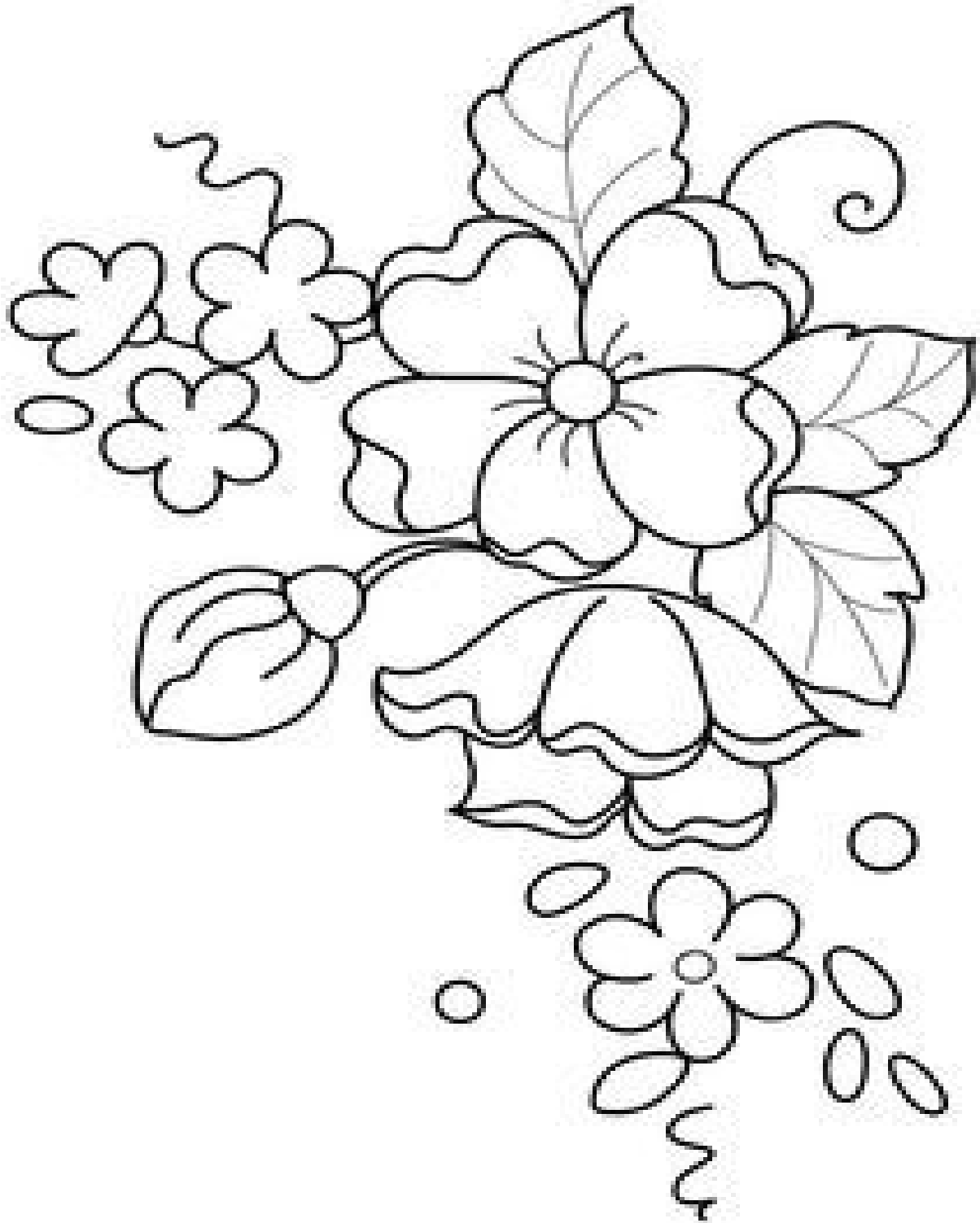
**Water soluble pens** are my preferred method of embroidery transfer.

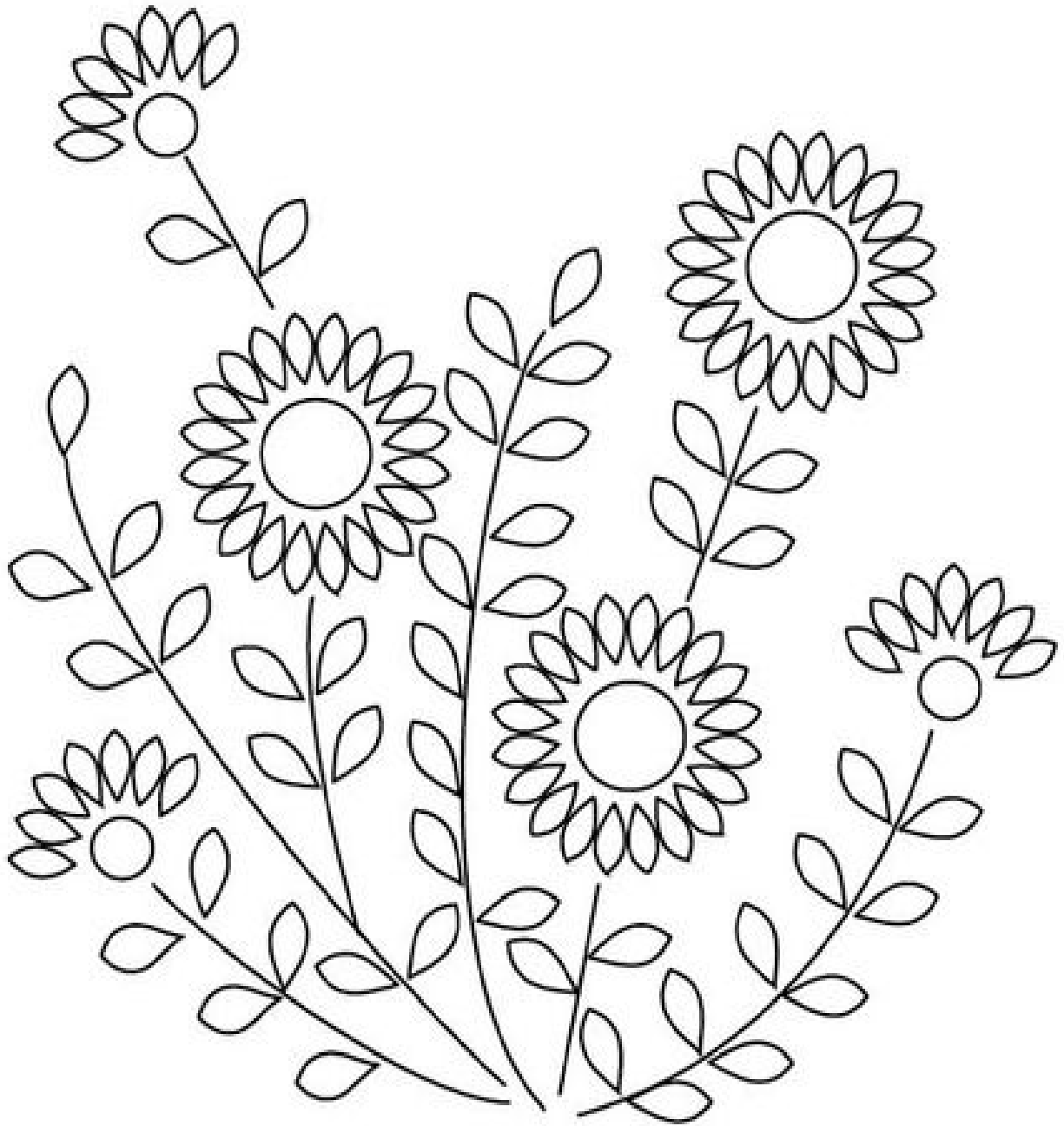
They're easy to use, come in a variety of thicknesses, and wash out easily with cool water.





# Templates









<b>Self-check -4</b>	<b>Written test</b>
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**Directions:** answer all the questions listed below. Use the answer sheet provided in the next page.

1. List out common embroidery design software programs?
2. What is a light table?

**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_



## Information sheet-5

## Developing design concept

### Learning instructions:

1. Read the specific objectives of this learning guide.
2. Follow the instructions described in number 56 to 59.
3. Read the information written in the “information sheets 5”. 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” **in page -59.**
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 5).
6. If you earned a satisfactory evaluation proceed to “information sheet 6”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to learning activity #2.
7. Submit your accomplished self-check. This will form part of your training portfolio.





## PROCESS FOR CREATING A CONCEPT

My process always begins with the 2 items mentioned above, asking questions of the client and researching the industry.

When talking with clients I'm always listening for the words they use to describe their business and their customers. They won't always give you these words by directly asking for them, but there are other ways to get the information from them.

- **Ask indirect questions** – Your clients will often reveal things about themselves and their businesses when talking about other things.
- **Listen actively** – Sometimes the information you want is between the lines and you'll have to listen actively for it.
- **Get to know your clients as people** – The more you know them outside their business the better you'll know their business
- **Speak their language** – Stay away from industry jargon and use the words your clients use.

I'm always looking for descriptive words like elegant, affordable, friendly, and dynamic. Abstract words that convey meaning about the client's brand. I'll jot these words down while we're talking and think more about them later. These words help form the verbal concept for the site's design.

Again you have to be prepared to listen. The words you're looking for are often not going to come in response to a direct question.

When researching the industry I'll keep the same words in mind and look for others. I'll look at how the industry as a whole describes itself and in what way(s) my client stands apart from the competition. Both lead to more words that will possibly serve as part of the abstract concept for the design.



Usually after talking to the client and researching the industry I'm filled with ideas. I'm not sure which concept will work best, but the ideas are there. Once they are I prefer to then stay away from consciously thinking about the design for a time. The design will pop into my mind here or there and when it does I'll let it, but at this stage I'm not sitting down to design. I'm letting the concept form in my subconscious.



During this time visual concepts come to mind. I'll see an idea for what the layout might be or maybe something more specific like a color or an image.

For example years ago I was designing a site for a virtual assistant and an image of a file cabinet serving as a list of menu choices popped into my mind. It eventually became part of the visual concept for the site and led the way in the rest of the design.

After a few days I know I'm ready and I'll sit down and start sketching different visual concepts for the design always keeping the few words that serve as the abstract concept in mind.

Visually I'm trying to come up with ideas for things like:

- Style/motiff



- Color Schemes
- Textures
- Shapes
- Layout

Again each of these is led by the abstract words that have become part of the verbal concept. One design might call for sharp angular shapes while another might call for soft rounded shapes for example.

One thing I haven't tried, but you may find helpful is to create a mood board. The link will lead you to a video explaining how to create one. If you're unfamiliar with them they're basically a collection of thoughts, possible layouts, and sources of inspiration you'll use to design the site. They serve as a document for yourself or the client detailing the concept you have for the site

<b>Self-check -1</b>	<b>Written test</b>
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**Directions:** answer all the questions listed below. Use the answer sheet provided in the next page.

1. How to develop design concept?

**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_



## Information sheet-6

## Developing design specifications

### Learning instructions:

1. Read the specific objectives of this learning guide.
2. Follow the instructions described in number 60 to 62.
3. Read the information written in the “information sheets 6”. 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” **in page 62-**.
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).
6. If you earned a satisfactory evaluation proceed to “information sheet 6”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to learning activity #2.
7. Submit your accomplished self-check. This will form part of your training portfolio.



## Product design specification

Is a detailed document providing information about a designed product or process? For example, the design specification must include all necessary drawings, dimensions, environmental factors, ergonomic factors, aesthetic factors, maintenance that will be needed, etc. It may also give specific examples of how the design should be executed, helping others work properly (a guideline for what the person should do)

A **requirement specification** is a documented requirement, or set of documented requirements, to be satisfied by a given material, design, product, service, etc. It is a common early part of fashion design and garment product development processes, in many fields. A functional specification is a kind of requirement specification, and may show functional block diagrams

Embroidery **design specification** is a detailed document providing information about a designed product or process. For example, the design specification must include all necessary drawings, dimensions, environmental factors, ergonomic factors, aesthetic factors, maintenance that will be needed.

### Garment product specification

A **garment specification** sheet or **spec** sheet is a technical document that contains the construction details of the product, a technical diagram/ sketch of the **garment**, measurements of the product.

## Steps of embroidery design specification

- Sketch embroidery design
- Select fabric types and details
- Mark the specific area
- Put the embroidery instruction
- Put the Stitch instruction



- Show the design look sample

<b>Self-check -1</b>	<b>Written test</b>
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**Directions:** answer all the questions listed below. Use the answer sheet provided in the next page.

1. What are the specifications must include?
2. What is embroidery design specification?
3. List out common steps of embroidery design specification?

**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_



# **INTERMEDIATE APPAREL PRODUCTION**

## **NTQF LEVEL II**

### **Learning guide-44**

**Unit of competence:** prepare embroidery design

**Module title:** preparing embroidery design

**LG code:** IND IAP2 MO11-LO3-LG-44

**TTLM code:** IND IAP2 MO11 TTLM 0909v1

**Lo3:** Edit Design



## Instruction sheet

## Learning guide #-44

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

- Selecting suitable designs.
- Importing designs into software programs.
- Edit designs.
- Determining production specifications
- Storing, organizing and protecting designs

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 –**

- Select Suitable designs or images for editing.
- Import Designs into software programs.
- Edit Designs to achieve design objectives.
- Determine Production specifications.
- store, organize and protect Designs





## Information sheet-1

## Selecting suitable designs.

### Learning instructions:

1. Read the specific objectives of this learning guide.
2. Follow the instructions described in number 65 to 68.
3. Read the information written in the “information sheets 1”. 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” **in page -68.**
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).
6. If you earned a satisfactory evaluation proceed to “information sheet 2”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to learning activity #3.
7. Submit your accomplished self-check. This will form part of your training portfolio.



# Factors to Consider When Choosing Embroidery Design

Here are factors that will guide you when selecting the best embroidery design for your textile work:

## Check Its Quality

It's vital that you check the quality of the embroidery design before you download it. Truth is told—some designs may never have been used.

So, you should try to sew them first before you embroider them to ensure that they will work. It will be pointless to download an embroidery design that doesn't serve its purpose.

## Look Out for Compatibility

The kind of hardware and software systems you've employed should guide you when choosing the best free embroidery design.

Because not all the free embroidery designs that you come across from the Internet are compatible with your system.

Check to make sure that the hardware system and the software system that you're using are in sync with the free embroidery design that you've come across.





## **Always Look Out for Copyright Issues with the Free Embroidery Design**

As a rule of thumb, always make sure that you've clearly understood the copyright limitations that have been spelled out in the website before you attempt to download a free embroidery design.

Some of the free embroidery designs may put you in trouble, especially if you've flouted the international copyright law when using them.

If they don't allow you to distribute or sell the free embroidery design, please don't. Otherwise, you may put the future of your firm into jeopardy.

## **Conclusion**

So, there you have it. It's very important that you look out for quality, compatibility, and copyright issues before you choose your free embroidery design for downloading. This may be the only way you can delight your customers and achieve your firm's objective. What's your take?

### **Selecting suitable designs**

The computerized embroidery process can be broken down into six selections of suitable designs functional activities:

1. Interpret artwork and digitize the design using specialized software
2. Save the design as a stitch file that can be understood by the embroidery machine



3. Read the stitch data file into the embroidery machine
4. Teach the machine how to embroider the design
5. Frame or hoop the fabric you wish to embroider on and slot into the machine arms.
6. Start the machine stitching and run until embroidery design is complete and finished.

### Select and Interpret artwork and digitize the design using specialized software

- Artwork may exist as a printed document or in a digital form. The design would be either scanned or opened into the specialized digitizing software and displayed on screen.
- Older systems require the artwork to be enlarged and plotted on a tablet, but modern systems use 'on screen' digitizing methods. The operator can zoom in and use the pointer of the mouse to define the design in stitches and select suitable design.

<b>Self-check -1</b>	<b>Written test</b>
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**Directions:** answer all the questions listed below. Use the answer sheet provided in the next page.

2. List out the common selection of suitable design?

**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_



## Information sheet-2

## Importing designs into software programs

### Learning instructions:

1. Read the specific objectives of this learning guide.
2. Follow the instructions described in number 69 to 72.
3. Read the information written in the “information sheets 2”. 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” **in page -72.**
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 2).
6. If you earned a satisfactory evaluation proceed to “information sheet 3”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to learning activity #3.
7. Submit your accomplished self-check. This will form part of your training portfolio.



## Importing designs into software programs

**The computerized embroidery process can be broken down into six functional activities:**

Interpret artwork and digitize the design using specialized software save the design as a stitch file that can be understood by the embroidery machine

- Read the stitch data file into the embroidery machine
- Teach the machine how to embroider the design
- Frame or hoop the fabric you wish to embroider on and slot into the machine arms.
- Start the machine stitching and run until embroidery design is complete and finished.

### **Interpret artwork and digitize the design using specialized software**

- Artwork may exist as a printed document or in a digital form. The design would be either scanned or opened into the specialized digitizing software and displayed on screen.
- Older systems require the artwork to be enlarged and plotted on a tablet, but modern systems use 'on screen' digitizing methods. The operator can zoom in and use the pointer of the mouse to define the design in stitches.

### **Save the embroidery design**

- Once the embroidery design is complete the design is saved in the internal file format of the specialist embroidery software.
- This is important if the design needs to be changed or edited
- Later as working with a native file makes this easier.

### **Read the embroidery design**

- The file needs to be transferred into the memory of the embroidery machine; this might be done via a cable from the pc running specialist software, or via a flash card or USB stick.



## Teach the machine how to embroider the design.

- Once the design is in the memory of the embroidery machine the machine operator needs to teach the machine how to sew the design i.e. which needles and what orientation to use.
- The needles are numbered and each needle is threaded with a different color.
- The embroidery design
- Software provides the operator with a schedule of which color is to be used in each stage of the design and the stages are numbered in sequence.
- To teach the machine the operator assigns the relevant needle number (color) to each stage. Each threaded needle will stitch its color block or blocks until a color change is required.
- It will then tie off its thread and park and the next relevant needle will move into position to begin sewing



## Frame or hoop the fabric you wish to embroider on and slot into the machine arms.

- The frame or hoop is based on a traditional embroidery ring; the fabric to be embroidered is secured in the frame rather like the skin on a drum.
- The purpose of this is to secure the fabric in a mechanism that can be slotted onto the embroidery machine so that it can be moved about accurately by the embroidery machine pantograph.



- Framing also serves to stabilize the fabric, to avoid the movement of the design whilst being stitched as described above.
- Further support is added by applying backing to the fabric which is a paper-like product inserted under the fabric and is often also framed with it.

**Start the machine stitching, run until embroidery design is complete and finished.**

- Embroidery machines use the conventional 'lock stitch' mechanism, using a top thread and a bottom 'bobbin' thread to create a stitch.
- The bobbin, located beneath the material being stitched, catches the thread of the penetrating needle and carries it in a circular direction creating a loop through which the bobbin thread passes locking the stitch to the back of the material

<b>Self-check -2</b>	<b>Written test</b>
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**Directions:** answer all the questions listed below. Use the answer sheet provided in the next page.

1. List out common save the embroidery design mated?
2. Lest out the common the machines who to embroider the design?

**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_





## Information sheet-3

## Edit designs.

### Learning instructions:


1. Read the specific objectives of this learning guide.
2. Follow the instructions described in number 73 to 81.
3. Read the information written in the “information sheets 3”. 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” **in page -81.**
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 3).
6. If you earned a satisfactory evaluation proceed to “information sheet 4”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to learning activity #3.
7. Submit your accomplished self-check. This will form part of your training portfolio.



Art link 8:- is a basic software program that allows you to open an embroidery design, make basic adjustments, and write the design directly to your embroidery machine or to a removable device, such as a usb stick.

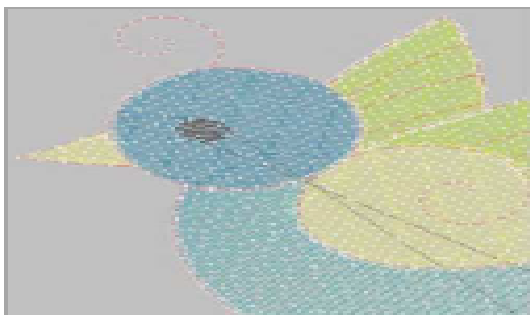
### Viewing the Design: Artistic vs. Design View

Open the design, WP009 following the file path, *C:\Users\Public\Public Embroidery\BERNINA 8 Embroidery\Animals and Bugs*.

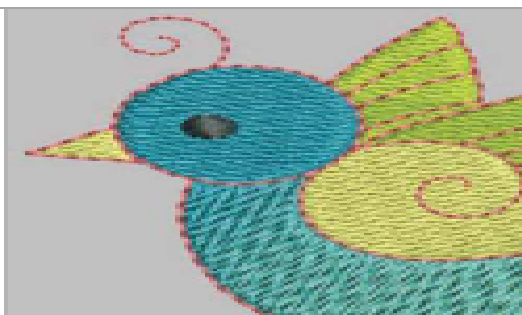
You can view the design in two ways; either in Design View or Artistic View (a rendering of the actual stitches). To change from one view to the other, click on the icon, Show Artistic View. 

A yellow icon means that the icon is active. The first time the software opens, it will open the design in Artistic View. Whatever view is active when you close the software determines how the design will open the next time you use the software.

*Design View*



*Artistic View*





## Zooming

**Mouse scroll wheel:** You can zoom in and out using the center scroll wheel on your mouse.

You can also use selections from the Zoom Toolbar in the first row of icons.

**To Fit:** The design will fill the screen.

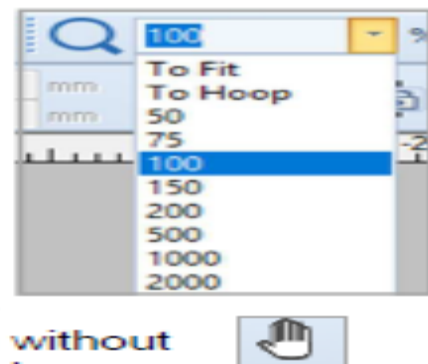
**To Hoop:** The hoop will fill the screen.

**100:** Select 100 from the list and the design will be shown onscreen at its actual size if the screen has been calibrated.

### Magnifying Glass:

The cursor turns into a magnifying glass. Click and drag a box around the area you want to focus on. When you release the mouse, that area will fill the screen.

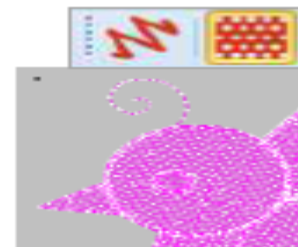
**Pan:** You can move the position of the design on the screen without changing the position within the hoop.



## Changing the View of the Screen

There are additional icons in the View Menu that affect what is seen on screen.

Switch to Design View and then click on the Points icon. All needle penetrations are displayed in the design as white dots. To turn this view off, click on the Points icon again.



### Show Hoop:

Left click on the Show Hoop icon to hide or show the hoop. When the icon is yellow, the hoop will be shown.



Right click on the icon to show a list of possible hoops. Choose your machine, the hoop size, and the foot. Press OK to activate the changes.



### Show Template

When Show Template is activated, the plastic template that comes with your machine will be shown.



### Show Grid

When Show Grid is activated, a grid will be shown on the design. Alter the size of the grid by right clicking on the icon and entering new values. Press OK in the dialog box to activate the changes.



### Show Ruler

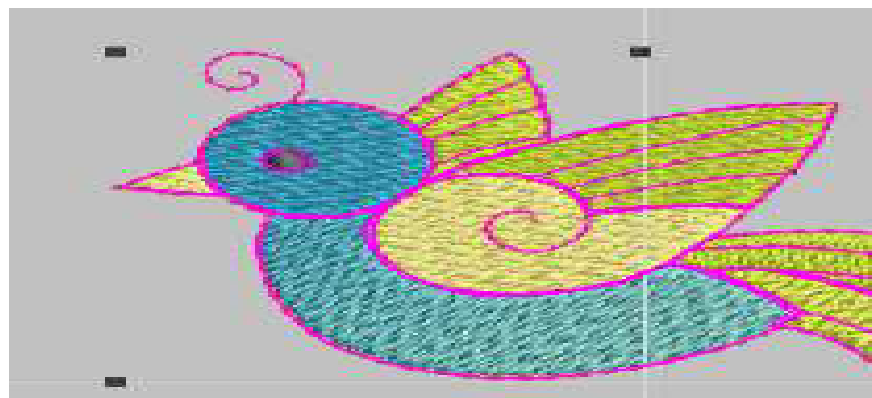
Click on Show Ruler to hide or show the horizontal and vertical rulers.



## Selecting the Design

**Select, Artistic View:** To make adjustments to the design, first select it by clicking anywhere on the design. Black control handles appear around the design when the design is selected.

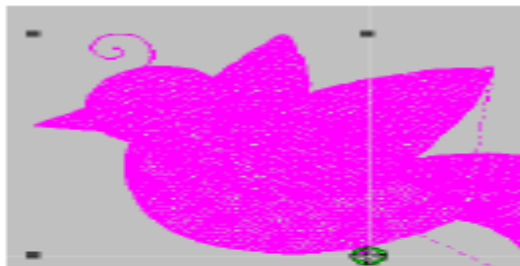
*Black handles indicate the design is selected.*



**Select, Design View:** When the view is switched to Design View and the design is selected, the design turns pink.



**Select, Design View:** When the view is switched to Design View and the design is selected, the design turns pink.



**Deselect:** Deselect the design by pressing the Esc key or by clicking anywhere on the screen away from the design.

### Modify the Design

Once the design is selected, the icons will be activated and will appear in color. If the design is not selected, the icons will appear grayed out.



*Design is selected; icons appear in color.*

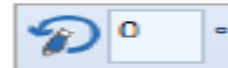


## Modify the Design *(continued)*



### Rotate 45 Degrees CCW / CW:

With the design selected, click either of the rotate 45 degree icons. Each time you click the icon, the design will rotate another 45 degrees.



### Rotate by Percent:

With the design selected, enter a value in degrees into the rotate box and press Enter. The design will rotate and the value will be reset to 0.

### Rotate by Dragging:

Click on the design twice and the control handles will appear hollow instead of black. To rotate the design visually, click on one of the corner handles and drag in the direction you wish to rotate the design.



An outline of the rotated design appears as you rotate and the degree of rotation appears in a flag. When the mouse is released, the design will be rotated.



### Scale Down / Up:



Each time the Scale Down icon is clicked, the design is reduced in size by 20%. After the design is scaled, the new size is 100%. The same is true for Scale Up, but the design is increased in size.

Stitches are added when the design is increased in size; stitches are taken away when the design is decreased in size.



## Changing the Design Size by a Specific Amount:

Change the design by a specific percentage or by a specific measurement through the measurement box in the second row of icons.

width:	3.300	in	100.00	%	
Height:	4.152	in	100.00	%	

To change the dimensions proportionally, keep Proportional Scaling in the locked position. The ratio between the length and width will be maintained.

To change the length or width independently of the other dimension, click on Proportional Scaling to open the lock.



Enter the desired dimensions in actual amounts or in a percentage and press Enter to activate the change.

The percentage will revert back to 100% after the change and the new dimensions will be shown.

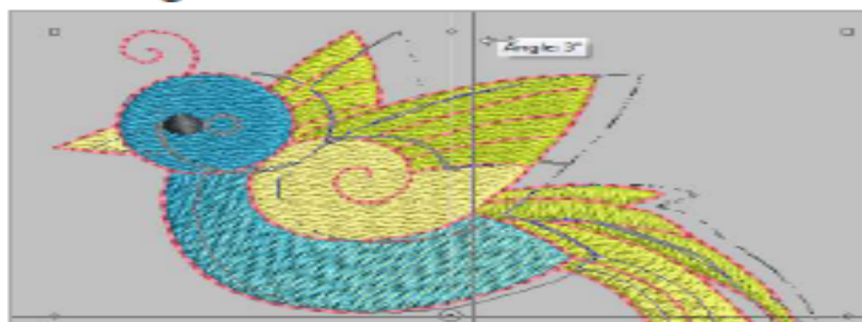
## Skewing a Design:



Skew a design by entering a value in the Skew box and pressing Enter.

To visually skew a design, change the black selection control handles to hollow rotate control handles by clicking on the design.


Click on the middle diamond-shaped handles to skew the design. These diamond-shape handles appear in the horizontal and vertical middle of the control handles. A flag appears showing the degree of the skew. Release the mouse to create the skewed design.






### Print a Template

A printed template is helpful for previewing the design on the item to be embroidered and as an aid to proper placement on that item.

- Select the Print Preview icon or File > Print Preview. 
- Click Options.
- Select 100% for Zoom.
- Select OK.
- Select Print Now to print your template.

### Stitching the Design

- Click on the Write to Card/Machine icon or select File> Write to Card/Machine. 
- The Device Selection Box will appear.
- Select the appropriate type.
- Click OK.

Self-check -3	Written test
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**Directions:** answer all the questions listed below. Use the answer sheet provided in the next page.

1. List out common method of modify the embroidery design?
2. What are the common steps of print preview an embroidery template?

**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**

Score = _____
Rating: _____





## Information sheet-4

# Determining production specifications

### Learning instructions:

1. Read the specific objectives of this learning guide.
2. Follow the instructions described in number 83 to 86.
3. Read the information written in the “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” **in page -86.**
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 4).
6. If you earned a satisfactory evaluation proceed to “information sheet 4”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to learning activity #2.
7. Submit your accomplished self-check. This will form part of your training portfolio.



## Check approved specifications

- Buyer, file no. & order quantity.
- Measurement specification
- Yarn count specification
- Fabric color approved swatch
- Needle size
- Thread tax & color

## Set embroidery m/c

- Program/SPI
- Needle
- Thread
- Pattern
- Interlining

## Embroidery quality check

- Embroidery placement
- Serial no.
- Defects/alteration
- Metal detection (as per buyer requirement)



## Embroidery process flow chart

- The flow chart has briefly discussed below. In the embroidery section, many steps are followed. Each step is described below shortly:

### 1. Monthly embroidery plan from the planning department:

- Planning department arranges the whole process which will be done for the coming order. How they provide service in a fixed date and all critical issues are determined by the planning department. The planning department makes a plan weekly/ monthly basis which style to do after which style. A planning sheet also includes a work deadline for embroidery.

### 2. Received body panel from cutting:

- Embroidery section receives a cut panel from the cutting section. Embroidery doing on specific cut parts of garments. So cutting section sends that specific parts to embroidery for embroidery operation

### 3. Received required thread/spec/design/pattern:

- For the purpose of embroidery, they received the required thread or specimen or design book or pattern. Without receiving the required material they cannot start embroidery. All necessary thread/spec./design /pattern must be ensured before the process started.



#### **4. Check approval specification:**

- We are just bound to submit the ordered goods. So before going to production the approval specification checked very carefully. All specifications match should match with approved specifications. If not match, no check with merchandising & rectify

#### **5. All specification matches:**

- Embroidery authority checked the specimen very carefully and find out the variation. They fingertips all specifications

#### **6. Set embroidery machine:**

- If all specification match set embroidery machine, if not match check with merchandising and rectify. Setting an embroidery machine for performing embroidery operation

#### **7. Embroidery operation:**

- In this step, the embroidery operation started in a little amount. Quality must be ensured as per buying house approval if the panel should recut and do embroidery again.

#### **8. Embroidery qc:**

In this step, the qc checked the embroidery. They match the produced product with the specimen. If okay go for body panel sewing. If not okay recut similar leftover fabrics and prepared for further embroidery.



### 9. Body panel sends for fusing:

- If qc pass then body panel send for fusing when the fusing operation is applicable on the part.

### 10. Send embroidery parts for sewing:

- After completing embroidery according to specification the embroidered parts send for sewing

<b>Self-check -4</b>	<b>Written test</b>
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**Directions:** answer all the questions listed below. Use the answer sheet provided in the next page.

1. List out common embroidery design quality checking?
2. What the common steps are of approve new embroidery design specification?
3. List out common embroidery process flow chart?

**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_



## Information sheet-5

## Storing, organizing and protecting designs

### Learning instructions:

1. Read the specific objectives of this learning guide.
2. Follow the instructions described in number 87 to 90.
3. Read the information written in the “information sheets 5”. 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” **in page-90 -**.
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 5).
6. If you earned a satisfactory evaluation proceed to “information sheet 5”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to learning activity #2.
7. Submit your accomplished self-check. This will form part of your training portfolio.



## Storing, organizing and protecting designs

What to do with our multiplying supply of trims, ribbon and accessories we've accumulated for sewing and machine embroidery? Believe me; everyone has the same problem when it comes to storage in our sewing and embroidery studio. There are numerous storage solutions available for this situation such as plastic tubs, drawer towers and metal grid type units. But one of my most useful and economical go-to organizing devices is the over-the-door shoe holder.

A clear vinyl shoe holder is an absolutely perfect container for many things and useful in many rooms! I recall one of my little sisters (smarter than i and very practical) mentioned this little secret years ago.

The need for storage in my laundry room has changed over the years. Originally, the over-the-door organizer was used to hold my son's remote controls for toy trucks and match box® cars, my daughter's endless barbie® dolls, bottles of bubbles and art supplies. As my children grew older, (sniff sniff) i continued to use the same unit (it is now 10 years old) for a variety of household items. Presently, it is corralling batteries, sun block, cellular phone chargers, sunglasses and whatever else does not have a permanent home.

Teenagers accumulate an extremely large amount of items in their bedrooms. I know the over-the-door organizer has helped my daughter keep her belts, scarves and hair accessories neatly in plain sight. And, by the way, it does hold approximately twelve pairs of shoes!

Most of the embroiderers i meet complain about storage issues. I know firsthand how frustrating it can be when you are in a time crunch and looking for a specific tool, specialty stabilizer or embellishment. Make your organized work area a lifestyle, not a



chore. Work in small segments, take 15 minutes and get started. Unearth that tub of trims and sort it out.

## Protecting designs

The conciseness of embroidery users back up their embroidery designs to one of the following places:

- USB sticks
- Cd's
- External hard drives
- The cloud
- dropbox

The benefit of saving to an online location such as to the cloud or dropbox is that it can be accessed from any computer anywhere in the world.

The nice thing about storing embroidery designs is that they are actually a very tiny, tiny file size. You can store thousands of embroidery designs and barely take up any room at all. Now sorting through thousands of embroidery designs could be painful if they are not properly organized.

Great tip: if you save files on your personal computer you can set it up







to automatically back up all files to a desired online location. This is a great option. The automatic saving to the cloud allows for regular backups for up-to-date security.

At heirloom creations we hear tragic stories of losing everything from time to time. Do not get caught in the “wish i should of backed up my computer” tragedy.

No matter what you pick, pick something! Safe guard your precious embroidery designs and other important items so they are always at your fingertips should a computer crash ever happen.

### Stabilizer keeper

This adorable embroidery stabilizer keeper pattern shows you how to make this hanging organizer using pretty fabric, a dowel rod, and clear vinyl for pockets. Add labels and hang. Although it could easily hang on the back of a door, it is too pretty to keep out of sight.



<b>Self-check -5</b>	<b>Written test</b>
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**Directions:** answer all the questions listed below. Use the answer sheet provided in the next page.

1. List out common way of put your embroidery design back up file?
2. What is stabilizer keeper?

**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**

Score = _____
Rating: _____



# INTERMEDIATE APPAREL PRODUCTION

## NTQF LEVEL II

**Learning guide-45**

**Unit of competence:** prepare embroidery design

**Module title:** preparing embroidery design

**LG CODE:** IND IAP2 MO11-LO4-LG-45

**TTLM CODE:** IND IAP2 MO11 TTLM 0909V1

**Lo4:** present design for feedback



## Instruction sheet

## Learning guide #-45

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

- Presenting design concept
- Receiving and considering feed back
- Modifying and improving design concept

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 –**

- Design concept is presented for feedback.
- Feedback is received and considered in line with design objectives.
- Design concept is modified and improved where possible



## Information sheet-1

## Presenting design concept

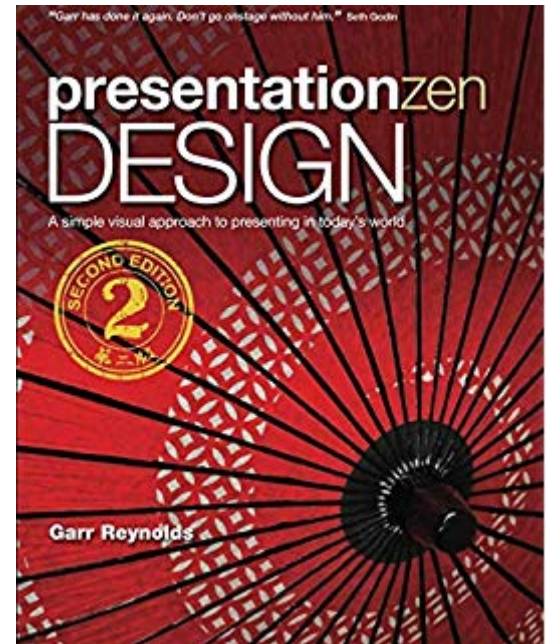
### Learning instructions:

1. Read the specific objectives of this learning guide.
2. Follow the instructions described in number 93 to 97.
3. Read the information written in the “information sheets 1”. 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” **in page-97 -**.
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).
6. If you earned a satisfactory evaluation proceed to “information sheet 2”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to learning activity #1.
7. Submit your accomplished self-check. This will form part of your training portfolio.



## Presenting design concept

As designers, we understand about motivating people through communication. However, sometimes we forget when it comes to our own work. Great design poorly presented can kill an idea. To avoid this pitfall, designers must consider the psychology behind their client's decision making. When presenting ideas, designers usually have a solution they favor. Most designers can also tell you that their favorite idea usually does not get chosen. Sometimes it is overlooked because of legitimate concerns from the client, but more than likely it's because of the way you presented it to the client.



## Five rules to use when presenting design concepts

### 1. Never show a bad idea

the first and most important rule is that you should never show work that you would not want to be associated with. The phenomena of the client choosing the least favorite design is more than legend so don't put yourself in a position where you have to carry out a design approach that is subpar. Author, educator and designer Ellen advice: "never, ever, show something you don't want the client to choose. If in doubt, take it out."

### 2. The rule of three

if you are a design legend, you can come to a meeting and present a single concept (instead of a group of them, like the rest of us). Most of us don't have that luxury, nor do our clients expect it. The rule of three is the most tried and true method for presenting ideas. Creating three options means added work as the designer is required to produce



ideas that may not reflect their ideal solution, but it mitigates the possibility of bastardizing the preferred design later in the process, as the designer has control of the compromises they are willing to make. Usually the client will choose somewhere in the middle.

- **Client’s choice:** this is a solid design, that’s not boring, but doesn’t challenge the client too much. This generally falls into the category of “what the client asked for.”
- **Designer’s choice:** this is the design that the designer thinks is the best solution. This is generally a highly creative solution that squarely balances business and audience needs.
- **“Wow” design:** this option pulls out the stops, pushes boundaries and challenges the client to think beyond the norm. This option probably won't get chosen but it gives you room to expand the conversation about what is possible.

### 3. Present in content

Scott young of perception research services suggests that designers do a disservice to themselves and their clients by presenting multiple design comps all at once. The trouble with this approach is that it turns the presentation into a “beauty contest” that pits design aesthetic against design aesthetic, as opposed to staying focused on design strategy. A better approach is to show work in relation to competitors, thereby switching the conversation from “which concept looks best,” to “which concept provides us a competitive advantage.” Young also suggests that it’s better to avoid conversations about the design aesthetic and rather focus on the brand and its meaning in a holistic way.

### 4. Name the concept

rob swan, senior vice president and executive creative director at brandimage, has a firm rule in his studio: every concept that is presented to a client has a name. “if you can’t name a concept, then there is no idea there,” explains swan. “if you can’t name the



driving concept behind the design, then it's just pure aesthetics." The name provides a clear line of sight from what you are seeing in the design all the way back to the strategy.

## **5. Focus on the problem, not the aesthetic**

the first step in presenting is to show the client that you understand the problem that the design is intended to solve. By reviewing the criteria for success that was established at the beginning of the project, you align the client's thinking, so that you share a common mind-set. As you show the work, focus on just a few key ideas that support the success criteria. Do not dwell on design elements, like typography or other design specifics, unless the client asks. What the client more likely wants to know is how the design meets his need. Discussing design is a trap that many designers fall into. They believe the client is as interested in the layout grid and typography as they are. Discussing such things invites the client to art direct the project, which is never desirable.

## **6. Present in person**

"i always present in person," says designer, educator and author petrol Vrontikis. "i hate to present in PDF form. It is the weakest way to put your work out into the world. You have no control over the way the client looks at thePDFand handles thePDF. It is completely out of your control. They show it to a bunch of people who haven't been involved and get scattered opinions." Vrontikis presents comps and discusses them with the client, but usually takes the comps with her when she leaves the meeting. Her rationale for doing so is not one of distrust of her client, but that the purpose of the meeting is to review the comps in a professional atmosphere, where she can be present to answer questions.

### **Be a presentation pro**

presenting concepts is a combination of strategy and theater. The ability to present ideas clearly to the client is often the difference between success and failure, so it's worth planning and rehearsing. Winging it or taking the presentation casually leaves you



vulnerable to the client's whims. Presenting your work in a professional manner with set standards and protocols establishes you as an expert and authority. Regardless of how good the design solution is, it must be communicated in such a way that the client has a rationale for liking it.

<b>Self-check -1</b>	<b>Written test</b>
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**Directions:** answer all the questions listed below. Use the answer sheet provided in the next page.

1. List out common five rules to use when presenting embroidery design?

**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_





## Information sheet-2

## Receiving and considering feed back

### Learning instructions:

1. Read the specific objectives of this learning guide.
2. Follow the instructions described in number 98 to 104.
3. Read the information written in the “information sheets 2”. 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” **in page-104 -**.
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).
6. If you earned a satisfactory evaluation proceed to “information sheet 2”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to learning activity #.
7. Submit your accomplished self-check. This will form part of your training portfolio.



## Receiving and considering feed back

Design feedback is an essential pedagogical tool to promote student design progress, yet little research has focused on what instructor feedback looks like, especially across design disciplines. In this paper, we analyzed feedback provided in dance choreography, industrial design, and mechanical engineering to explore variation in feedback type across disciplines as well as how feedback type encouraged students to take convergent or divergent paths in their design processes. Many common feedback types were observed across the three disciplines, regardless of



variance in context and expectations, as well as some notable distinctions. With regards to feedback directing convergent and divergent thinking, feedback suggesting convergent pathways was more prominent across all three disciplines.

### Giving useful feedback

If you're a client or project manager who needs to provide feedback to your designer, keep these guidelines in mind.

### Start with a foundation of trust

The best design feedback I receive comes from people who I trust, and I know they have equal respect for me. Trust is a two-way street, and it must be established before a designer will receive your feedback with open arms.



Show faith in me by never impeding on my ownership of the design process. Show that your goal is the best design outcome for your project, and it's never muddled by personal preferences or competing agendas.

### **Frame your feedback with context**

The most important thing about design feedback is that it must always remain framed by your project goals and metrics for success.

### **Be clear and specific**

Nothing is worse than vague feedback. *"I'm not feeling it"*, or *"It doesn't pop"* are worthless statements. First, make sure you frame your feedback and describe precisely what it applies to (be it color, layout, content design, usability, etc

### **Describe problems, don't offer solutions**

This might be the most common offender. Clients get too prescriptive with their feedback, and it drives designers' nuts. Instead of providing the how, provide the why.

When you're supplying design feedback, it's natural to want to offer solutions. But if you knew the best design solutions, you wouldn't need the expertise of a designer. This goes back to showing trust and respect. Trust that I, with your help, will come up with the best solution.

### **Be prepared to explain your thinking**

The design feedback process should be a discussion. Rarely do I receive feedback and never reply for clarification. As a designer my job is to question everything. So if you come at me with *"make the logo bigger"* I will always say *"why?"* If you give me a vague *"I don't like this"*, i'll ask *"why not?"*. Or I may even say, *"but how will your*



*customers react to it?*”. Be prepared to answer that why every single time. If you don’t have an answer that ties back to your project goals and customer needs, then question whether that piece of feedback has any merit at all. Better yet, provide the why right from the beginning, so I don’t have to ask.

### **Serve up a love sandwich**

To soften the blow of negative critique, try presenting it as a love sandwich. The two pieces of bread are praise, and the filling in the middle is the negative feedback.

### **Stay objective**

This one can be really challenging for some people because our personal preferences are so innate to our decision making process. But you are not your customers. Your preferences have very little weight unless the product you’re designing is made for you as the sole user. When providing feedback, it’s vital that you remove from the equation as much of your own aesthetic preference as possible. Instead, focus on what your customers will like. What makes them feel they can trust your company? What makes their lives easier? Your subjective impressions rarely impact heavily on those goals. There should be very little need for comments like *“I don’t like this”*. Instead, think in terms of *“our users may not understand this”*. Stay objective and aligned with your project goals at all times.

### **Receiving design feedback**

Designers, follows these steps to make your feedback process pain-free and maximize usefulness

### **Set a process and clear expectations**

If your clients suck at providing feedback, much of the blame falls on you for not educating them in how to do it well. Remember that many of them aren’t used to this



process — they may never have done it before — and you need to guide them to provide feedback that is most useful to you.

**Before you ask for your first round of feedback, explain this to your client:**

1. Precisely what you want feedback on (so your client focuses on the right things).
2. What type of feedback is most useful? (see Giving Useful Feedback above).
3. Who is providing feedback? Is this a single person or a committee? Is there one point of contact who will be responsible for consolidating all feedback for you?
4. How do you want to receive feedback? In-person? By phone or email? In invasion comments? Consider how you are you most comfortable receiving feedback, and also what format is most efficient for your design process.

**Start early and ask often**

Gone are the days of the big reveal from the celebrity designer, when you present a nearly finished concept to your clients and hope for a “wow” response. Especially with digital products, it’s essential to start the feedback and iteration process as early as possible, because the best work is deeply collaborative. Don’t head too far down any path without feedback first. This keeps things efficient and on-budget, which will please your business-conscious clients.

Aim for frequent small updates and continuous feedback rather than large chunks of work with occasional feedback between. This has the added benefit of making your client feel more involved too.



Don't be afraid to pull in others for feedback right from the get-go. Your developer(s) should have eyes across the design and UX early on, to help pinpoint areas that may cause dev headaches and cost overruns.

### **Stay open-minded and don't take it personally**

Take critique with grace and dignity. Never get defensive. Remember your client is only trying to help you create the best design outcome. Critique of your design is not personal. Your client may see things from a very different perspective than you, and that perspective is valuable. The feedback process is the most important way for you to improve as a designer, so take everything constructively and try to learn and grow from it.

Lose your ego and stay open-minded to ideas no matter where they come from. If you have to shoot-down an idea, use data and experience to justify your thinking. Stay polite at all time, even if you feel your client isn't.

### **Clarify and find the root of the cause**

Ask why? All the time! If your client doesn't provide adequate justification for their requests, demand it. If feedback gets too prescriptive or subjective, focus back to goals and metrics for project success, and frame your clarifying questions in those term to force the ensuing discussion down the right path. Don't end that discussion until you're satisfied you fully understand the motivation behind that piece of feedback.

Question your own assumptions too! As a designer it's easy to get stuck in a rut and keep reusing the same design solutions over and over. But the right solution for one project may be wrong for another. Learn to step back from your work from time to time to question yourself.



**Present better solutions, and know how to justify them.**

If your client requests a design solution that you believe is inferior to your ideas, show it to them anyway. And then present your “better” solution along with it as comparison. This ensures your client that you’re listening to their ideas rather than dismissing them, so they feel they don’t lose control of the outcome..

<b>Self-check -2</b>	<b>Written test</b>
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**Directions:** answer all the questions listed below. Use the answer sheet provided in the next page.

1. What is the three disciplines convergent pathway?

**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_



## Information sheet-3

# Modifying and improving design concept

### Learning instructions:

1. Read the specific objectives of this learning guide.
2. Follow the instructions described in number 105 to 107.
3. Read the information written in the “information sheets 1”. 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” **in page -107**.
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).
6. If you earned a satisfactory evaluation proceed to “information sheet 3”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to learning activity #.
7. Submit your accomplished self-check. This will form part of your training portfolio.





## Modify an entire design

Once you are used to the steps involved in sewing outdesigns – either clipart or ones you have purchased –you will soon want to make global designmodifications such as resizing, or changing threadcolors and fabric types. These are all relatively simpleoperations.

### To modify an entire design

- 1 Open the design you want to use. See **Opening designs** for details.



- 2 Check design dimensions, and resize as required. See **Scaling objects** for details.

For example, if you are stitching a left chest design, maximum size will be approximately 4.25" or 108 mm square.

- 3 Adjust design thread colors as desired. See **Changing thread colors** for details.



- 4 Check the fabric type and change as necessary. See also **Changing fabrics**.
- 5 Select a hoop of the required size. See **Selecting hoops** for details.



6 Visualize the design on a garment or article. See **Visualizing finished articles** for details.



7 Print a worksheet and send the design to machine. See **Printing designs** and **Stitching out designs** in the Reference Manual for details.

Self-check -3	Written test
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**Directions:** answer all the questions listed below. Use the answer sheet provided in the next page.

1. List out common steps of modify an entire design?

**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_

