



Republic of the Philippines  
DEPARTMENT OF EDUCATION



# K to 12 Basic Education Curriculum Technology and Livelihood Education Learning Module



## BEAUTY CARE (NAIL CARE) SERVICES

*EXPLORATORY COURSE*

*Grade 7 and Grade 8*

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## What Is This Module About?

Welcome to the world of **Beauty Care (Nail Care) Services!**

This Module is an exploratory course which leads you to **Beauty Care (Nail Care) Services National Certificate Level II (NC II)**<sup>1</sup>. It covers four (4) common competencies that a Grade 7 / Grade 8 Technology and Livelihood Education (TLE) student like you ought to possess, namely:

- 1) Use of Nail Care Tools and Equipment;
- 2) Maintain Tools and Equipment;
- 3) Practice Occupational Health and Safety Procedure; and
- 4) Practice basic nail designs

These four (4) common competencies are covered separately in 4 Lessons. As shown below, each Lesson is directed to the attainment of one or two learning outcomes:

### Lesson 1 – **Use of Nail Care Tools and Equipment**

- LO1. Prepare the necessary tools and equipment for the specific nail care activity.
- LO2. Use nail care tools and equipment.

### Lesson 2 – **Maintain Tools and Equipment**

- LO1. Check condition of nail care tools and equipment
- LO2. Perform basic preventive and corrective maintenance
- LO3. Store nail care tools and equipment

### Lesson 3 – **Practice Occupational Health and Safety Procedure**

- LO1. Identify hazards and risks
- LO2. Evaluate and control hazards and risks

### Lesson 4 – **Practice basic nail designs**

- LO1. Identify nail structure, shapes and nail diseases/disorders
- LO2. Create basic nail designs

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<sup>1</sup>NATIONAL CERTIFICATE (NC) is a certification issued to individuals who have achieved all the required units of competency for a national qualification as defined under the Training Regulations. NCs are aligned to specific levels within the PTQF. (TESDA Board Resolution No. 2004-13, Training Regulations Framework)

NATIONAL CERTIFICATE LEVEL refers to the four (4) qualification levels defined in the Philippine TVET Qualifications Framework (PTQF) where the worker with:

a. NC I performs a routine and predictable tasks; has little judgment; and, works under supervision;

b. NC II performs a prescribed range of functions involving known routines and procedures; has limited choice and complexity of functions, and has little accountability;



## How Do You Use This Module?

This Module has four (4) Lessons. Each lesson has the following components:

- Learning Outcome/s
- Performance Standard
- Materials /Resources
- Definition of Terms
- What Do You Already Know?
- What Do You Need to Know?
- How Much Have You Learned?
- How Do You Apply What You Have Learned?
- How Well Did You Perform?
- What is your Score?
- References

To get the most from this Module, you need to do the following:

- Begin by reading and understanding the Learning Outcome/s and Performance Standard/s. These tell you what you should know and be able to do at the end of this module.
- Find out what you already know by taking the pretest. Then check your answers against the Answer Key. If you got 99 to 100% of the items correctly, you may proceed to the next Lesson. This means that you have no need to go through the lesson because you already know what it teach. If you fail to get 99 to 100% of the items correctly, repeat the Lesson and review those items which you failed to get correctly.
- Do the required Learning Activities. The section begins with one or more Information Sheets. An Information Sheet contains important notes or basic information that you need to know.  
After reading the Information Sheet, test how much you learned by doing the Self-check. Refer to the Answer Key for correction. Do not hesitate to go back to the Information Sheet if you did not get all test items correctly. This will ensure your mastery of basic information.
- It is not enough that you acquire content or information. You must be able to demonstrate what you learned by doing what the Activity / Operation /Job Sheet directs you to do. In other words, you must be able to apply what you learned in real life.
- How well did you perform? Accomplish the Scoring Rubrics.

Each Lesson also provides you with references and definition of key terms for your guide. They can be of great help. Use them fully.



If you have questions, do not hesitate to ask your teacher.





## Definition of Terms

**Bevel** – to shape the edge of something

**Dispose** – to throw away

**Hygiene** – the science concerned with maintaining good health and cleanliness

**Implements** – articles or tools used in manicuring

**Infection** – a condition caused by a germ or a pathogen

**Pathogen** – a microbe or microorganism such as a virus, bacterium, prion, or fungus that causes disease

**Sterilization** – any process that eliminates (removes) or kills all forms of microbial life

**Radiation** – a process in which energy is transmitted in the form of waves or particles that can be used to destroy microorganisms

**Disinfectant** – an agent, such as heat, radiation, or a chemical, that destroys, neutralizes, or prevents the growth of disease-carrying microorganisms

**Antiseptic** – a substance, milder than a disinfectant, that prevents the growth and development of microorganisms

**Cuticle** – the nonliving epidermis that surrounds the edges of the fingernail or toenail

**Moisten** – make wet or damp

**Nail bed** – the portion of the skin upon which the nail plate rests

**Effleurage** – a French word meaning "to skim" or "to touch lightly", is a series of massage strokes intended to warm up the muscles

**Spa** – a beauty care service where curative minerals are present for beautification

**Hand spa** – a beauty care service using natural oils, vitamins and minerals, and which is believed to have effect on the body

**Paraffin** – a waxy white or colorless solid hydrocarbon mixture used to make candles, wax paper, lubricants, and sealing materials

**Foot spa** – a beauty care service offered by salons to relax and moisturize the feet

## LEARNING OUTCOME 1

**Prepare the necessary nail care tools and equipment for specific nail care activities.**

## PERFORMANCE STANDARDS

- Tools and equipment are prepared based on established salon procedures and policies.
- Tools and equipment are identified and checked according to task requirements.



## Materials

- Hand tools, equipment and specifications
- Tools condition report forms
- Workplace/simulated environment



## What Do You Already Know?

**Let us determine how much you already know about the use of nail care tools and equipment. Take this test.**

Pretest LO 1

**Directions:** Choose the letter of the correct answer. Write your answer on a separate sheet.

1. A tool that is used to push back or loosen the cuticles
  - a. Cuticle remover
  - b. Nail File
  - c. Cuticle nail pusher
  - d. Emery board
2. An implement that is used to shape the free edges of the nail with the coarse side, and bevel the nail with the finer side
  - a. Nail Cutter
  - b. Nail File
  - c. Nail Trimmer
  - d. Nail Buffer

3. The equipment which is used to sanitize or kill bacteria or micro-organisms in metal implements.
  - a. Hand Spa Machine
  - b. Buffer
  - c. Solvent
  - d. Sterilizer
  
4. The implement with pointed and rounded ends to remove excess polish.
  - a. Orangewood Stick
  - b. Nail File
  - c. Nail Buffer
  - d. Emery board
  
5. The electronic gadget which is used to soothe pain of arthritis, muscle spasms and dry skin of the hands.
  - a. Sterilizer
  - b. Foot Spa Machine
  - c. Hand Spa Machine
  - d. Manicure Table
  
6. It is used to smooth out ridges on the nails, give nails a healthy shine and remove any surface stain.
  - a. Sterilizer
  - b. Buffer
  - c. Nail file
  - d. Orangewood stick
  
7. A type of volcanic rock used to remove callouses.
  - a. Foot spa basin
  - b. Foot spa tray
  - c. Pumice stone
  - d. Cotton
  
8. It is a wheeled cart that is pushed by hand and used for transporting manicuring and pedicuring tools and materials.
  - a. Trolley
  - b. Supply tray
  - c. Manicure tray
  - d. Foot file
  
9. It is an organic compound used as sanitizer in nail salons.
  - a. Base coat
  - b. Top coat
  - c. Alcohol
  - d. Cuticle solvent
  
10. It is a clear polish applied to the nail plate before the application of colored polish.
  - a. Base coat
  - b. Top coat
  - c. Alcohol
  - d. Cuticle solvent





## What Do You Need To Know?

Read the Information Sheet 1.1 very well then find out how much you can remember and how much you learned by doing Self-check 1.1.

Information Sheet 1.1

### NAIL CARE TOOLS AND EQUIPMENT

**TOOLS** are articles used in any nail care service which are durable or permanent and are hand-held. Tools are also referred to as implements.

The tools commonly used in **manicure** and **pedicure** are the following:

**Callous remover** is designed to strip off calluses and corns.



**Cuticle nail pusher** is used to push back and loosen the cuticles.



**Cuticle nipper** is used to cut the cuticles.



**Cuticle scissors** are used to cut stubborn cuticles.



**Finger or Manicure bowl** is a small bowl used for soaking the fingers to soften the cuticles.



**Foot file** is made of metal or sandpaper, with a rough file on one side to remove calluses and a fine file on the other to smoothen the feet.



**Foot spa basin** is a large rectangular container used for bathing and soaking the feet when giving a pedicure.



**Manicure tray** is a flat container where all the necessary tools and implements are placed for use by the manicurist.



**Manicure nail brush** is a plastic brush with nylon bristles used to clean dirt and cosmetic residue from the nail surface and skin.



**Mixing bowl** is a small open-top, rounded cup-like container used for mixing the aromatic oils and other fluids for the hand or foot spa.



**Nail buffer** is used for smoothing and polishing the nails.



**Nail cutter / Nail clipper / Nail trimmer** is a hand tool made of metal used to trim fingernails and toenails.



**Nail file** is an implement used to shape the free edges of the nail with the coarse side and bevel the nail with the finer side.



**Orangewood stick** is an implement with pointed and rounded ends to remove excess polish.



**Pedicure nail brush** is a tool used to remove cosmetics and cleanse nails.



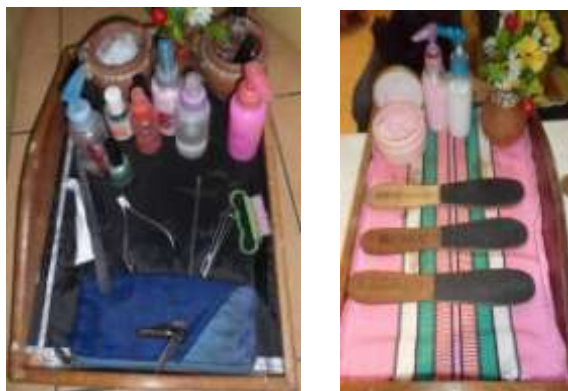
**Plastic container for cotton** is a small receptacle for cotton.



**Pumice stone** is a type of volcanic rock, that removes dry and annoying skin of the feet as well as calluses.



**Supply tray** is a flat container that holds the necessary cosmetics and implements.



**Trolley** is a wheeled cart that is pushed by hand and used for transporting manicuring and pedicuring tools and materials.



**MATERIALS** are cosmetics and supplies that are consumed and should be replaced from time to time. They are also called *consumables*.

The following are the materials used in giving manicure, pedicure, and hand and foot spa:

**Rubbing alcohol** is an organic compound used as sanitizer.



**Antiseptic solution** is an agent that reduces or prevents the multiplication of microorganisms.



**Apron** is an outer protective garment that covers primarily the front of the body to protect clothes from dirt or stains.



**Assorted colored nail polish** is a lacquer applied on fingernails and toenails to decorate and/or protect the nail plate.



**Base coat** is a clear layer of polish applied to the nail plate before the application of colored polish to smoothen the nail surface and promote healthier nails.



**Benzalconium chloride** is a yellow-white powder prepared in an aqueous solution and used as surface disinfectant and topical antiseptic.

**Bleaching soap** is a type of soap formulated to whiten the skin.



**Cling wrap** is a thin plastic film used for sealing the paraffin during a hand spa.



**Cotton** is a soft white downy fiber for dubbing or cleaning the nails and removing nail polish.



**Cuticle oil** is a mixture of fats and waxes containing lanolin and petroleum base to soften and lubricate the skin around the nails.



**Cuticle remover** is a liquid used to soften nail cuticles and prepare them for cutting.



**Disinfectant** is an agent, such as heat, radiation, or a chemical, that destroys, neutralizes, or prevents the growth of disease-carrying microorganisms.



**Emery board** is a wooden, sand paper-like stick with a fine texture on one side and a coarse texture on the other side used to gently grind down the edges of the nails.



**First aid kit** is a collection of supplies for use in giving first aid.



**Foot blush** is a liquid spray that contains peppermint and alpha hydroxyl acids derived from fruits. It whisks away dead skin cells, deodorizes, and softens the feet, giving them a pinkish glow after use.



**Foot soak** is an herbal blend to relax, energize, soothe and deodorize the feet.



**Foot scrub** is a mixture of natural ingredients to keep feet soft, smooth, and moisturized.



**Garbage bins/bags** are plastic disposable bags or trash receptacles used to contain rubbish.



**Hand towel** is an absorbent cloth for drying the hands.



**Lotion** is any of various cosmetic preparations that are applied to soften the skin.



**Manicure pillow** is a hand cushion that helps a client to keep her hands steady and relaxed.



**Nail hardener** is a liquid applied to the nails to form a protective barrier to prevent chipping, peeling, and splitting of nails.



**Nail polish remover (Acetone)** is an organic solvent used to dissolve old polish on nails.



**Quick dry** is a liquid applied to colored nail polish to dry faster.





**Solvent** is a substance used to thin out the nail polish when it has thickened.



**Toe nail separator** is a soft material where toes are inserted to keep them apart to prevent a freshly painted toenail from staining another toe.



**Top coat** is a clear nail polish applied to the nails after the colored polish to protect it from scratches and chips, it makes nails harder and keeps them looking shiny.



**Towel** is an absorbent cloth for drying the hands and feet.



**Wet sanitizer** is a substance or preparation for killing germs.



**EQUIPMENT** are the items which are more or less durable and permanent needed for a particular activity or purpose.

These are the equipment and furniture or fixtures that are used in a beauty salon:

**Chairs** are seats with back support and four legs others have arm rests.



**Foot spa machine** is an electronic gadget used for soaking, bathing, and massaging the feet during a foot spa.



**Foot spa tool** is a simple seat with three or four legs designed to provide comfort and elevation during a foot spa.



**Hand spa machine** is an electronic gadget used to soothe pain from arthritis, and muscle spasms, and dry cracked skin of the hands.



**Manicurist's chair or stool** is an adjustable upholstered seat fitted over a piece of metal or chrome.



**Manicure table** is a furniture especially designed for giving manicure. It usually has a laminated plastic surface and a drawer for storing materials. It is often fitted with ball casters for easy mobility.



**Sterilizer** is an equipment in a salon used for sterilizing metal implements to kill microorganisms.



**Timer** is a device that can be preset to start or stop something at a given time.



## How Much Have You Learned?

### Self-Check 1.1

Read the questions carefully. Write the answer on a separate sheet of paper.

- \_\_\_\_\_ 1. What do we call the tool that is used to push back or loosen the cuticles?
- \_\_\_\_\_ 2. What implement is used to shape the free edges of the nail with the coarse side and bevel the nail with the finer side?
- \_\_\_\_\_ 3. What hand tool is made of metal and is used to trim fingernails and toenails?
- \_\_\_\_\_ 4. How do we call the implement used for smoothing and polishing the nails?
- \_\_\_\_\_ 5. What is a wooden, sand paper-like stick with a fine texture on one side and a coarse texture on the other side used to gently grind down the edges of the nails called?
- \_\_\_\_\_ 6. How do we call the implement with pointed and rounded ends to remove excess polish?
- \_\_\_\_\_ 7. What electronic gadget is used for soaking, bathing, and massaging the feet during a foot spa?

- \_\_\_\_\_ 8. What do we call the equipment in a salon that is used for sterilizing metal implements to kill microorganisms?
- \_\_\_\_\_ 9. How do we call the simple seat with three or four legs designed to provide comfort and elevation during a foot spa?
- \_\_\_\_\_ 10. What electronic gadget is used to soothe pain of arthritis, muscle spasms and dry cracked skin of the hands?

**Refer to the Answer Key. What is your score?**



## How Do You Apply What You Have Learned?

**Show that you learned something by doing this activity**

Activity Sheet 1.1

### I. Identification of Tools and Equipment According to Task Requirement

Materials, Tools, and Equipment

<b>Tools</b>	<b>Materials</b>	<b>Equipment</b>
Callous Remover	Alcohol	Chairs
Cuticle Nail Pusher	Antiseptic Solution	Foot Spa Machine
Cuticle Nipper	Apron	Hand Spa Machine
Cuticle Scissors	Assorted Nail Polish	Foot Spa Stool
Finger or Manicure Bowl	Base Coat	Manicurist's Stool
Foot File	Benzalconium Chloride	Manicure Table
Foot Spa Basin	Bleaching Soap	Sterilizer
Foot Spa Tray with Handle	Cling Wrap	Timer
Manicure Tray	Cotton	
Manicure Nail Brush	Cuticle Oil	
Mixing Bowl	Cuticle Remover	
Nail Buffer	Disinfectant	
Nail Cutter/Clipper/Trimmer	First Aid Kit	
Nail File	Foot Blush	
Orange Wood Stick	Foot Soak	
Pedicure Nail Brush	Foot Scrub	
Plastic Container for Cotton	Garbage Bags/Bins	
Pumice Stone	Hand Towel	
Trolleys	Emery board	

	<b>Material</b>	
	Lotion Manicure Pillow Nail Hardener Nail Polish Remover Quick Dry Solvent Toe Nail Separator Top Coat Wet Sanitizer	

Instructions:

You are given different materials, tools, and equipment. Group all the materials together, then all the tools, and finally the equipment.

**II. Procedure:**

1. Identify the tools, materials, and equipment which are used in giving:
  - A. Manicure and Pedicure
  - B. Hand Spa
  - C. Foot Spa
2. Check the tools, materials, and equipment for proper operation as per safety practices.
3. Gather all the materials in the shop or laboratory. Classify all those unsafe for use and mark “S”; those unsafe for use, mark “U”, and those for repair, “R”.



**How Well Did You Perform?**

**Find out by accomplishing the Scoring Card honestly and sincerely. Remember it is your learning at stake!**

**Direction:**

Evaluate yourself by checking the appropriate boxes to indicate the degree of competency in handling nail care tools and equipment.

<b>Criteria</b>	<b>15</b>	<b>10</b>	<b>5</b>	<b>Score</b>
Identify nail care tools, materials and equipment.				
Demonstrate knowledge on the safety practices of nail care tools, materials, and equipment.				
Classify nail care tools and equipment according to their standards of use				
<b>Total</b>				

**Rating Scale:**

15 – The student consistently perform tasks to standards with no supervision

10 – The student can perform the tasks with limited supervision and/or does not perform the task to standard.

5 – The student can perform the tasks with direct supervision.

Activity Sheet 1.2

Following are necessary tools, materials and equipment for specific nail care services.

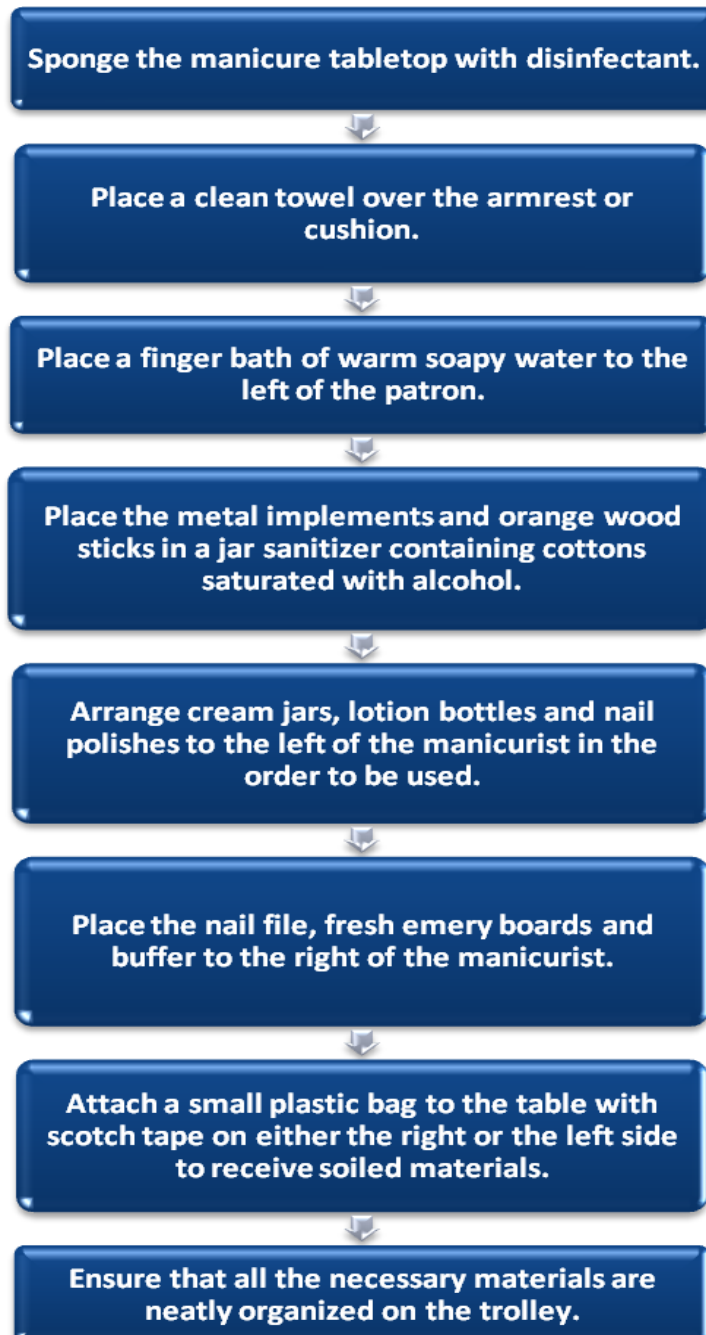
<b>Tools</b>	<b>Materials</b>	<b>Equipment</b>
Callous Remover	Alcohol	Chairs
Cuticle Nail Pusher	Antiseptic Solution	Foot Spa Machine
Cuticle Nipper	Apron	Hand Spa Machine
Cuticle Scissor	Assorted Nail Polish	Foot Spa Stool
Finger or Manicure Bowl	Base Coat	Manicurist's Stool
Foot File	Benzalconium Chloride	Manicure Table
Foot Spa Basin	Bleaching Soap	Sterilizer
Foot Spa Tray with Handle	Cling Wrap	Timer
Manicure Tray	Cotton	
Manicure Nail Brush	Cuticle Oil	
Mixing Bowl	Cuticle Remover	
Nail Buffer	Disinfectant	
Nail Cutter/Clipper/Trimmer	First Aid Kit	
Nail File	Foot Blush	
Orange Wood Stick	Foot Soak	
Pedicure Nail Brush	Foot Scrub	
Plastic Container for Cotton	Garbage Bags/Bins	
Pumice Stone	Hand Towel	
Trolleys	Emery board	
	Lotion	
	Manicure Pillow	
	Nail Hardener	
	Nail Polish Remover	
	Quick Dry	
	Solvent	
	Toe Nail Separator	
	Top Coat	
	Wet Sanitizer	

Direction:

Demonstrate the following activities requiring the use of specific materials, tools and equipment.

Activity Sheet 1.2

## I. MANICURE



## II. PEDICURE



## III. HAND SPA





#### IV. FOOT SPA





# How Well Did You Perform?

Find out by accomplishing the Scoring Rubric honestly.

## Rubric for Performance

Dimension	Highly Skilled 5	Skilled 4	Moderately Skilled 3	Unskilled 2	No Attempt 1
Use of tools, Equipment, and materials (20%)	Appropriate selection, preparation, and use of materials and tools/ equipment all the time	Appropriate selection, preparation, and use of materials and tools/ equipment most of the time	Appropriate selection, preparation, and use of materials and tools/ equipment some of the time	Never selects, Prepares, and uses appropriate materials and tools/equipment	No attempt to use tools/ equipment
Application of procedure (40%)	Systematic application of procedures all the time without supervision	Systematic application of procedures most of the time with minimum supervision	Systematic application of procedures some of the time with constant supervision	Never follows systematic application of procedures and highly dependent on supervision	No attempt to apply procedures to project/activity
Work Safety / habits (30%)	Highly self-motivated and observes all safety precautions at all times	Self-motivated and observes most safety precautions most of the time	Self-motivated and observes occasionally some safety precautions	Needs to be motivated and does not observe safety precautions	No motivation and totally disregards precaution
Time/ Speed (10%)	Work finished ahead of time	Work finished meets deadline	Work finished close to deadline	Work finished way beyond deadline	No concept of time

### Rating Scale

Weighted Score = Score x Item (weight)

Score Percentage =  $\frac{\text{Total weighted score} \times 30 + 70}{\text{Perfect score (5)}}$

### Example:

5 x 20% = 1  
 5 x 40% = 2  
 4 x 30% = 1.2  
 3 x 10% = 0.3  
**Total weighted score = 4.5**

**Score Percentage**

$$= \frac{4.5}{5} \times 30 + 70$$

**Grade = 97**

**Note:** If you want to give your students higher grades, adjust the score percentage by changing 30+70 to 40 + 60.



## How Do You Extend Your Learning?

**Direction:** After learning about the different tools, materials and equipment, with your own sets of nail care tools, materials and equipment, classify them using the grid below. Do this on a separate sheet of paper.

	TOOL	MATERIAL	EQUIPMENT
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
21.			
22.			
23.			

## LEARNING OUTCOME 2

### Use nail care tools and equipment

## PERFORMANCE STANDARDS

- Tools and equipment are used according to task requirements.
- Safety procedures for using tools and equipment are observed.



## Materials

- Hand tools, equipment, and specifications
- Personal protective equipment (PPE)
- Workplace/simulated environment



## What Do You Already Know?

Let us determine how much you already know about the use of nail care tools and equipment. Take this test.

Pretest LO 2

**Direction:** Match the word in column A with its description in column B. Write the letter of the correct answer on a separate sheet.

Column A	Column B
1. Emery board	a. an electronic gadget used for giving foot spa.
2. Nail buffer	b. a tool that is used to give the nails a natural glow
3. Callous remover	c. an implement used to bevel and smoothen the nails
4. Foot spa machine	d. a tool used to remove callouses
5. Cuticle nipper	e. it is used to remove nail polish
6. Cuticle pusher	f. it is a soft material inserted between toes
7. Foot scrub	g. It is an implement with pointed and rounded ends used to remove excess polish
8. Orangewood stick	

9. Acetone
10. Toe nail separator

- h. an implement used to push dead cuticle
- i. it is a mixture of natural ingredients to keep feet soft, smooth, and moisturized



## What Do You Need To Know?

**Read the Information Sheet 2.1 very well and then find out how much you can remember and how much you have learned by doing Self-check 2.1.**

### Information Sheet 2.1

Nail Care, once considered as a luxury for the few or as a mark of distinction between the rich and the poor, is now within the reach of the general public. In fact, part of a person's grooming and a form of inexpensive relaxation is a regular nail care activity – be it manicure, pedicure, hand spa or foot spa.

The following shows the proper way of holding and handling some nail care tools or implements and equipment.

## MANICURE AND PEDICURE

### Nail File

- Hold the file firmly in the right or left hand (as the case may be), with the thumb underneath it for support and the other four fingers on its upper surface. Place the file slightly under the free edge and file the nail from corner to center, shaping the nail. Never file back and forth; this would cause the nails to crack and split. Do not file deep into the corners; this weakens the nails, hurts, the skin, and causes ingrown nails.



### Emery Board

- It is held in the same manner as the nail file. Bevel the rough surface of the nail using the fine side to smoothen it. Emery boards are discarded after use on one person.



### Orangewood Stick

- It is held in the same manner as in writing with a pencil. To loosen cuticle, work around nail; for applying oil or solvent, slightly dip the cotton-tipped orangewood stick and work around the base of the nail; to clean under the free edge of the nail, from the center toward each side, with gentle pressure so that live tissue at the root of the nail will not be injured.



### Cuticle Nail Pusher

- It is held in the same manner as in writing with a pencil. The dull spade side is used to push back and loosen the cuticles. Keep cuticle moist using cuticle remover while working. Use the cuticle pusher in a flat position to remove dead cuticle adhering to the nail without scratching the nail plate. In using the pusher, avoid too much pressure to prevent injury on tissues.



### Cuticle Nipper

- Pick up the cuticle nipper by the handles and turn the cutting edges towards you; place the bent tip of the index finger over the top of the shank. Place the thumb on the side of the handle and the remaining fingers over the opposite handle. Use it with utmost care to remove dead cuticle and hangnails so as not to injure live tissue



### Nail Cutter

- Hold the clippers with cutting edges downward between thumb, index and middle finger. Press clipper handles by squeezing them together and remove excess nail length.



### Nail Brush

- Insert the ring finger and pinky in the nail brush handle and brush the nails with a downward motion from the base to the fingertips to clean the nails and fingers.



## Nail Buffer

- Place the thumb and the ring finger under the handle of the buffer while the index and the middle fingers are on its top and the pinky is on its side. Apply a small amount of powder over the buffer then buff the nails with downward strokes from the base to the free edge of each nail until a smooth clear gloss has been obtained. Buffing helps in giving the nail natural gloss and increases blood circulation to the finger tips. To prevent heating and burning sensation, lift the buffer from the nail after each stroke.



## HAND AND FOOT SPA

### Foot File

- Start with the course side of the foot file. Gently slide it back and forth across the ball of your foot and the bottom the toes. Still with the rough side of the file work mostly on the outside rim of the heel. Flip the file over and repeat the process with each foot. The fine side will smoothen the skin and leave it feeling polished.



### Callous Remover

- Insert the blade into the callous remover with care. Lay the callous remover on the top thick part of the callous. Do not lay the blade above the area that is going to be cut, as this may result in cutting the soft part of the foot, resulting in an open wound. Applying light pressure with a steady hand on the callous remover, gently glide it over the callous. Repeat the process if necessary until the callous is thinner. Smoothen the callous with a foot file.



### Pumice Stone

- After soaking the feet in warm soapy water, use the pumice stone to gently buff away cracked or dry skin of the feet with a soft, circular motion. Never apply heavy pressure to the pumice for this can cause sores, open wounds, and possible infection.



### Hand and Foot Spa Machine

- Make sure that electrical wirings are dry and protected from accidental water spillage. Set the machine to the temperature that the client can withstand.



Learning to use tools and equipment properly assures you that you will give your client a nail care service safely. You should carefully follow these tips if you want to achieve quality service all the time.

### PPE (Personal Protective Equipment)

Personal Protective Equipment are garments designed to protect the wearer's body from injury or chemicals or for job-related occupational safety and health purposes.

**Glove** is a hand covering.



**Smock gown** is a loose cloak or robe worn to protect the clothes.



**Mask** is a protective face covering for hygienic purposes and to protect the face against chemical exposure.





**Headband** is a band of absorbent material worn on or around the head across the forehead to keep the sweat and the hair off the face.



## How Much Have You Learned?

Self-Check 2.1

**Refer to the Answer Key. What is your score?**

I. Answer each question briefly.

1. Why should filing be done from the corners to the center of the nails?
2. Why is gentle pressure applied in using orangewood stick?
3. What effect does buffing have on the nails?
4. Why should a cuticle nipper be used with utmost care?
5. What would likely to happen if heavy pressure was applied when using a pumice stone?



## How Do You Apply What You Have Learned?

Show that you learned something by doing this activity

Operation Sheet 2.1

### I. Demonstration on the proper use of nail care tools and equipment

Materials, Tools and Equipment

<b>Materials</b>			
Cuticle remover	Hand towel	First aid kit	Antiseptic solutions
<b>Tools</b>			
Nail file	Orangewood stick	Cuticle nail pusher	Nail cutter
<b>Equipment</b>			
Foot spa machine			

#### Procedure:

1. Demonstrate the proper use of the following tools:
  - a. Cuticle nail pusher
  - b. Nail file
  - c. Orangewood stick
  - d. Nail cutter
2. Show how to set the hand spa machine for use.
3. Act out how to set a foot spa machine for use.

#### II-A. Materials and Tools:

Materials		
Cuticle remover	Cotton	Hand towel
Tools		
Orangewood stick	Cuticle nail pusher	

#### Instructions:

1. Apply cuticle remover to cuticle in one stroke. Spread it with a brush.
2. Allow to stand for 1 minute.
3. Hold orangewood stick tipped with cotton or cuticle nail pusher 2.5 cm from tip.
4. Starting at one side of the nail, gently begin to loosen the cuticle with a rotating action. Work from one side of the nail to the other.
5. Using tip of the implement, remove matter from under the free-edge.
6. Using a cotton, carefully mold back skin, wiping off remaining cuticle remover.

### III-B. Materials and Tools:

Materials			
Antiseptic	solution	Cotton	First aid kit
Tools			
Nail cutter/clipper			

#### Instructions:

1. Adjust the clipper in working position.
2. Turn the client's palm up.
3. Hold the client's finger upright between your thumb and fingers.
4. Hold clippers with cutting edges downward between thumb and index and middle fingers.
5. Place the nail plate between cutting edges, holding clipper to cut straight across the nail plate.
6. Gauge the desired length of nail (not shorter than 3mm).
7. Press clipper handles by squeezing handles together, and remove excess length.



## How Well Did You Perform?

Find out by accomplishing the Scoring Rubric honestly.

Criteria	Weight
Demonstrated the proper way of using all nail care tools and equipment	15 pts.
Demonstrated the proper way of using most of the nail care tools and equipment	10 pts.
Demonstrated the proper way of using some of the nail care tools and equipment.	5 pts.
Failed to demonstrate the proper way of using nail care tools and equipment	1 pt.

#### Rating Scale:

- 15 – Very Good
- 10 – Good
- 5 – Fair
- 1 – Needs Improvement



## How Do You Extend Your Learning?

After learning how to use the different nail care tools and equipment properly, you will be shaping the nail using the emery board on your own.

1. Hold the emery board between the thumb and index finger of the dominant hand.
2. Hold the client's fingertip between the thumb and index finger of auxiliary hand.
3. Position the emery board under the free edge of the nail.
4. Slide the emery board across free edge to center of nail edge in one stroke. Work from the corner to the center of the nail.
5. Place the emery board on the opposite side of the nail and repeat the procedure.
6. Repeat until desired shape is achieved.
7. Check the nail edge for rough spots. Bevel the nail by lightly filing edge downward with the fine side of the emery board.

When you are finished, check your work and then show it to your teacher for critiquing.



**Congratulations! You did a great job! Rest and relax a while and then move on to the next lesson. Good luck!**

### REFERENCES

#### LO1

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- Moore, Oakley and Franco. The World of Cosmetology. McGraw-Hill Book Company: 1980

#### LO 2

- Nordmann, Lorraine, et. al. Beauty Therapy – The Foundation. Thomson Learning: 2001
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## LESSON 2

# Maintenance of Tools and Equipment



### LEARNING OUTCOMES:

At the end of this Lesson, you are expected to do the following:

- LO 1. Check condition of nail care tools and equipment;**
- LO 2. Perform basic preventive and corrective maintenance; and**
- LO 3. Store nail care tools and equipment.**



## Definition of Terms

**Antiseptic** – a substance, milder than a disinfectant, that prevents the growth and development of microorganisms

**Contaminated wastes** – materials which are infected or with some measure of decay

**Disinfectant** – an agent, such as heat, radiation, or a chemical, that destroys, neutralizes, or prevents the growth of disease-carrying microorganisms

**Dispose** – to throw away

**Foot spa** – a beauty care service offered by salons to relax and moisturize the feet

**Hand spa** – a beauty care service using natural oils, vitamins and minerals, having curative effect on the body

**Hygiene** – the science concerned with maintaining good health and cleanliness

**Implements** – durable articles or tools used in manicuring

**Infection** – a condition caused by a germ or a pathogen

**Pathogen** – a microbe or microorganism such as a virus, bacterium, prion, or fungus that causes disease

**Polythene** – a kind of plastic commonly used as grocery bags, shampoo bottles, children's toys among others

**PPE (Personal Protective Equipment)** – protective clothing designed to protect the wearer's body from injury or chemicals or for job-related occupational safety and health purposes

**Radiation** – a process in which energy is transmitted in the form of waves or particles that can be used to destroy micro-organisms

**Spa** – a beauty care service where curative minerals are present for beautification

**Sterilization** – any process that eliminates (removes) or kills all forms of microbial life

## LEARNING OUTCOME 1

**Check the condition of nail care tools and equipment**

### PERFORMANCE STANDARDS

- Procedures for sterilization and sanitation of nail care tools and equipment are followed.
- Non-functional tools and equipment are segregated and labeled according to classification.
- Tools and equipment are safely stored in accordance with salon requirements and local health regulations.
- Conditions of PPE are checked in accordance with the manufacturer's instructions.



### Materials

- Tools, equipment, and specifications
- Personal protective equipment (PPE)
- Workplace/simulated environment



### What Do You Already Know?

**Let us determine how much you already know about the use of nail care tools and equipment. Take this test.**

Pretest LO 1

#### A. Multiple Choice

**Directions:** Choose the letter of the correct answer. Write your answer on a separate sheet.

1. It is the process of destroying all living microorganisms.
  - a. Sanitation
  - b. Disinfecting
  - c. Sterilization
  - d. Sanitization

2. It is the process of destroying some, not all microorganisms using heat or antiseptics.
  - a. Sanitation
  - b. Disinfecting
  - c. Sterilization
  - d. Sanitization
  
3. It is a substance used to control micro-organisms on non-living surfaces.
  - a. Antiseptic
  - b. Solvent
  - c. Disinfectant
  - d. Nail Hardener
  
4. It is an agent that prevents the multiplication of micro-organisms.
  - a. Antiseptic
  - b. Solvent
  - c. Disinfectant
  - d. Nail Hardener
  
5. It is the application of measures to promote public health and prevent the spread of infectious diseases.
  - a. Sanitation
  - b. Disinfecting
  - c. Sterilization
  - d. Sanitization

### B. Essay

**Directions:** Briefly discuss the following questions

1. A strong emphasis is placed on sanitizing all implements and equipment. Why is sanitizing so important in nail care?
2. Differentiate sanitation from sterilization.



## What Do You Need To Know?

Read the Information Sheet 1.1 very well and then find out how much you can remember and how much you learned by doing Self-check 1.1.

Information Sheet 1.1

### Ensuring Safety and Cleanliness in the Salon

It is important to assemble, sanitize, and sterilize all the necessary items before starting any nail care activity. **Sanitation** is the application of measures to promote public health and prevent the spread of infectious diseases. The observance of safety rules in the salon industry can be of great help in preventing accidents and injury to anyone in the salon.



## **Sterilization vs Sanitization**

**Sterilization** is the process of destroying all living micro-organisms. **Sanitization** is the process of destroying some, not all microorganisms. Sterilization and sanitization techniques applied in the beauty salon involve the use of physical agents like heat and radiation; and chemical agents like antiseptics and vapor fumigants.

### **disinfectant vs antiseptic**

A **disinfectant** is a substance used to control micro-organisms on non-living surfaces such as tools, equipment, and furniture/ fixtures. An **antiseptic** is an agent that prevents the multiplication of microorganisms. Since it is milder than a disinfectant, it can be used directly on the skin.

#### **Preparation of Equipment to be Sanitized**

- a. Read directions on disinfectant.
- b. Measure and mix the disinfectant as directed.
- c. Saturate a cleaning cloth with disinfectant solution and wipe entire surface area of equipment.
- d. Wipe the surface dry with paper towel to dry it.
- e. Dispose of sanitizing solution and used towels.

#### **Preparation of Metals Implements for Sterilization**

- a. Soak the tools/ implements in hot, soapy water solution to remove any debris and oil residue. Rinse them thoroughly.
- b. Place the tools/implements in a 70% to 90% alcohol solution for 20 minutes.
- c. Remove the tools/implements from solution, wipe them dry, and place them into a dry sterilizer.

#### **Preparation of the Sanitizing Jar**

- a. Cleanse the sanitizing jar with disinfectant and wipe it dry.
- b. Place thin layer of sterile cotton at the bottom of jar.
- c. Remove implements from wet or dry sanitizer and place them into the jar, handles up, except for metal nail files.
- d. Fill the jar with 70% to 90% alcohol solution to cover cutting edges and tips of orangewood sticks.

Keep in mind that all tools/implements and equipment should not be used unless effectively sanitized or sterilized so as to prevent potential diseases. Ensure that all materials are neatly organized on the trolley. All beauticians should maintain a high standard of personal hygiene. Wherever possible, use disposable products.

Ensure the client's safety and comfort by using tools and equipment which are in good condition and that he/she is provided with the appropriate personal protective clothing.

Your goal is to give the highest professional nail care service to each client. As such, tools and equipment must be thoroughly checked to identify those which function efficiently and those which do not. See to it that functional tools and equipment are stored safely in accordance

with salon requirements and local health regulations. Non-functional or faulty tools and equipment are segregated and labeled properly either for repair or for discarding.

After every working session, the following should be done:

- a. Tools which are made of plastic should be kept clean and sanitized properly in preparation for the next patron.
- b. Empty bottles and containers are discarded in a covered trash bin.
- c. Used treatment products and other chemicals are stored, arranged and properly labeled in the cabinet.
- d. Finger bowls must be sanitized before use for the next client.
- e. The hand and foot spa machines must be flushed with a solution of about 5% bleach. Circulate the liquid through the system for at least 10 minutes.
- f. Leave the solution in the hand and foot spa machines overnight or at least 5-10 hours before draining the machines so that they are thoroughly sanitized.
- g. Table tops and door handles are wiped with disinfectant and the floor should be mopped with disinfectant as well.
- h. Metal tools and instruments must be sterilized following proper sterilization techniques. After the process, store it in a dry cabinet until needed.
- i. Tools/Implements which are made of porous materials such as nail files, buffers, nail brushes and orangewood sticks can harbor bacteria easily. Since they are wood products which cannot be sterilized, these tools should not be reused.
- j. Waste materials should be disposed of properly in an enclosed waste bin fitted with polythene bag. The bin should be sanitized with disinfectant regularly in a well-ventilated area. Remember to wear protective gloves while doing this.
- k. Contaminated wastes should be disposed of, following the right procedures prescribed by local authorities.
- l. Any tool or equipment in poor condition must be repaired immediately or disposed of properly so as not to pose danger to the clients as well as the beauticians.





## How Much Have You Learned?

Self-Check 1.1

**Refer to the Answer Key. What is your score?**

Directions: Write brief answers to the following questions:

1. How often does a beautician sanitize her hands?
2. How can you keep metal tools/implements clean after being sterilized?
3. How should waste materials be disposed of? How about contaminated wastes?
4. Why is it important to observe safety rules in the salon?
5. When do we say that tools and equipment are in good condition? When do we say that they are not?



## How Do You Apply What You Have Learned?

**Show that you learned something by doing this activity**

Activity Sheet 1.1

### I-A. Materials, Tools, Equipment and PPE

Materials	Tools	Equipment	PPE
Alcohol	Cuticle nail pusher	Foot spa machine	Gloves
Bleach	Nail cutter	Hand spa machine	Mask
Disinfectant	Cuticle nippers	Sterilizer	
Cleaning cloths	Cuticle scissors	Foot spa stool	
	Metal file	Manicure table	
	Orangewood stick	Manicurist's stool	

Procedure:

The students are grouped with 5 members each.

1. Simulate/Perform
  - a. Group 1 – Sanitize hand and foot spa machines
  - b. Group 2 – Sterilize metal tools/implements
  - c. Group 3 – Sanitize non-metal tools/implements
  - d. Group 4 – Sanitize environmental surfaces
  - e. Group 5 – Dispose waste materials and contaminated wastes

**B. Tools and Equipment:**

TOOLS	EQUIPMENT
Callous Remover	Chairs
Cuticle Nail Pusher	Foot Spa Machine
Cuticle Nipper	Hand Spa Machine
Cuticle Scissor	Foot Spa Stool
Finger or Manicure Bowl	Manicurist's Stool
Foot File	Manicure Table
Foot Spa Basin	Sterilizer
Foot Spa Tray with Handle	Timer
Manicure Tray	
Manicure Nail Brush	
Mixing Bowl	
Nail Buffer	
Nail Cutter/Clipper/Trimmer	
Nail File	
Orange Wood Stick	
Pedicure Nail Brush	
Plastic Container for Cotton	
Pumice Stone	
Trolleys	

**C. Instructions: Your group is given sets of tools and equipment. Do the following**

1. Make a checklist of these tools and equipment following the format below.

TOOL	GOOD CONDITION	DEFECTIVE
1.		
2.		
3.		
4.		
5.		

EQUIPMENT	GOOD CONDITION	DEFECTIVE
1.		
2.		
3.		
4.		
5.		

2. Check each tool and equipment.
3. Depending on the specific conditions of the tools and equipment, tick off (✓) the appropriate column (GOOD or DEFECTIVE) for each item.
4. Label the tools and equipment that are defective.

Let your teacher evaluate your work.



## How Well Did You Perform?

Find out by accomplishing the Scoring Rubric honestly.

### Rubric for Performance

Dimension	Highly Skilled 5	Skilled 4	Moderately Skilled 3	Unskilled 2	No Attempt 1
Use of tools, Equipment, and materials (20%)	Appropriate selection, preparation, and use of materials and tools/ equipment all the time	Appropriate selection, preparation, and use of materials and tools/ equipment most of the time	Appropriate selection, preparation, and use of materials and tools/ equipment some of the time	Never selects, Prepares, and uses appropriate materials and tools/equipment	No attempt to use tools/ equipment
Application of procedure (40%)	Systematic application of procedures all the time without supervision	Systematic application of procedures most of the time with minimum supervision	Systematic application of procedures some of the time with constant supervision	Never follows systematic application of procedures and highly development on supervision	No attempt to apply procedures to project/activity
Work Safety / habits (30%)	Highly self-motivated and observes all safety precautions at all times	Self-motivated and observes most safety precautions most of the time	Self-motivated and observes occasionally some safety precautions	Needs to be motivated and does not observe safety precautions	No motivation and totally disregards precaution
Time / Speed (10%)	Work finished ahead of time	Work finished meets deadline	Work finished close to deadline	Work finished way beyond deadline	No concept of time

#### Rating Scale

Weighted Score: = Score x Item (weight)

Score Percentage =  $\frac{\text{Total weighted score} \times 30 + 70}{\text{Perfect score (5)}}$

#### Example:

$5 \times 20\% = 1$   
 $5 \times 40\% = 2$   
 $4 \times 30\% = 1.2$   
 $3 \times 10\% = \underline{0.3}$   
**Total weighted score = 4.5**

**Score Percentage**

$$= \frac{4.5 \times 30 + 70}{5}$$

**Grade = 97**



## How Do You Extend Your Learning?

After identifying functional and non-functional tools and equipment, your group will make a log report.

- a. With an index card (5x8), construct a grid and list all identified and labeled defective tools in alphabetical order.

TOOL	RECOMMENDATION	
	For Repair	For Disposal
1.		
2.		
3.		
4.		
5.		

- b. Using another index card (5x8), do the same with defective equipment.

TOOL	RECOMMENDATION	
	For Repair	For Disposal
1.		
2.		
3.		
4.		
5.		

- c. Submit your log reports to your teacher.

## LEARNING OUTCOME 2

**Perform basic preventive and corrective maintenance**

## PERFORMANCE STANDARDS

- Nail care tools and equipment are identified.
- Appropriate cleaning procedures for nail care tools and equipment are applied.
- Tools are cleaned according to standard procedures.
- Defective equipment and tools are inspected and replaced according to manufacturer's specifications.
- Workplace is cleaned and maintained according to OHS regulations.



## Materials

- Tools, equipment, and specifications
- Personal protective equipment (PPE)
- Workplace/simulated environment



## What Do You Already Know?

Let us determine how much you already know about the basic preventive and corrective maintenance of nail care tools and equipment. Take this test.

Pretest LO 2

**Directions:** Supply an appropriate word to make each statement complete. Choose the answer from the words enclosed in the box below and write it on a separate sheet of paper.

Water	Store	Inspect	Boil
Enclosed		Sterilize	Disinfect
Sanitary		Washed	Directed

1. \_\_\_\_\_ metal implements after every use to avoid infection or possible diseases.
2. \_\_\_\_\_ foot basins after each use with a bleach solution.
3. \_\_\_\_\_ metal implements once a month in a pot for 10 minutes.
4. \_\_\_\_\_ sterilized metal instruments in an airtight, zipper-sealed bag to keep them from being exposed to dirt and bacteria.
5. \_\_\_\_\_ tools and equipment regularly to identify defective ones.
6. All beauty salons must be well-lighted and ventilated and must be in good \_\_\_\_\_ condition.
7. Salon establishments must be provided with continuous running hot and cold \_\_\_\_\_.
8. All waste materials should be disposed of in an \_\_\_\_\_ waste bin fitted with polythene bin liner.
9. Each client must be provided with a freshly \_\_\_\_\_ towel.
10. Measure and mix disinfectant as \_\_\_\_\_.





## What Do You Need To Know?

**Read the Information Sheet 1.1 very well and then find out how much you can remember and how much you learned by doing Self-check 1.1.**

Information Sheet 2.1

### **Keeping Tools and Equipment Safe, Clean and Functional**

It is vital to sterilize metal implements, sanitize wooden tools, disinfect hand and foot spa machines as well as environmental surfaces before and after each use. Contaminated tools can cause bacterial and fungal infections that are unsightly, painful, and sometimes, fatal. There are several methods of cleaning and sterilization. Do a cursory cleaning after each nail care service and deep-clean monthly to keep tools safe and useful all the time.

1. Sterilize metal implements after each use in a hospital-grade disinfectant that is bactericidal, virucidal, and fungicidal. This disinfectant can be found in beauty supply stores. Immerse the tools in the disinfectant for 10 minutes.
2. Disinfect foot basins after each use with a bleach solution. Make a 1:10 solution by mixing one part bleach with 10 parts water. Using gloves, rinse the basin with the solution to disinfect. If necessary, scrub with a detergent to remove any dirt or debris.
3. Use a boiling method of sterilization once a month to disinfect all metal implements. Designate one pot for sterilization to prevent cross-contamination with food. Submerge the tools in boiling water for 10 minutes. Drain the tools and allow them to dry.
4. Store sterilized metal implements in an airtight, zipper-sealed bag to keep them from being exposed to dirt and bacteria. Be sure tools are completely dry before storing them. In case there is an interval of at least two weeks before the next nail care service, sterilize the tools again before use.
5. Inspect tools and equipment regularly to identify defective ones for repair, replacement, or condemnation.

### **Keeping the Workplace Clean and Safe**

1. All beauty salons must be well-lighted and well-ventilated and must be in good sanitary condition.
2. The salon premises must be free from rodents, vermin, flies and or similar insects.
3. All salon establishments must be provided with continuous running hot and cold water.
4. The curtains and floor coverings in the salon must be washable and kept clean.

5. All hair, used cotton or other waste materials must be removed from the floor immediately, and deposited in a closed container. Get rid of them from the salon premises at frequent intervals.
6. The rest rooms must be well-sanitized and be provided with individual towels.
7. Each beautician must wear a washable uniform while serving clients.
8. Each client must be provided with a freshly laundered towel.
9. All waste materials should be disposed of in an enclosed waste bin fitted with polythene bin liner, durable enough to resist tearing.



## How Much Have You Learned?

Self-Check 2.1

**Refer to the Answer Key. What is your score?**

Enumerate the following:

1. 5 Ways to Keep Tools and Equipment Safe and Functional
2. Ways to Keep the Salon Clean



## How Do You Apply What You Have Learned?

**Show that you learned something by doing this activity**

Operation Sheet 2.1

### **A. Group Activity**

**Directions:** Visit your school's beauty salon and determine if it is clean and safe. Make the necessary recommendations if it is beyond your limitations.

1. See to it that the premises are free from rodents, vermin, flies and similar insects.
2. Make sure that the place is provided with continuous running hot and cold water.
3. Inspect the curtains and floor coverings if they are washed and ironed.

4. Ensure that all used cotton or other waste materials are removed from the floor immediately, and deposited in a closed container. Get rid of them from the salon premises at frequent intervals.
5. Check if the rest room is sanitized, including its door knob, and if it has towels.
6. Check if waste materials are disposed of in an enclosed waste bin fitted with polythene bin liner, durable enough to resist tearing.

**B. Materials, Tools, Equipment and PPE**

Materials			
Alcohol	Bleach	Disinfectant	Cleaning cloths
Tools			
Cuticle Nail Pusher	Nail Cutter	Cuticle Nippers	
Cuticle Scissors	Metal File	Orangewood Stick	
Equipment			
Foot Spa Machine	Hand Spa Machine	Sterilizer	
Foot Spa Stool	Manicure Table	Manicurist's Stool	
PPE			
Gloves	Mask		

Procedure:

1. Steps in Sanitizing Equipment
  - a. Read directions on disinfectant.
  - b. Measure and mix disinfectant as directed.
  - c. Saturate a cleaning cloth with disinfectant solution and wipe entire surface area.
  - d. Wipe the surface, dry with paper towel.
  - e. Dispose of sanitizing solution and used towels.
  
2. Steps in Sterilizing Metal Implements
  - a. Soak the tools/ implements in hot, soapy water solution to remove any debris and oil residue. Rinse them thoroughly.
  - b. Place the tools/implements in a 70% to 90% alcohol solution for 20 minutes.
  - c. Remove the tools/implements from solution, wipe them dry, and place them into a dry sterilizer.

3. Steps in Sanitizing Wooden Implements
  - a. Cleanse sanitizing jar with disinfectant and wipe it dry.
  - b. Place thin layer of sterile cotton at the bottom of jar.
  - c. Remove implements from wet or dry sanitizer and place them into the jar, handles up, except for metal nail files.
  - d. Fill jar with 70% to 90% alcohol solution to cover cutting edges and tips of orangewood sticks



## How Well Did You Perform?

Find out by accomplishing the Scoring Card honestly.

**Directions:** Evaluate your group by checking the appropriate boxes to indicate the degree of competency in the given activities.

Criteria	15	10	5	Score
Follows proper way of keeping the workplace clean and safe.				
Demonstrates knowledge on sanitizing nail care: <ol style="list-style-type: none"> <li>a. equipment</li> <li>b. metal implements</li> <li>c. wooden implements</li> </ol>				
Observes safety precautions at all times				
Finishes work finished on time				
<b>Total</b>				

### Rating Scale:

- 15 – The students consistently perform tasks to standards with no supervision.
- 10 – The student s can perform the tasks with limited supervision and/or does not perform the task to standard.
- 5 – The student can perform the tasks with direct supervision.



## How Do You Extend Your Learning?

**Directions:** After learning the proper cleaning procedure for nail care tools and equipment, you are now ready to clean your own sets of tools and equipment.

1. Clean your metal instruments according to standard procedure.
2. Disinfect your foot basin, finger bowl, foot spa stool, manicurist's stool, and manicure table.
3. Sanitize your orangewood stick, buffer, foot brush, and nail brush.

Present your finished work to your teacher for evaluation.

## LEARNING OUTCOME 3

### Store nail care tools and equipment

## PERFORMANCE STANDARDS

- Inventory of tools, instruments and equipment is conducted and recorded.
- Tools and equipment are stored safely in accordance with manufacturer's specifications.



## Materials

- Hand tools, equipment, and specifications
- Tools condition report forms
- Workplace/simulated environment



## What Do You Already Know?

Let us determine how much you already know about the proper storage of nail care tools and equipment. Take this test.

Pretest LO 3

**Directions:** Write T if the statement is correct; if not, change the underlined word/s to make it correct.

1. Tools which are made of metal should be kept clean and sanitized properly in preparation for the next client.
2. The hand and foot spa machines must be kept dry after disinfecting them.
3. Metal tools and instruments must be sterilized following proper sterilization techniques.
4. Tools/ Implements which are made of porous materials such as nail files, buffers, nail brushes and orangewood sticks cannot be sterilized. These tools should not be reused.
5. Tools or equipment in poor condition can still be used in any nail care service.



## What Do You Need To Know?

**Read the Information Sheet 1.1 very well and then find out how much you can remember and how much you learned by doing Self-check 1.1.**

### Information Sheet 3.1

At the end of every working session, make an inventory of specific activities that should be done:

- a. Plastic tools should be kept clean and sanitized properly in preparation for the next client.
- b. Empty bottles and containers are discarded in a covered trash bin.
- c. Used treatment products and other chemicals are stored, arranged and properly labeled in the cabinet.
- d. Finger bowls must be sanitized before they are used by another client.
- e. The hand and foot spa machines must be kept dry after disinfecting them.
- f. Table tops and door handles are wiped and the floor mopped with disinfectant.
- g. Metal tools and instruments must be sterilized properly. Then they are stored in a dry cabinet until needed.
- h. Tools/implements are made of porous materials, such as nail files, buffers, nail brushes and orangewood sticks can harbor bacteria easily. Since they are wood products which cannot be sterilized, these tools should not be reused.
- i. Waste materials should be disposed of properly in an enclosed waste bin fitted with polythene bag. The bin should be sanitized with disinfectant regularly in a well-ventilated area. Remember to wear protective gloves while doing this.
- j. Any tool or equipment in poor condition must be repaired immediately, replaced or disposed of properly so as not to pose danger both to the clients and beauticians.

#### Storage:

A manicurist must ensure that storage of nail care tools, materials, and equipment within the establishment meets the following requirements.

1. Flammable and combustible chemicals are stored away from potential sources of ignition such as an open flame or an electrical device;
2. All nail care chemicals are stored in closed bottles or containers.
3. Storage units:
  - a. Cabinets, drawers, containers used for storage of implements and towels are clean;
  - b. Clean linen is stored in an enclosed, dust-proof cabinet or container;
  - c. Implements which have been used on a client are not mixed with clean ones;

4. Supplies:
  - a. Unused supplies, except product application brushes, are stored in a clean, closed container or drawer;
  - b. Used/soiled disposable supplies are discarded immediately in a clean, closed waste receptacle;
5. Implement Storage:
  - a. Implements that have been used on a client or soiled in any manner are placed in a properly labeled covered receptacle until disinfected;
  - b. Sanitized implements are stored in a clean closed container or drawer until used;
- 6 . Towels
  - a. Cloth towels are deposited in a closed receptacle after use;
  - b. Used/soiled cloth towels are not used again until properly laundered and sanitized;
  - c. Disposable towels are discarded in a covered waste receptacle immediately following each nail technology service;







## How Much Have You Learned?

### Self-Check 3.1

In not less than 5 sentences, describe how tools and equipment are stored.

#### Scoring rubric

	Fair 5 pts	Good 10 pts	Very Good 15 pts
Knowledge and understanding	Student was able to convey limited ideas on the topic with little knowledge.	Student was able to convey a few ideas on the topic with some degree of knowledge.	Student was able to convey several ideas on the topic with a good degree of knowledge.
Accuracy	Work was organized and planned with little effectiveness.	Work was organized and planned with some effectiveness.	Work was organized and planned with considerable effectiveness.
Effort	Student put little or no effort into this activity.	Student put some effort into this activity.	Student put full effort into this activity.

Rating Scale:

15 pts. = Very Good

10 pts. = Good

5 pts. = Fair



# How Do You Apply What You Have Learned?

Show that you learned something by doing this activity.

Operation Sheet 3.1

## I-A. Materials, Tools, and Equipment

Tools	Materials	Equipment
Callous Remover	Alcohol	Chairs
Cuticle Nail Pusher	Antiseptic Solution	Foot Spa Machine
Cuticle Nipper	Apron	Hand Spa Machine
Cuticle Scissor	Assorted Nail Polish	Foot Spa Stool
Finger or Manicure Bowl	Base Coat	Manicurist's Stool
Foot File	Benzalconium Chloride	Manicure Table
Foot Spa Basin	Bleaching Soap	Sterilizer
Foot Spa Tray with Handle	Cling Wrap	Timer
Manicure Tray	Cotton	
Manicure Nail Brush	Cuticle Oil	
Mixing Bowl	Cuticle Remover	
Nail Buffer	Disinfectant	
Nail Cutter/Clipper/Trimmer	First Aid Kit	
Nail File	Foot Blush	
Orange Wood Stick	Foot Soak	
Pedicure Nail Brush	Foot Scrub	
Plastic Container for Cotton	Garbage Bags/Bins	
Pumice Stone	Hand Towel	
Trolleys	Emery board	
	Lotion	
	Manicure Pillow	
	Nail Hardener	
	Nail Polish Remover	
	Quick Dry	
	Solvent	
	Toe Nail Separator	
	Top Coat	
	Wet Sanitizer	

Procedure:

1. Given the list of materials, tools and equipment in nail care, show how to properly store them.

### B. Materials, Tools and Equipment

All the materials, tools and equipment provided in the workplace

Instructions: Simulate the proper safekeeping and storage of tools and equipment.

#### Score Card

**Directions:** Evaluate yourself by checking the appropriate boxes to indicate the degree of competency in the given activities.

Criteria	15	10	5	Score
Follows the proper way of storing nail care tools and equipment.				
Complete the steps in the correct sequence.				
Observes safety precautions at all times.				
Finishes work on time.				

#### Rating Scale:

15 – The student consistently performs tasks to standards with no supervision.

10 – The student can perform the tasks with limited supervision and/or does not perform the task to standard.

5 – The student can perform the tasks with direct supervision.



## How Do You Extend Your Learning?

After learning the correct way of safekeeping/storage of nail care tools and equipment, you are now assigned to do the same in your work shop.

1. Make an inventory of all the tools and equipment in your shop work using index cards as your checklist.

Tick off (✓) the tool, material or equipment which are missing.

Tools		Materials		Equipment	
Callous Remover		Alcohol		Chairs	
Cuticle Nail Pusher		Antiseptic Solution		Foot Spa Machine	
Cuticle Nipper		Apron		Hand Spa Machine	
Cuticle Scissor		Assorted Nail Polish		Foot Spa Stool	
Finger or Manicure Bowl		Base Coat		Manicurist's Stool	
Foot File		Benzalconium Chloride		Manicure Table	
Foot Spa Basin		Bleaching Soap		Sterilizer	
Foot Spa Tray with Handle				Timer	
Manicure Tray		Cling Wrap			
Manicure Nail Brush		Cotton			
Mixing Bowl		Cuticle Oil			
Nail Buffer		Cuticle Remover			
Nail		Disinfectant			
Cutter/Clipper/Trimmer		First Aid Kit			
Nail File		Foot Blush			
Orange Wood Stick		Foot Soak			
Pedicure Nail Brush		Foot Scrub			
Plastic Container for Cotton		Garbage Bags/Bins			
		Hand Towel			
Pumice Stone		Emery board			
Trolleys		Lotion			
		Manicure Pillow			
		Nail Hardener			
		Nail Polish Remover			
		Quick Dry			
		Solvent			
		Toe Nail Separator			
		Top Coat			
		Wet Sanitizer			



**Congratulations! You did a great job! Rest and relax a while before you move on to the next lesson. Good luck!**

## REFERENCES

### LO1

- Nordmann, Lorraine, et. al. Beauty Therapy – The Foundation. Thomson Learning: 2001
- Kibbe, Constance V. Standard Textbook of Cosmetology. Milady Publishing Corp: 1984
- Moore, Oakley and Franco. The World of Cosmetology. McGraw-Hill Book Company: 1980

### LO 2

- Nordmann, Lorraine, et. al. Beauty Therapy – The Foundation. Thomson Learning: 2001
- Kibbe, Constance V. Standard Textbook of Cosmetology. Milady Publishing Corp: 1984
- Moore, Oakley and Franco. The World of Cosmetology. McGraw-Hill Book Company: 198

### LO 3

- Nordmann, Lorraine, et. al. Beauty Therapy – The Foundation. Thomson Learning: 2001
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## LESSON 3

# Practicing Occupational Health and Safety Procedures



### LEARNING OUTCOMES:

At the end of this Lesson, you are expected to do the following:

- LO1. Identify hazards and risks; and
- LO2. Evaluate and control hazards and risks;



## Definition of Terms

**Chemical hazards** – are substances used and/or produced at work that have the potential to harm the health and safety of people at work.

**Infection** – a condition when microorganisms invade the body and multiply, causing illness.

**Infection control** – a process that minimizes the risk of spreading infection while performing procedures on client.

**Harm** – adverse health effects on something or someone under certain conditions at work.

**Maximal Allowable Concentration (MCL)** – is a peak or maximum concentration of an airborne, to which most workers could be safely exposed.

**Occupational Hazards** – are various environmental factors or stresses that can cause sickness, impaired health, or significant discomfort in workers and can be classified as chemical, physical, biological, or ergonomic.

**Occupational health and safety (OHS)** – a planned system of working to prevent illness and injury, where you work by recognizing and identifying hazards and risks.

**OSH trainings** – are interventions conducted to facilitate learning on occupational safety and health, the results of which can contribute to the attainment of better and improved OSH conditions.

**Skin penetration** – means any process, intentionally or otherwise, that involves the shaving, piercing, cutting, puncturing, or tearing of the skin or mucous membrane.

**Threshold Limit Value (TLV)** – is a measure of concentration of toxic substances that a person can withstand.

**Workplace** – refers to the office, premises or worksite where a worker is habitually assigned. Where there is no fixed or definite workplace, the term shall include the place where the worker actually performs regular work, or where he regularly reports to render service or to take an assignment.

## LEARNING OUTCOME 1

**Identify hazards and risks**

## PERFORMANCE STANDARDS

- Workplace hazards and risks are identified.
- Hazards and risks and their corresponding indicators are identified in the workplace.
- Effects of hazards are determined.



## Materials

- Lcd projector, video clips, laptop
- Workplace/simulated environment





## What Do You Already Know?

**Let us determine how much you already know about the hazards and risks in the workplace. Take this test.**

Pretest LO 1

Read the following statements and select the best answer.

1. It is the chance or probability that a person will be harmed or will experience an adverse health effect if exposed to a hazard.
  - a. harm
  - b. risk
  - c. ergonomics
2. It is an adverse health effect on something or someone under certain conditions at work.
  - a. harm
  - b. risk
  - c. ergonomics
3. It involves identifying the hazards present and then evaluating the risks, taking into account the existing precautions.
  - a. risk assessment
  - b. training
  - c. experience
4. It is important to give the health and safety experience to new or inexperienced workers, including those that have been away from the workforce for some time.
  - a. training
  - b. exposure
  - c. hygiene
5. It is a practice in some beauty salons that may adversely affect the health of customers and workers such as exposure to biological hazards that cause infectious diseases.
  - a. unsafe practices
  - b. fungi
  - c. activities



## What Do You Need To Know?

Read the Information Sheet 1.1 very well and then find out how much you can remember and how much you learned by doing Self-check 1.1.

### Information Sheet 1.1

**Occupational health and safety (OHS)** is a planned system of working to prevent illness and injury in the workplace. It involves recognizing and identifying specific hazards and risks. Health and safety procedure is the responsibility of all persons in the beauty service industries. You must identify the hazards where you are working, and evaluate how dangerous they are. Eliminate the hazard or modify the risks that it presents.

An occupational health and safety management system should consists of the following:

1. **Management Commitment.** Management can show their commitment to OHS by
  - establishing an OHS policy
  - identifying its objectives
2. **Planning.** This includes setting standards for management and employees by establishing:
  - How the business ensures sound OHS practices are implemented?
  - Who is assigned and responsible for the implementation? This person will coordinate the assessment, delegate tasks, and be responsible for taking notes and writing up information for the register
  - What resources are required for the implementation?
  - When will the OHS practices be implemented?
  - How will workers identify and report hazards to employer?
3. **Consultation.** Consulting and working with your employees is important. Employees must have a basic understanding of what could be considered high-risk activities in the salon. There should be a two way communication where employers listen to and cooperate with employees. Management can then ensure OHS decisions are based on the best and most up-to-date information.
4. **Training.** It is important to give health and safety training to new or inexperienced workers, including those that have been away from the workforce for some time.
5. **Risk management.** This involves identifying the hazards present and then evaluating the risks, taking into account the existing precautions.

Steps to risk assessment:

1. Identifying hazards and risks
2. Evaluate hazards and risks
3. Control hazards and risks



refer harm or adverse health effects on something or someone under certain conditions at work.



refers the chance or probability that a person will be harmed or experience an adverse health effect if exposed to a hazard.

### Identifying Hazards and Risks

Identifying workplace hazards means looking for those things at your workplace that have the potential to cause harm.

#### Step1. Identifying hazards and risks

There are many hazards present at a beauty salon that deserve your attention. Use this guide as a starting point for conducting a risk assessment at your facility to correct potential hazards and keep your client safe. Identifying hazards and risks should include the following:

- a. Consulting with salon employees
- b. Conducting a worker survey
- c. Inspecting the workplace
- d. Ensuring that the information supplied by manufacturers and suppliers is regularly updated and made available to all in the workplace.

#### Common hazards in a beauty salon

1. *Electricity.* Common accidents in the workplace can result from contact with faulty electrical equipment that may have become “live” or from contact with worn or damaged power cords and switches, the presence of water in the salon increases the risk of electrocution or injury.
2. *Chemical hazard.* Chemicals used in the beauty salon like nail polish, nail polish removers, callus removers, and acrylic powders for artificial nails are common products found in many nail salons. Tcauses skin irritations and respiratory problems. Information on chemical hazards can be obtained from the following:
  - Product label
  - Material safety data sheet (MSDS) – Provides information on how to properly handle, store, discard and care for potentially hazardous chemicals. It also provides information on what a person who has been exposed to a certain harmful chemical should do.
  - the manufacturer

3. *Slips, trips, falls.* These are common occurrences in workplaces. People slip and trip on slippery, rough or uneven surfaces and may fall down from stairs or off ladders.
4. *Fire.* The range, number and 'portability' of electrical equipment used in salons, together with their proximity to water, make for potentially hazardous situations
5. *Manual handling of material and tools.* Lifting and moving heavy stock materials and working at poorly designed workstations can cause injuries and muscle strains. Injury due to cutting with cuticle nippers, cuticle scissors and cuticle pusher.
6. *Infection hazards.* Unsafe or unhygienic practices in the beauty salon may affect the health of customers and workers such as exposure to biological hazards that cause infectious diseases such as blood borne pathogens (hepatitis B, hepatitis C, and HIV), and fungal infections like ringworms.
7. *Ergonomic Hazards.* Ergonomics is the scientific study of people at work. The goal of ergonomics is to reduce stress and eliminate injuries and disorders associated with the overuse of muscles, bad posture and repeated tasks.



## How Much Have You Learned?

Self-Check 1.1

**Refer to the Answer Key. What is your score?**

Directions: Write the word **True** if the statement is correct and **False** if the statement is incorrect.

1. MSDS provides information on how to handle, store, discard and care for potentially hazardous chemicals
2. OHS is a planned system of working to prevent illness and injury where you work by recognizing and identifying hazards and risks in the nail salon.
3. Identifying workplace hazards means looking for those things at your workplace that have the potential to cause harm.
4. Damaged equipment may cause an accident or injury if they are not working properly.
5. In any occupation where there is exposure to blood and other bodily fluids, there is always the potential for the transmission of blood borne allergy.
6. To avoid injury and harm to health of salon's client, it is important that new or inexperienced workers should be adequately trained in OHS.
7. Ergonomics reduces stress and eliminate injuries and disorders associated with the overuse of muscles, bad posture and repeated tasks

8. PPE protects workers from chemical hazards.
9. Back injuries are most commonly caused by wrong posture or position and can be prevented.
10. Nail workers have an obligation to ensure their clients' health and safety.



## How Do You Apply What You Have Learned?

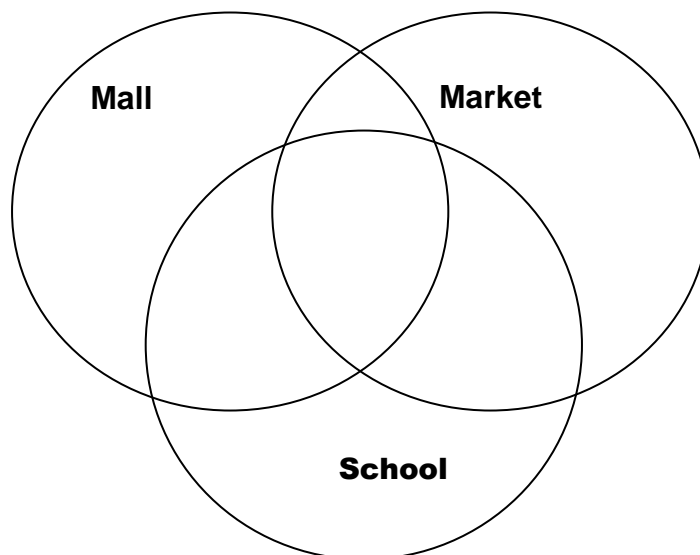
Show that you learned something by doing this activity

Activity Sheet 1.1

### I. Venn Diagram Learning Activity.

#### Procedure

1. Group yourselves into five (5) members.
2. Choose your reporter and complete the Venn Diagram.
3. List down common hazards that might be encountered in the following areas:
  - Mall
  - School
  - Market
4. Report the common hazards in class.
5. Keep your group notes, which you will use in the next lesson.



### HAZARD RECOGNITION ACTIVITY



## How Well Did You Perform?

Find out by accomplishing the Scoring Rubric honestly.

### Scoring Rubric

	Fair 5 pts	Good 10 pts	Very Good 15 pts
Knowledge and understanding	Students were able to convey limited ideas on the topic with little knowledge.	Students were able to convey a few ideas on the topic with some degree of knowledge.	Students were able to convey several ideas on the topic with a good degree of knowledge.
Accuracy	Work was organized and planned with little effectiveness.	Work was organized and planned with some effectiveness.	Work was organized and planned with considerable effectiveness.
Effort	Students put little or no effort into this activity.	Students put some effort into this activity.	Students put full effort into this activity.

### Rating Scale

- 15 – The students consistently perform tasks to standards with no supervision.
- 10 – The students can perform the tasks with limited supervision and/or does not perform the task to standard.
- 5 – The students can perform the tasks with direct supervision.



## How Do You Extend Your Learning?

**Directions:** Look for hazards and risks that might be present in your house. Place a sticker whenever you find possible hazards inside your house. Identify potential risks that could transpire in your house.

PART OF THE HOUSE	HAZARD	RISK
1.		
2.		
3.		
4.		
5.		

## LEARNING OUTCOME 2

**Evaluate and control hazards and risks**

### PERFORMANCE STANDARDS

- Terms of maximum tolerable limits are identified based on threshold limit values (TLV)
- Evaluate and control hazards and risks
- OHS issues and concerns are identified in accordance with workplace requirements



### Materials

- LCD projector, video clips, laptop
- Workplace/simulated environment





## What Do You Already Know?

Let us determine how much you already know about the evaluation and control of hazards and risks. Take this test.

Pretest LO 2

### Directions:

Answer the following questions to demonstrate your prior knowledge on health and safety issues in the workplace.

1. If spillage occurs,
  - a. walk over it
  - b. shout for help
  - c. throw towel over it
  - d. identify the spillage to everyone and clean up appropriately
2. To avoid product contamination, always
  - a. dispose of used or remaining product between clients
  - b. use an applicator bottle or dropper to apply the product.
  - c. Use single-use disposable implements to remove products from containers for application or remove product with a clean and disinfected spatula and put product to be used into a disposable or disinfectable service cup.
  - d. all of the above
3. If you are carrying out a nail service and the fire alarm sounds', you should
  - a. leave the workplace and run
  - b. leave the client to relax while you go out to some safe area
  - c. ignore it (because it might be a false alarm)
  - d. assist your client to the nearest exit and safe place
4. Occupational health and safety risk assessment is carried out to
  - a. make the nail salon look professional
  - b. assess the risk of using chemical substances
  - c. assess the risk of using equipment
  - d. prevent injury, infection or accidents
5. An overloaded socket requires you to
  - a. repair and obtain an extension wire until new sockets can be fitted
  - b. keep on using it
  - c. ensure candles are not near to it
  - d. inform people about the wet floor



## What Do You Need To Know?

**Read the Information Sheet 2.1 very well then find out how much you can remember and how much you learned by doing Self-check 2.1.**

Information Sheet 2.1

**Evaluating hazards and risks** is the process of determining the level of risk created by the hazard and the likelihood of injury or illness occurring. The priority of control increases as the established level of risk increases. The person identifying the risk of harm or injury from a hazard in a salon should consider these questions:

- a. How likely that it is a hazard will cause harm;
- b. How serious that harm is likely to be;
- c. How often (and how many) workers are exposed.

You must have a record of every risk assessment. If this injury or harm happen again, it is possible that you will go back to the original records to see if the original assessment overlook a possible hazard. The assessment stage is essential because it will determine the type(s) of control methods required.

**Reminder: a risk is the chance,( high or low) that somebody may be harmed by a hazard**

### Control Hazards and Risks

Where the assessment reveals a problem, preventive measures must be designed and implemented. Control measures should now be selected according to the list of control priorities. First, try to eliminate the hazard. If this is not possible, prevent or minimize exposure to the risk by one or a combination of:

- a. substituting a less hazardous material, process or equipment
- b. redesigning equipment or work processes
- c. isolating the hazard

When exposure to the risk is not (or cannot be) minimized by other means:

- a. Introduce administrative controls like safe work methods and operating procedures.  
Written work procedures control the way the work is done.
- b. Use appropriate personal protective equipment

### PPE at Work

Personal protective equipment is a clothing designed to be worn by a nail technician or salon workers to protect them from risks of injury or illness. It should only be considered as a control measure when exposure to a risk cannot be minimized in another way, or when used in conjunction with other control measures as a final barrier between the nail salon worker from the

chemical hazard and other cause of hazards. The PPE does not control hazards at the source equipment which will protect you from risks to health and safety.

PPE is composed of the following:

Impermeable gloves



Eyewear



Splash proof apron



Protective mask



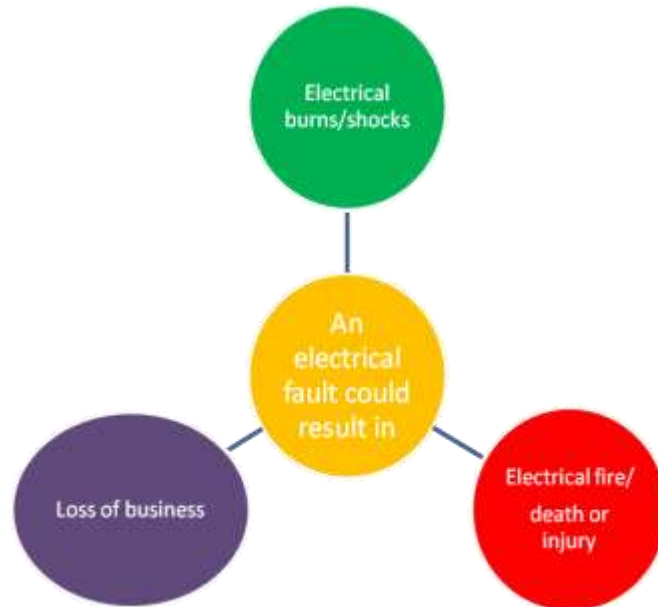
Advantages of wearing PPE at work:

- Prevents damage to workers' nails and skin
- To prevent skin from absorbing potentially harmful chemicals which may cause skin allergies, irritation, or other related problems.
- So as not to generate a lot of dust, it may be necessary to wear a dust mask to minimize breathing in particles while filing or buffing nails.
- Protects the wearer's face and prevents the breathing of air contaminated with chemical and/or biological agents.

## Common workplace hazards and their control measures

The following are workplace hazards and their control measures:

### ELECTRICAL HAZARD



Many of the electrical appliances used in the beauty salons can create serious health and safety risks, particularly in wet conditions. Damage to equipment increases this risk. Electrical shock can result in electrocution, burns and injuries from falls.

#### **Control Measures:**

- a. Always check any electrical equipment before use.
- b. Ask qualified electrician to check all electrical equipment in the workplace annually or as often as needed.
- c. Do not use broken or damaged electrical equipment should not be used, the tag must warn people not to use the equipment.
- d. When adjusting or cleaning equipment, SWITCH OFF the power and pull out the plug and NOT by the cord.
- e. Do not touch equipment with wet hands or use a wet cloth to clean sockets.
- f. Make sure flexible cords are fully unwound and kept clear of work traffic.
- g. Do not run too many pieces of equipment from one socket.

## CHEMICAL HAZARDS



Simon Hayter / Special to the Chronicle

**Chemical hazards** are substances used and/or produced at work that have the potential to harm the health and safety of people at work. The Beauty industry is exposed to repeated exposure to numerous hazardous substances including nail and skin care products, hair dyes, bleaches, perming solutions, hair styling agents, straighteners, rebonding solutions, peroxides, disinfectants, and cleaning products. They can harm people's health if they get into the body, for example, if they are breathed in, absorbed through the skin or eyes or ingested accidentally. The effects of hazardous substances may show immediately, or may take years for illness or disease to develop. Health effects of some hazardous substances include skin irritation, coughs, asthma, sensitization, poisoning and cancer.

### Measures of Concentration of Toxic Chemical Substances

#### Threshold Limit Value (TLV)

**TLV** is a measure of concentration of toxic substances.

It is the average concentration of an airborne substance to which most workers could be safely exposed over an eight-hour working day or forty-hour working week throughout a working lifetime.

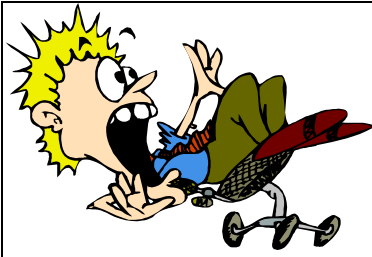
#### Maximal Allowable Concentration (MCL)

**MCL** is a peak or maximum concentration of an airborne to which most workers could be safely exposed.

#### Control Measures:

- a. Use alternative substances or processes which are less hazardous
- b. Provide good ventilation to get rid of the fumes and chemical smell that builds up in a salon
- c. Provide separate eating and drinking amenities for employees
- d. Ensure appropriate safety signs, training, instruction and provision of Material Safety Data Sheets (MSDS) and labels
- e. Use appropriate PPE

## Slips, Trips, Falls



**Slip** – loss of balance caused by too little friction between a person's foot and a walking surface.

**Trips** – hit an object, lose your balance and fall



**Falls** – when you lose your balance & drop to the floor



The results of slips, trips and falls include broken bones, abrasions, contusions, strains, sprains, back or spinal injuries and other serious injuries. During a slip, trip or fall accident, injury may be caused by over stretching joints, bones and ligaments.

### Control Measures

- Clean up spills straight away.
- Use mats on slippery floors.
- Wear appropriate work shoes.
- Improve cleaning methods to prevent build-up of grease/detergent
- Provide ample storage space, to avoid materials being placed in aisles/walkways
- Set absorbent flooring materials into entrance areas

## FIRE SAFETY



As a beauty salon staff, you must be aware of and trained in fire and emergency evacuation procedures in the workplace. An emergency exit route will be the easiest route by which all of the clients and staff can leave the building or salon safely.

### **Control Measures**

- a. Keep all escape routes and fire exits clear, and make regular checks to ensure they are safe to use
- b. Firefighting equipment must be available, located in a specified area. You can include fire extinguishers, blankets, sand buckets, and water hoses.
- c. Store products, particularly aerosols, away from naked flames or sources of heat, at or below room temperature and in a dry atmosphere.
- d. Switch off and unplug all electrical appliances before leaving the workplace .
- e. Make sure that all workers in the salon are aware of the actions that one must take in the event of a fire.

## Manual Handling



**Manual handling** involves any activity that requires the use of force exerted by a person to lift, lower, push, pull, carry or otherwise move any load. These can result in injuries to any part of the body.

Nail salon workers use forceful repetitive movements such as filing and buffing nails and holding uncomfortable positions for long periods of time, thereby increasing risk to joint and musculoskeletal injuries.

### **Control measures**

- a. Plan the lift before you begin.
- b. Position your feet shoulder width apart.
- c. Bend your knees without moving your upper body, squat down to the floor. Keep the shoulders level and facing in the same directions as the hips.
- d. Get a firm grip and keep your arms within a boundary formed by the legs.
- e. Keep the load as close to your body as possible.
- f. Lift the load smoothly; do not jerk.
- g. If an item is too high, use a stepladder or stool to help you.

## Biological Hazards

**Biological hazards**, also known as **biohazards**, refer to biological substances that pose a threat to the health of living organisms, primarily that of humans. Micro-organisms are everywhere and are continually introduced into the environment. They live on skin, in food and dirt. Micro-organisms are easily spread between clients and operators and are easily transferred by contact with unwashed hands, soiled equipment or contact with blood and body substances. Nail technicians must assume that all blood and other body substances are potential sources of infection. To minimize transfer of micro-organisms, you must perform all procedures in a safe and hygienic manner, following all infection control techniques and procedures. Skin that is intact, without cuts or abrasions, is a natural protective barrier against infection



### **Control Measures:**

The following are the methods on how to control infectious diseases:

1. **Cleaning** is the removal of soil and a reduction in the number of micro-organisms from equipment surfaces by washing in detergent and warm water.

#### **Methods of Cleaning:**

1. Rinse the equipment in warm water (15-30°C) to remove any blood or body fluids. Hot water used at this stage will cause coagulation and the substances will stick to the instrument. Cold water will harden fats, making cleaning more difficult.
  2. Wash the equipment in a sink filled with warm water and a mild alkaline detergent to remove all visible soiling (strong alkaline detergents may damage some instruments). Hold the items low in the sink to limit the generation of aerosols during scrubbing. Use of a scouring pad can assist in removing stains.
  3. Rinse the equipment thoroughly in running water.
  4. Dry with a cotton cloth. Drying prevents residues from damaging equipment during sterilization.
  5. Store under cover in a clean, dry, and dust-free environment.
2. **Disinfection** is the removal of micro-organisms by chemical or physical means. The level of decontamination depends on duration of exposure to lethal levels of disinfectants. Unlike sterilization, disinfection does not remove all microorganisms but reduces the population to safe levels.

#### **Proper use of disinfectants:**

- a. All implements must be thoroughly cleaned of all visible matter or residue before soaking in disinfectant and prevent them from being effective.
  - b. Implements and tools must be completely immersed in disinfectant solution for the time specified on the product label. Complete immersion of tools and implements means enough liquid to cover all surfaces of the item including the handles.
3. **Sterilization** is the total destruction of all living micro-organisms and their spores.

#### **Methods of sterilization:**

1. Physical agents such as radiation and heat
2. Chemical agents, such as antiseptics, disinfectants and vapor fumigants

## **Ergonomics**

**Ergonomics** is the study of how equipment and furniture can be arranged in order that people can do work or other activities more efficiently and comfortably. It is important in the adaptation of work conditions to the physical and psychological nature of people.

Below are pictures showing how ergonomics can help reduce strain to your bodies on the proper posture during manicure and pedicure services.

A nail technician should consider the three main factors in nail servicing:

1. Supporting the weight of the client's arm or leg
2. Working while looking down at the hand or foot of the client
3. Looking forward at the hand or foot of the client

The following pictures show how you are going to position the hand and foot of your client when giving a manicure and pedicure services to avoid pain in your hands, shoulders and back

**A. Correct position of hand while giving a manicure**



Correct position of the client's hand



Incorrect position of client's hand

Use a rolled towel or hand cushion when giving a manicure client's arm weight will rest on the cushion instead of holding it. Repetitive motion, takes a toll on your muscles and joints and can cause long-term problems, such as arthritis and carpal tunnel syndrome.

Carpal tunnel syndrome is a type of compression neuropathy, a nerve damage caused by compression and irritation of the median nerve in the wrist. The nerve is compressed within the carpal tunnel, a bony canal in the palm side of the wrist that provides passage for the median nerve to the hand and can be due to trauma from repetitive works.

**B. Correct position of foot while a giving a pedicure**



Correct position of client's leg



Incorrect position of client's leg

**Correct position of client's leg**

Elevate the client's feet and place them on a footrest that bears his or her weight. During the massage portion of a service, the footrests can bear the majority of the weight so you as a nail technician can limit the pressure on your back, shoulders, and neck.

**Incorrect position of client's foot:**

Do not bear the weight of a client's leg by resting the foot in your lap or by using your own strength to lift and lower the leg. This position will cause strains in the muscles in your shoulders and back. It also reduces your mobility to be agile as you work through the different steps of the service.

### C. Correct position of a pedicurist in giving a pedicure service



Correct position of pedicurist



Incorrect position of pedicurist

Keep your back straight and supported while giving a pedicure service. Use both the height adjustment of your chair and of the footrest to keep the feet at a workable level instead of straining the body. Ask your client to bend his knees and move his feet to appropriate positions.

#### **Incorrect position of nail technician while giving a pedicure service**

If you need to perform close-up, detailed work, guard against rounding the shoulders and extending the neck to get as close to the foot as possible. This will cause strain to the muscles in your upper body and the entire back. You will feel worse when you add enormous strain to your body as you try to get into a position that will give you best perspective.

### D. Correct position of your feet while giving a manicure service



Correct position of pedicurist's feet



Incorrect position of pedicurist's feet

#### **Correct position of pedicurist's feet**

As nail technician, you may twist your chair because you want to get closer to your work. Instead of contorting yourself into this position, it use a table with a cut-out that allows you to sit straight in your chair but still work on the client's hands from an angle. You can improve your posture even without a cut-out in the desk by strengthening your core muscles so you are able to sit straight for longer periods of time. It is also important to develop a habit of keeping both feet on the floor to prevent the unbalanced compression.

### **Incorrect position of pedicurist's legs**

This nail technician has her shoulders rolled forward, her left arm is resting on the table, which pushes her shoulder up, she is twisted in her chair, and her legs are crossed. This will cause more compression on one side of the body than the other.



## **How Much Have You Learned?**

Self-Check 2.1

**Refer to the Answer Key. What is your score?**

### **Completion Test: Evaluation and Controlling hazards and risks**

**Directions:** Choose the word from the box given below to complete the sentences.

reduction	burns	slips	microorganism
clear,	health	injury	illness
airborne	syndrome		

1. Disinfection does not remove all \_\_\_\_\_ but reduces the population to safe levels.
2. The person identifying the risk of harm from an \_\_\_\_\_ of hazard in a salon should be aware of the OHS procedures.
3. Cleaning is the removal of soil and a \_\_\_\_\_ in the number of micro-organisms from equipment surfaces by washing in detergent and warm water.
4. Keep all escape routes and fire exits \_\_\_\_\_ and make regular checks to ensure they are safe to use.
5. During a \_\_\_\_\_, trip or fall accident, injury may be caused by over stretching joints, bones and ligaments
6. Personal protective equipment is clothing equipment designed to be worn by a nail technician or salon workers to protect them from risks of injury or \_\_\_\_\_.
7. Electrical shock can result in electrocution \_\_\_\_\_ and injuries from falls.
8. \_\_\_\_\_ effects of some hazardous substances include skin irritation, coughs, asthma, sensitization, poisoning and cancer.
9. Carpal tunnel \_\_\_\_\_ is a type of compression neuropathy , a nerve damage caused by compression and irritation of the median nerve in the wrist..
10. MCL is a peak or maximum concentration of an \_\_\_\_\_ to which most worker could be safely exposed.



## How Do You Apply What You Have Learned?

Show that you learned something by doing this activity

Activity Sheet 2.1

- I. **Directions:** This is group activity: Visit and conduct an interview with salon workers in a nail salon nearby your place. Use the checklist below to serve as your basis in evaluating the hazards and risks in a nail salon.

### CHECKLIST

The checklist consists of questions on types of occupational hazards. The questions can be answered by “YES” or “NO”. Measures that can be taken to eliminate or reduce hazard are often already indicated by questions themselves. This checklist is not intended to cover all the risks of every workplace but to help you put the method into practice.

#### Do the hazards exist at the workplace?

	<b>Physical load and ergonomic workplace design</b>	<b>YES</b>	<b>NO</b>
	<b>QUESTIONS</b>		
	1. Do clients' and nail technicians' seats enable a good working posture for the variety of different tasks carried out by a nail technician?		
	2. Does the amount of working space cause uncomfortable working postures?		
	3. Do nail technicians work in solid shoes (without heels) that give good support and enable a good working posture?		
	4. Do nail technicians complain about the climate or smell in the salon?		
	5. Is there sufficient light for safe and efficient task performance?		
	<b>Working with chemicals hazards</b>		
	<b>QUESTIONS</b>		
	1. Are all bits of information about the hazards of the chemicals available and known to all employees?		
	2. Are employees sufficiently protected from exposure to chemical?		
	3. Are the manufacturers' safety instructions followed?		
	4. Have employees been instructed on working safely with dangerous materials?		

	5. Are protective gloves routinely being used for chemical tasks and for cleaning tasks by all employees?		
	6. Are all employees instructed in the use of, and encouraged to use, protective gloves and creams?		
	<b>Electrical risks, slips, trips, and falls</b>		
	<b>QUESTIONS</b>		
	1. Are the floors slippery and dirty during work time?		
	2. Are aisles or passageways tidy free from cords, electrical cables and extension boards lying on the floor?		
	3. Do the employees wear slippery shoes?		
	4. Is electrical equipment (foot spa machine) used according to the suppliers' safety instruction?		
	5. Are the electrical devices and cables undamaged and regularly examined?		
	6. Are electrical devices protected against splash water?		

Activity Sheet 2.2

## II. FILM CLIPS VIEWING

You are going to view film clips that provide a basic introduction to health and safety signs and symbols found in the workplace. They provide a useful guide for you and other people who will undergo other services in the industry. Different workplace situations are shown where safety signs are important. The film is suitable for all sectors and all levels of employees but especially for young people in training or work experience. It will inform you about safety signs at work.

### Directions:

1. Watch the Napo film clips provided.
  - Film: Safe Start, Scene: Watch Out For Others Too
  - Film: Danger, Chemicals, Scene: Dangerous to the environment
  - Film: Risky Business, Scenes: Assess The Risks and Act On Risks
  - Film: Safety Inside and Outside of Work, Scene: An edited section (for example from the stairs to the football)
2. Group yourselves into five (5)
  - Discuss the hazards shown in the scenes.
  - Explain to class the meanings of hazard and risk and give your recommendations on how to prevent hazards and risks according to the film clips shown.



## How Well Did You Perform?

Find out by accomplishing the Scoring Rubric honestly.

	15 pts	10 pts.	5 pts.
Content and Development	Content is comprehensive and accurate.  Major points are stated clearly and are well supported.	Content is accurate.  Major points are stated.	Content is Incomplete.  Major points are not clear and/or persuasive.
Accuracy	Students used five (5) sentences with accurate, factual information.	Students have four (4) sentences with accurate, factual information.	Major errors in factual information with two (2) or less sentence.
Effort	Students put much efforts into this activity.	Students put some efforts into this activity.	Students put little or no effort into this activity.

### Rating Scale

15 = Very Good

10 = Good

5 = Fair



## How Do You Extend Your Learning?

**Directions:** In your assignment notebook, identify the hazards shown in the film clips. Discuss how some risks are more dangerous than others by making a list of the risks from most to least severe.

IDENTIFIED RISKS	RANKING



**Congratulations! You did a great job! Rest and relax a while and then move on to the next lesson. Good luck!**



## REFERENCES

### LO1

- [www.cdc.gov](http://www.cdc.gov)
- <http://www.workcover.nsw.gov.au/forms> publications
- <http://www.deir.qld.gov.au/workplace/subjects/hairdressing/guide/hazards/electric/index.htm>
- <http://www.dh.sa.gov.au/>
- <http://www.hsa.ie/eng/>
- <http://www.nailsmag.com/article/1138/posture-primer>

### LO 2

- [www.cdc.gov](http://www.cdc.gov)
- <http://www.workcover.nsw.gov.au/forms> publications
- <http://www.deir.qld.gov.au/workplace/subjects/hairdressing/guide/hazards/electric/index.htm>
- <http://www.dh.sa.gov.au/>
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- [www.dhrm.state.va.us/workerscomp/.../STF](http://www.dhrm.state.va.us/workerscomp/.../STF)

## LESSON 4

### Applying Basic Nail Designs



#### LEARNING OUTCOMES

At the end of this Lesson, you are expected to do the following:

- LO1. Identify nail structure and shapes; and
- LO2. Create basic nail designs



## Definition of Terms

**Nail** – a plate of keratin that lies on the tips of the fingers and toes

**Keratin** – a sulfur-containing fibrous protein constituting the main structural protein of hard epidermal tissues, such as horn , hair, feathers, nails, claws, hoofs, and the like

**Dermis** – the second layer of skin, it contains blood vessels, nerves, hair roots and sweat glands

**Hyponychium** – the epithelium of the nail bed, particularly its proximal part in the region of the nail root and lunula, forming the nail matrix

**Epidermis** – the upper or outer layer of the two main layers of cells that make up the skin. The epidermis is mostly made up of flat, scale-like cells called squamous cells. These cells are round cells called basal cells. The deepest part of the epidermis also contains melanocytes

## LEARNING OUTCOME 1

Identify nail structures and shapes

## PERFORMANCE STANDARDS

- Nail structure and shapes are identified;
- Nails are trimmed and varied shapes are applied;
- Nails diseases and disorders are identified.



## Materials

- Tools, equipment, and specification
- Pictures
- Workplace/simulated environment



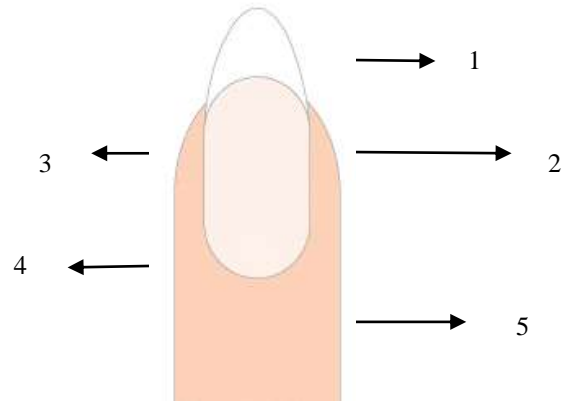
## What Do You Already Know?

Let us determine how much you already know about the nail structure and basic nail designs. Take this test.

Pretest LO 1

Directions:

1. Label the different parts of the nail.



2. Identify the different shapes of the nail.



a) \_\_\_\_\_



b) \_\_\_\_\_



c) \_\_\_\_\_



d) \_\_\_\_\_



e) \_\_\_\_\_

## A. Nail Diseases and Disorders

**Directions:** Match the statement in column A with column B. Write the letter of your choice on the space before the number.

### Column A

1. a vertical splitting or separation of the nail plate layers at the distal (free) edge of the nail plate
2. extreme thickening curvature of the nails, usually it is caused by varying degree of hyperkeratosis
3. A condition nail plate which separates from the nail bed
4. Nail condition in which the cuticle splits around the nail.
5. chronic inflammation of the nail fold and nail bed (matrix)
6. is referred to ingrown nails which affect the fingers and toenails
7. infectious disease caused by a vegetable parasite
8. deformity of nail plate caused by biting nails
9. an overgrowth of cuticle which sticks to the surfaces of nail plate
10. is caused by uneven growth of the nails, usually resulting from illness.

### Column B

- a. Blue nails
- b. Brittle nails
- c. Claw nails
- d. Eggshell nails
- e. Hangnails
- f. Onychauxis or hypertrophy
- g. Onychia
- h. Onychocryptosis
- i. Onychomycosis
- j. Onychophagy or bitten nail
- k. Pterygium
- l. Ridges



## What Do You Need To Know?

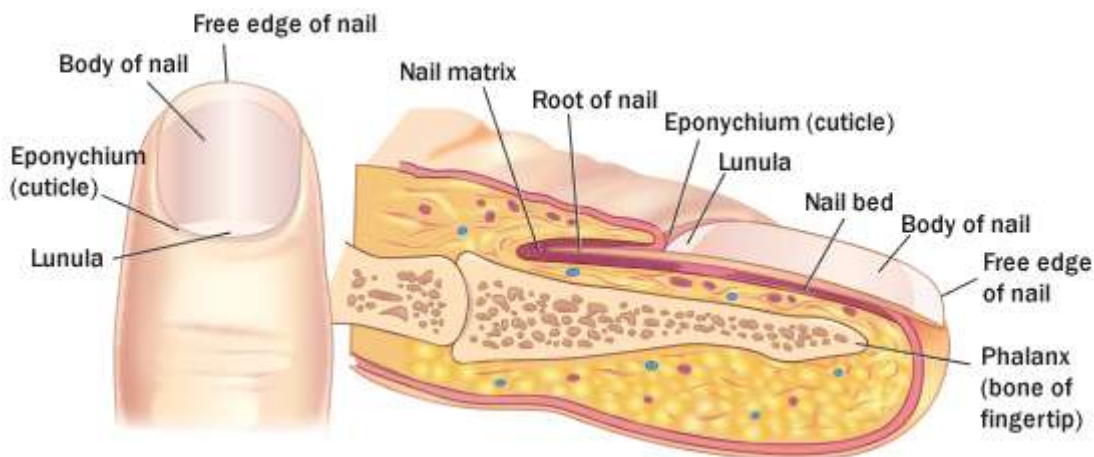
Read the Information Sheet 1.1 very well and then find out how much you can remember and how much you have learned by doing Self-check 1.1.

### Information Sheet 1.1

#### **Basic Information About the Nail**

The nail is a plate of keratin that lies on the tips of the fingers and toes. The main use of the nail is to protect the fingers and toes. It also assists with certain physical activities in daily life.

#### **Nail and its structure**



#### **Parts of the Nail**

1. **Lunula** – the pearly coloured and crescent-shaped area of a fingernail or toenail.
2. **Cuticle** – the overlapping epidermis around the nail. It is the transparent skin, which is called the 'true cuticle' which is removed during the manicuring process.
3. **Free edge** – the part of the nail that can be filed and shaped. It is an extension of the nail plate that overlaps the eponychium.
4. **Matrix** – the part of the nail situated directly beneath the cuticle. It produces the cells that become the nail plate.

It also contains blood vessels and nerves. Blood supply provides the cells with nourishment. If the matrix is damaged the nail will grow deformed.

5. **Nail bed** – the part of the nail where the nail plate rests on, also a continuation of the matrix and it is abundantly supplied with blood vessels and nerves.

6. **Nail walls** – the folds of the skin that overlap the sides of the nail. They hold your nail in place and protect the nail plate edges.
7. **Nail plate** – is the visible nail that rests on the nail bed up to the free edge. This is made up of dead cells and a minimum amount of moisture.

### Shapes of the Nail

The shape of nail conforms to the finger tips of an individual. It also determines how the fingernails should be styled during a manicure.



1. **Oval** – this is common among people with long, perfect nail beds. It may be styled slightly rounded at the base and slightly pointed at the fingertips. Most often this type of nail has a natural look and looks very good in a short-medium length.
2. **Round** – ideal for shorter nails, the nail is allowed to grow out straight at the sides for approximately 1.5 mm and then the tip is filed into a rounded shape. This is a strong shape which is great for those who keep their nails short.
3. **Stiletto/pointed** – filed away at the sides to a point at the tip; this shape is very weak as the sides of the nail (which provide the strength) are totally lost.
4. **Squoval** – Similar to the above but followed by squaring off the tip, giving the nail tip strength over the oval shape.
5. **Square** – The most popular among the nail shapes. It is created by allowing the nail to grow out straight and then filing the tip straight across at right angles with the rest of the nail plate.















## Nail Diseases and Disorders



Nail diseases are conditions of both the nail and the surrounding skins which result from bacterial, fungal and viral infections. Some conditions will show a green, yellow or black discoloration of the nail, depending on the nature of the infection. The main course for infection is through damaged cuticles and broken skin.





Many disorders can affect the nails. These disorders can affect any portion of the nail unit and can impact the appearance of the nail plate itself. Nail disorders can r



Here is a list of the common nail disorders and diseases and their characteristics.

Nail Disorders		Characteristics
1. Blue nails		Bluish in color; these may be attributed to poor blood circulation or heart disorder.
2. Brittle nails		Vertical splitting or separation of the nail plate layers at the distal (free) edge of the nail plate. Over exposure to detergent soap and other chemical solvents may be the cause.
3. Bruised nails		Shows dark purplish (almost black or brown) spots, usually due to injury and bleeding of the nail bed. As the nail grows, dried blood in the nail bed will also go out.
4. Eggshell nails		In this disorder, the nail plate separates from the nail-bed and curves at the free edge. It may be caused by chronic illness of the systemic or nervous origin.
5. Furrows		These are long ridges that run either lengthwise or across the nail. Some lengthwise ridges are normal in adults. These ridges increase with age and can also be caused by psoriasis, poor circulation and frostbite.

		Ridges that run across the nail are caused by high fevers, pregnancy, and measles.
6. Hangnails		These are marked by a condition in which the cuticle splits around the nail. Carelessness in removing the cuticle, dryness, cutting off too much may result in hangnails. It may cause infection if not treated.
7. Leconychia or white spot		White spot appears frequently in the nails. They may be caused by injury to the base of the nail. As the nail continues to grow, these white spots eventually disappear.
8. Pterygium		It is an overgrowth of cuticle which sticks to the surfaces of nail plate. Carefully remove the adhering growth by means of a cuticle nipper.
9. Onychatrophia		It is described as wasting away of the nail. The nail loses its luster, shrinks, and falls. This can be caused by injury to the nail matrix or by internal disease.
10. Onychauxis or hypertrophy		It is an overgrowth of the nail usually in thickness rather than length. It is caused by an internal imbalance, such as local infection or heredity.
11. Onychophagy or bitten nail		It is a deformity of the nail plate caused by biting the nails. Biting is an acquired nervous habit which prompts the individual to chew the nail or the hardened cuticle.
12. Onychorrhexis or split or brittle nails		These are caused by an injury to the finger, careless filing of the nails, excessive use of cuticle solvents and nail polish removers. The nails may be extremely dry because of some granular disorder.

13. Ridges		<p>It is caused by uneven growth of the nails, usually resulting from illness. Buffing the nails with paste polish will help remove the ridges.</p>
14. Treating cuts		<p>It is caused by an accident during manicure. Apply an antiseptic immediately. Do not apply nail polish on the affected area.</p>

<b>Nail Diseases</b>		<b>Characteristics</b>
1. Onychomycosis		<p>It is an infectious disease caused by a vegetable parasite. The onset of the disease takes about two to three months and the attack is rarely on more than one or two nails. The appearance of the nail is frayed (worn out), brittle with furrowed surface, opaque, grayish, or yellowish in color and is lifted-up by an accumulation of epidermis underneath.</p>
2. Onychia		<p>It is chronic inflammation of the nail fold and nail bed (matrix). It results from the introduction of microscopic athogen through small wounds.</p>
3. Onychocryptosis		<p>This refers to ingrown nails which affect the fingers and toenails. It is marked by nail growth into surrounding tissues and may cause infection. Incorrect trimming a shaping of nails are often responsible for ingrown nails.</p>
4. Onychoptosis		<p>It is the periodic shedding of one or more nails, either in whole or in part. This condition maybe a symptom of a more alarm disease such as syphilis or can result from fever, trauma systematic upset or adverse reaction to drug.</p>

5. Onycholysis		It refers to the detachment of the nail from the nail bed, starting at its distal and/or lateral attachment. The most common cause of onycholysis is psoriasis, an unhealthy skin condition.
6. Onychogryphosis or claw nails		This pertains to extreme thickening and curvature of the nails, usually caused by a varying degree of hyperkeratosis (skin disease in which the skin gets thicker) on the distal portion of the nail bed that detaches and lifts the plate off the bed.



## How Much Have You Learned?

### Self-Check 1.1

#### Test 1. Enumeration

**Directions:** Enumerate the following.

- A. Parts of the nail
- B. Shapes of nails

#### Test II. FILL IN THE BLANKS

**Directions:** Fill in the blanks with the correct answer.

1. Free edge is the part of the nail that can be filed and shaped. It is an extension of the \_\_\_\_\_ that overlaps the hyponychium.
2. \_\_\_\_\_ are the folds of the skin that overlap the sides of the nail. They hold your nail in place and protect the nail plate edges.
3. Nail bed is the part of the nail on which the nail plate \_\_\_\_\_. It is also a continuation of the matrix. It is abundantly supplied with blood vessels and nerves.

4. The matrix produces the cells that grow into the nail plate. It is situated directly below the \_\_\_\_\_. It also contains blood vessels and nerves. Blood supply provides the cells with nourishment. If the matrix is damaged the nail will grow deformed.

5. \_\_\_\_\_ is the visible nail that rests on the nail bed up to the free edge. This is made up of dead cells and minimum amount of moisture.

### COMPLETION TEST

**Directions:** Fill in the blanks with the correct answers. Choose your answers from the box below and write your answers on the space provided for.

Hyperkeratosis	Bluish	Eggshell nails	
Onychia	Uneven	Furrows	Detachment
Treating cuts	Shedding	Hangnail	

1. \_\_\_\_\_ are long ridges that run either lengthwise or across the nail.
2. \_\_\_\_\_ is a term applicable to chronic inflammation of the nail fold and nail bed.
3. Onychogryphosis pertains to extreme thickening curvature of the nails and usually it is caused by varying degrees of \_\_\_\_\_.
4. Onychoptosis is the periodic \_\_\_\_\_ of one or more nails, either in whole or in part.
5. Ridges are caused by \_\_\_\_\_ growth of the nails, usually resulting from illness
6. Blue nail is \_\_\_\_\_ in color, and may be attributed to poor blood circulation or heart disorder.
7. \_\_\_\_\_ are caused by an accident during manicure service.
8. \_\_\_\_\_ is a condition in which the cuticle splits around the nail.
9. \_\_\_\_\_ separates from the nail bed and curves at the free edge.
10. Onycholysis refers to the \_\_\_\_\_ of the nail from the nail bed, starting at its distal and/or lateral attachment.

Refer to the Answer Key. What is your score?



## How Do You Apply What You Have Learned?

Show that you learned something by doing this activity

Operation Sheet 1.1

### Trim Your Nails

**Trimming** of nail plays a very vital role. It is very easy task but sometime it causes little problems such as unwanted abrasions and **ingrown** nails, when done not properly Apply the following steps when cutting the nails.

#### Step 1:

Prepare the types of instruments for this task. Nail cutter, who has small or medium slightly curved blades, which are suitable for trimming the finger nails. Nail cutters with straight blades are suitable for use.

#### Step 2:

Before using your nail cutter, make sure that it is clean. Wash your nail cutter to remove dust and germs, specially when you are sharing your nail cutter with someone else. Dry it thoroughly after washing it.

#### Step 3:

Wash your hands. Wipe them dry with any towel or tissue paper. This process cleans your fingernails and helps soften them, making them easier to cut.

#### Step 4:

You must cut your nails in a place where you can clearly see what you are doing. Have a small receptacle ready so you can collect the trimmed nails.

#### Step 5:

Decide the shape of your nails. Decide which shape you actually want. After deciding, lift the nail cutter and start cutting your nails.

#### Step 6:

Start cutting your nails starting from your little finger,

#### Step 7

Make at least two or three cuts of a finger nail until everything is snug. Follow the curve of the nail to get a clean cut. Check skin flaps after each cut and remove them carefully.

#### Step 8:

Sit comfortably and crouch your knee side to easily reach up and see the nails clearly. Be sure not to set up deep razor to prevent scratches. Adjust the position of razor if you feel any discomfort.

#### Step 9:

After cutting your nails, use a nail file to smooth any rough and odd surface on your nails. When you file, do it in on tilt – from the corner of the nail to go down.

**Step 10:**

Apply some moisturizer on your hands to keep the cuticles moisturized and smooth.



## How Well Did You Perform?

Find out by accomplishing the Scoring Rubric honestly.

Criteria for Judging	Points	Score
General Appearance <ul style="list-style-type: none"><li>Different nail shapes are applied</li><li>Proportion of the different nail shapes were observed</li></ul>	35	
Workmanship <ul style="list-style-type: none"><li>Neatness in work were observed</li></ul>	35	
Cleanliness <ul style="list-style-type: none"><li>Work area is cleaned</li></ul>	20	
Speed <ul style="list-style-type: none"><li>Finished based on allotted time</li></ul>	10	
	TOTAL	

## LEARNING OUTCOME 2

**Create Basic Nail Designs**

## PERFORMANCE STANDARDS

- Different basic nail designs are explained and demonstrated through visuals; and
- Different basic nail designs are created on mock nails.



## Materials

- Tools, equipment and specification
- Pictures
- Workplace/simulated environment





## What Do You Already Know?

Let us determine how much you already know about the different basic nail designs. Take this test.

**I. Directions:** Identify the names of the following basic nail designs.



1. \_\_\_\_\_



2. \_\_\_\_\_



3. \_\_\_\_\_



4. \_\_\_\_\_



5. \_\_\_\_\_



## What Do You Need To Know?

Read the Information Sheet 2.1 very well and then find out how much you can remember and how much you have learned by doing Self-check 2.1.

Information Sheet 2.1

### **Basic Nail Designs**

The following are basic nail designs which you can offer in a nail salon. Steps and illustrations are shown below.

**A. Plain manicure** – the application of nail polish to the entire nail plate



#### **How to make plain manicure**

1. Apply base coat
  - Begin with the little finger on one hand. Repeat polish application on the other hand
2. Apply two coats of polish
  - Use light long strokes from nail base to free edge.
  - Apply first coat to the middle of the nail first and then to the sides.
  - Apply second coat of polish on both hands.
  - Remove excess polish around nail with a cotton tipped orangewood stick
3. Apply top coat
  - Apply a top coat over the entire nail plate.

#### **Tips**

Learn the history of color by buying an artist color wheel. You can use what you learn to help clients select complementary colors that match their skin tone.

**B. Half-Moon** – involves applying of nail polish over the whole nail plate except the lunula.

**How to make a half-moon nail design:**

1. Apply base coat
2. Apply white or platinum nail polish and leave for a few minutes to dry.



3. Apply colored polish from one side to the other side of the nail following the shape of the lunula. Repeat the application of the nail polish if necessary.



4. Remove excess polish from the skin.
5. Apply top coat.

**C. Half- Moon with Tip** – It involves the application of colored polish over the whole nail plate except the area of lunula and tip of the nail.

**How to make a half-moon design with Tip**

1. Apply base coat.
2. Apply white or platinum nail polish and leave for a few minutes to dry.



3. Apply colored nail polish from one side to the other side of the nail to form a half-moon, leaving the lunula of the nail. Leave the part of the free edge. The free edge should be seen as in Fig 5. Repeat the application of nail polish if necessary.



4. Remove excess polish
5. Apply top coat

**D. French Manicure or Tip design** – involves the application of colored polish over the whole part of the nail except the area of the free-edge.



**How to make a French manicure design (Variation no. 1)**

1. Apply base coat and leave for a few minutes to dry.
2. Apply white or platinum nail polish and leave for a few minutes to dry.



3. Apply colored nail polish from one side to the other side of the nail following the shape of the free edge. Repeat the application of nail polish if necessary.



4. Remove excess polish.
5. Apply top coat.

**French Manicure or Tip design (Variation no. 2)** – involves the application of white nail polish or colored polish on the tips and coating the rest of the nail with a sheer polish . It is suitable for short and moderately long nails.



**How to make French manicure (Variation no. 2)**

1. Apply base coat and leave for a few minutes to dry.
2. Apply a coat of translucent pink polish over your entire nail.
3. With the use of white or colored nail polish, draw a thin line over the tip of the nail following the shape of the free edge of the nail. Apply second coating if necessary.
4. Remove excess polish.
5. Apply top coat.



## E. Elephant Tusk

Elephant tusk is a style that involves the application of nail polish to create S curve, leaving a slightly larger gap along the nail walls.

### How to make an elephant tusk nail design:

1. Apply white or platinum nail polish and leave for a few minutes to dry.
2. Apply colored nail polish creating a half circle design at the inner side of the nail as you continue it to form an S.
3. Fill up the other side to complete the design.
4. Remove excess polish.
5. Seal with a top coat.



## How Much Have You Learned?

Self-Check 2.1

Refer to the Answer Key. What is your score?

**Directions:** Identify the following nail designs. Write your answer on the blank before each number.

- \_\_\_\_\_ 1. It is the application of nail polish to the entire nail plate.
- \_\_\_\_\_ 2. It involves the application of colored polish over the whole nail plate except the lunula and the nail tip.
- \_\_\_\_\_ 3. It involves applying of nail polish over the whole nail plate except the lunula.
- \_\_\_\_\_ 4. It involves the application of nail polish to create an S curve, leaving a slightly larger gap along the nail walls.
- \_\_\_\_\_ 5. It involves the application of colored polish over the whole part of the nail except the free-edge.



## How Do You Apply What You Have Learned?

Show that you have learned something by doing this activity.

Operation Sheet 1.1

### Objectives:

To learn the techniques in applying plain manicure, half- moon, half-moon with tip, French manicure, and elephant tusk designs on plastic spoons through group activity.

### Materials:

base coat, colored polish, top coat, acetone, cotton, orange wood stick, plastic spoons

### Directions:

1. Prepare all the materials needed in basic nail designs.
2. Follow the given instructions for every nail designs.
3. Consider the size, color, and shapes of your plastic spoons when undertaking this activity.
4. Display your finished project on used illustration board.

#### A. Plain manicure



Steps in Plain manicure

1. Apply Base coat.
2. Apply two coats of polish.
3. Apply top coat.

#### B. Half-moon



How to make a half-moon:

1. Apply white or platinum nail polish and leave for a few minutes to dry.
2. Apply colored polish from one side to the other side of the nail following the shape of the lunula.
3. Repeat the application of nail polish if necessary.
4. Remove excess polish from the skin.
5. Apply top coat.

### C. Half- moon with Tip



Steps in Giving Half-moon with Tip

1. Apply white or platinum nail polish and leave for a few minutes to dry.
2. Apply colored polish from one side to the other side of the nail to form the half-moon, leaving the lunula of the nail.
3. Remove excess polish
4. Apply top coat..

### D. French Manicure

French design or Tip design (Variation no. 1)

Steps in giving French manicure (Variation no. 1)

1. Apply white or platinum polish and leave for a few minutes to dry.
2. Apply colored polish from one side to the other side following the shape of the free-edge.
3. Remove excess polish
4. Apply top coat.



French design or Tip design (Variation no. 2)

Steps in giving French manicure (Variation no. 2)

1. Apply base coat and leave for a few minutes
2. Apply a coat of translucent pink polish over your entire nail.
3. With the use of white or platinum nail polish, draw a thin line over the tip of the nail following the shape of the free edge of the nail. Apply second coating if necessary.
4. Remove excess polish.
5. Apply top coat.

### E. Elephant Tusk

Steps in making Elephant Tusk:

- a) Apply base coat (platinum) twice.
- b) Apply colored nail polish creating a half circle design at the inner side of the nail as you continue it to form and S.
- c) Fill up the other side to complete the design.
- d) Remove excess polish.
- e) Seal with a top coat.





## How Well Did You Perform?

Find out by accomplishing the Score Card honestly.

Criteria for Judging	Points	Score
General Appearance <ul style="list-style-type: none"><li>• Color combinations of the nail polish are evident.</li><li>• Nail designs were creatively applied.</li><li>• Proportion of the different nail designs were observed.</li></ul>	35	
Workmanship <ul style="list-style-type: none"><li>• Nail polish coat were evenly applied</li><li>• neatness in work were observed.</li></ul>	35	
Quality. <ul style="list-style-type: none"><li>• Durability of the finished project were observed</li></ul>	20	
Speed <ul style="list-style-type: none"><li>• The project was finished and submitted on time.</li></ul>	10	
	TOTAL	

### Rating Scale

95-100 = Outstanding

85-94 = Very satisfactory

75-84 = Satisfactory

65-74 = Needs improvement



**Congratulations! You did a great job! You have come to the end of this module!**



## REFERENCES

### LO1

- [kreativestudios.com](http://kreativestudios.com)
- <http://www.google.com.ph/imgres>
- [www.cbd.int/ibd/2008/Resources/teachers/appendix3.shtml](http://www.cbd.int/ibd/2008/Resources/teachers/appendix3.shtml)
- [http://en.wikipedia.org/wiki/Nail\\_disease](http://en.wikipedia.org/wiki/Nail_disease)
- <http://www.beautyweb.com/>

### LO 2

- [kreativestudios.com](http://kreativestudios.com)
- [Http://www.google.com.ph/imgre](http://www.google.com.ph/imgre)

## **ANSWER KEYS:**

### **LESSON 1**

#### **LO1:**

##### **WHAT DO YOU ALREADY KNOW?**

1. Cuticle Nail Pusher
2. Nail File
3. Sterilizer
4. Orangewood Stick
5. Hand Spa Machine
6. Buffer
7. Pumice Stone
8. Trolley
9. Alcohol
10. Base coat

##### **HOW MUCH HAVE YOU LEARNED?**

1. Cuticle Nail Pusher
2. Nail File
3. Nail Cutter/Nail Clipper/Nail Trimmer
4. Nail Buffer
5. Emery board
6. Orangewood Stick
7. Foot Spa Machine
8. Sterilizer
9. Foot Spa Stool
10. Hand Spa Machine

#### **LO2:**

##### **WHAT DO YOU ALREADY KNOW?**

1. D
2. C
3. E
4. B
5. A
6. I
7. J
8. H
9. F
10. G

## HOW MUCH HAVE YOU LEARNED?

1. To avoid cracking and splitting of the nails.
2. So that live tissue at the root of the nail will not be injured.
3. Buffing gives the nails natural gloss and increases the circulation of the blood to the fingernails.
4. So as not to injure live tissues.
5. It can cause sores, open wounds and possible infection.

## LESSON 2

### LO1:

### WHAT DO YOU ALREADY KNOW?

#### A.

1. C
2. D
3. C
4. A
5. A

#### B.

1. Sanitizing implements and equipment are essential because they kill and prevent the growth of germs. Unsanitized equipment can spread germs from one person to another, potentially leading to serious infections.
2. Sterilization is the process of destroying all living micro-organisms while sanitation is the process of destroying some, but not all microorganisms.

## HOW MUCH HAVE YOU LEARNED?

1. Before and after each nail care service
2. After metal tools and equipment have been sterilized, they must be stored in a cabinet until needed.
3. Waste materials should be disposed of properly in an enclosed bin with polythene bag while contaminated materials should be disposed of as recommended by local authorities..
4. To prevent accidents, injury and spread of potential diseases and to give the highest professional nail care service.
5. Tools and equipment are in good condition when they are not defective and can be used efficiently. They are not in good condition if they are faulty, rusty, and do not function efficiently.

## LO2:

### WHAT DO YOU ALREADY KNOW?

#### A.

1. Sterilize
2. Disinfect
3. Boil
4. Store
5. Inspect
6. Sanitary
7. Water
8. Enclosed
9. Washed
10. Directed

### HOW MUCH HAVE YOU LEARNED?

#### Ways to Keep Tools and Equipment Safe and Functional

- a. Sterilize metal implements after each use in a hospital-grade disinfectant that is bactericidal, virucidal, and fungicidal. This disinfectant can be found in beauty supply stores. Immerse the tools in the disinfectant for 10 minutes.
- b. Disinfect foot basins after each use with a bleach solution. Make a 1-to-10 solution by mixing one part bleach with 10 parts water. Using gloves, rinse the basin with the solution to disinfect. If necessary, scrub with a detergent to remove any dirt or debris.
- c. Use a boiling method of sterilization once a month to disinfect all metal implements. Designate one pot for sterilization to prevent cross-contamination with food. Submerge the tools in boiling water for 10 minutes. Drain the tools and allow them to dry.
- d. Store sterilized metal implements in an airtight, zipper-sealed bag to keep them from being exposed to dirt and bacteria. Be sure tools are completely dry before storing them. If waiting more than a couple of weeks before the next nail care service, sterilize the tools again before use.
- e. Inspect tools and equipment regularly to identify defective ones for repair, replacement or condemnation.

#### Ways to Keep a Salon Clean and Safe

1. All beauty salons must be well-lighted, and well-ventilated, and must in good sanitary condition.
2. The salon premises must be free from rodents, vermin, flies and similar insects.
3. All salon establishments must be provided with continuous running hot and cold water.
4. The curtains and floor coverings in the salon must be washable and kept clean.
5. All hair, used cotton and other waste materials must be removed from the floor immediately, and deposited in a closed container. Get rid of them from the salon premises at frequent intervals.
6. The rest rooms must be well-sanitized and be provided with individual towels.

7. All waste materials should be disposed of in an enclosed waste bin fitted with polythene bin liner, durable enough to resist tearing.

### **LO3:**

#### **WHAT DO YOU ALREADY KNOW?**

1. Plastic
2. T
3. T
4. T
5. Repaired/replaced/disposed of

#### **HOW MUCH HAVE YOU LEARNED?**

Metal tools and instruments must be sterilized following proper sterilization techniques. After the process, store in a dry cabinet until needed. Tools/implements which are made of porous materials such as nail files, buffers, nail brushes and orangewood sticks can harbor bacteria easily. Since they are wood products which cannot be sterilized, these tools should not be reused. The hand and foot spa machines must be kept dry after disinfecting them.

## **LESSON 3**

### **ANSWER KEYS:**

#### **LO1:**

#### **WHAT DO YOU ALREADY KNOW?**

1. Risk
2. Harm
3. Risk assessment
4. Training
5. Unsafe practices

#### **HOW MUCH HAVE YOU LEARNED?**

1. True
2. True
3. True
4. True
5. False
6. True
7. False
8. True
9. True
10. True

## LO2:

### WHAT DO YOU ALREADY KNOW?

1. Identify the spillage to everyone and clean up appropriately
2. All of the above
3. Assist your client to the nearest exit and safe place
4. Preventing injury, infection, or accidents
5. Unsafe practices

### HOW MUCH HAVE YOU LEARNED?

1. Microorganism
2. Injury
3. Reduction
4. Clear
6. Slips
7. Illness
8. Burns
9. Health
10. Syndrome
11. Airborne

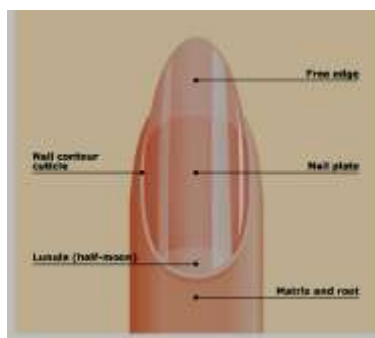
## LESSON 4

### LO1.

### WHAT DO YOU ALREADY KNOW?

### LO1.

#### Test 1



#### Test II.

1. Stiletto
2. Squoval
3. Round
4. Square

5. Oval/Almond

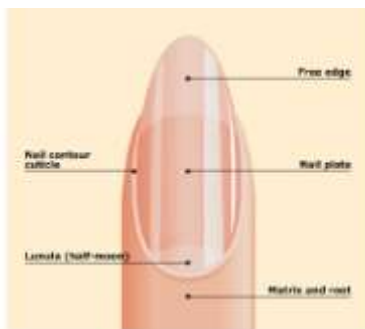
### Test III.

1. B
2. D
3. K
4. J
5. L
6. E
7. G
8. H
9. C
10. I

## HOW MUCH HAVE YOU LEARNED?

### Test 1.

A.



B

1. Oval
2. Pointed
3. Square
4. Round
5. Squoval

### Test II.

A. Fill in the Blanks

1. Nail plate
2. Nail walls
3. Rest
4. Cuticle
5. Nail plate

B. Completion Test

1. Furrows
2. Onychia
3. Hyperkeratosis
4. Shedding
5. Uneven

6. Bluish
7. Treating Cuts
8. Hangnails
9. Eggshell nails
10. Detachment

## **LO2.**

### **WHAT DO YOU ALREADY KNOW?**

1. Half-Moon with tip
2. French Manicure
3. Plain manicure
4. Half moon
5. Elephant tusk

### **HOW MUCH HAVE YOU LEARNED?**

1. Plain Manicure
2. Half-Moon with Tip
3. Half Moon
4. Elephant Tusk
5. French Manicure



# *Acknowledgement*

This Learning Module was developed for the Exploratory Courses in Technology and Livelihood Education, Grades 7 and 8 of the K to 12 Curriculum with the assistance of the following persons:

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