



TLE-Carpentry

Module 1: Identifying Materials and Tools for a Task



SELF-LEARNING MODULE



DEPARTMENT OF EDUCATION - SOCCSKSARGEN

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TLE- Carpentry Grade 7/8
Self- Learning Module (SLM)
Module 1: Identifying Materials and Tools for a Task
First Edition, 2020

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Printed in the Philippines by Department of Education – SOCCSKSARGEN Region

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7/8

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Introductory Message

For the facilitator:

Welcome to the TLE-Carpentry 7/8 Self-Learning Module (SLM) on Identifying Tools and Materials for a Tasks.

This module was collaboratively designed, developed and reviewed by educators both from public and private institutions to assist you, the teacher or facilitator in helping the learners meet the standards set by the K to 12 Curriculum while overcoming their personal, social, and economic constraints in schooling.

This learning resource hopes to engage the learners into guided and independent learning activities at their own pace and time. Furthermore, this also aims to help learners acquire the needed 21st century skills while taking into consideration their needs and circumstances.

In addition to the material in the main text, you will also see this box in the body of the module:



Notes to the Teacher

This contains helpful tips or strategies that will help you in guiding the learners.

As a facilitator you are expected to orient the learners on how to use this module. You also need to keep track of the learners' progress while allowing them to manage their own learning. Furthermore, you are expected to encourage and assist the learners as they do the tasks included in the module.









For the learner:




Welcome to the TLE-Carpentry 7/8 Self- Learning Module (SLM) on Identifying Tools and Materials for a Tasks

The hand is one of the most symbolized part of the human body. It is often used to depict skill, action and purpose. Through our hands we may learn, create and accomplish. Hence, the hand in this learning resource signifies that you as a learner is capable and empowered to successfully achieve the relevant competencies and skills at your own pace and time. Your academic success lies in your own hands!

This module was designed to provide you with fun and meaningful opportunities for guided and independent learning at your own pace and time. You will be enabled to process the contents of the learning resource while being an active learner.

This module has the following parts and corresponding icons:

 <i>What I Need to Know</i>	This will give you an idea of the skills or competencies you are expected to learn in the module.
 <i>What I Know</i>	This part includes an activity that aims to check what you already know about the lesson to take. If you get all the answers correct (100%), you may decide to skip this module.
 <i>What's In</i>	This is a brief drill or review to help you link the current lesson with the previous one.
 <i>What's New</i>	In this portion, the new lesson will be introduced to you in various ways; a story, a song, a poem, a problem opener, an activity or a situation.
 <i>What is It</i>	This section provides a brief discussion of the lesson. This aims to help you discover and understand new concepts and skills.
 <i>What's More</i>	This comprises activities for independent practice to solidify your understanding and skills of the topic. You may check the answers to the exercises using the Answer Key at the end of the module.
 <i>What I Have Learned</i>	This includes questions or blank sentence/paragraph to be filled in to process what you learned from the lesson.
 <i>What I Can Do</i>	This section provides an activity which will help you transfer your new knowledge or skill into real life situations or concerns.

 Assessment	This is a task which aims to evaluate your level of mastery in achieving the learning competency.
 Additional Activities	In this portion, another activity will be given to you to enrich your knowledge or skill of the lesson learned.
 Answer Key	This contains answers to all activities in the module.

At the end of this module you will also find:

References

This is a list of all sources used in developing this module.

The following are some reminders in using this module:

1. Use the module with care. Do not put unnecessary mark/s on any part of the module. Use a separate sheet of paper in answering the exercises.
2. Don't forget to answer *What I Know* before moving on to the other activities included in the module.
3. Read the instruction carefully before doing each task.
4. Observe honesty and integrity in doing the tasks and checking your answers.
5. Finish the task at hand before proceeding to the next.
6. Return this module to your teacher/facilitator once you are through with it.

If you encounter any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator. Always bear in mind that you are not alone.

We hope that through this material, you will experience meaningful learning and gain deep understanding of the relevant competencies. You can do it!



What I Need to Know

How are you today? Welcome to Lesson 1. How do you feel that you are going to be a skilled carpenter soon? This module was designed and written with you in mind. It is here to help you describe tools and materials used in carpentry. Do you have tools and materials for carpentry at your home? If yes, they are the basic construction tools and materials that a carpenter needs to build a furniture or a house to make your family safe and comfortable.

After going through this module, you are expected to describe tools and materials used in carpentry and prepare tools and materials for a task **(TLE_IACP7/8UT-0a-1)**.



What I Know

First, test yourself with your prior knowledge about the lesson you are about to learn

Directions: Choose the letter of the best answer. Write the chosen letter on your activity notebook.

1. You need to mark a line on a floor that is to be 10 meters (32' 10"). Which is the best layout tool to use?
 - a. Rip saw
 - b. Level bar
 - c. Pull-push-rule
 - d. Cross-cut-saw
2. Which are used as parts or components of a projects?
 - a. tools
 - b. materials
 - c. equipment
 - d. hardware
3. Which of the following does the term plumb refers to?
 - a. horizontal plane
 - b. vertical plane
 - c. both
 - d. none of the above
4. Architectural drawings are not drawn full size. Which is used to allow the building views to be drawn on a smaller paper?
 - a. measuring tape
 - b. ruler
 - c. scale
 - d. pencil

5. Which type of leveling tool is used to check walls for plumb and is hung from a string?
- a. plumb
 - b. chalk line
 - c. string line
 - d. level line
6. Which shop tool can be used to rip materials, make meter cuts and grooves?
- a. circular saw
 - b. chop saw
 - c. table saw
 - d. jointer
7. Which tool is often kept on a carpenter's belt and used to take measurements?
- a. chalk line
 - b. speed square
 - c. speed square
 - d. T-belt
8. The term level refers to the_____.
- a. horizontal plane
 - b. vertical plane
 - c. both
 - d. both a and b
9. Which equipment is manipulated by hand to facilitate carpentry tools?
- a. tools
 - b. materials
 - c. equipment
 - d. hardware
10. Which of the following is a sawn timber?
- a. plywood
 - b. lumber
 - c. gravel
 - d. cement
11. Which of these is a steel hand tool with small sharp teeth used for sharpening or shaping?
- a. metal vise
 - b. steel file
 - c. chalk line
 - d. speed square
12. Which of these is an all-purpose knife used for cutting?
- a. metal vise
 - b. steel file
 - c. utility knife
 - d. chalk line
13. Which of these is a double screw clamp with wooden jaws and useful for furniture for construction and repair?
- a. quick clamp
 - b. bar clamp
 - c. wood chisel
 - d. wood clamp
14. Which of these is a tool used to put in crosshead screws?
- a. Philips head screwdriver
 - b. architect ruler
 - c. flat head screw
 - d. ball peen hammer
15. Which carpenter's tool is used to drive and pull nails?
- a. claw hammer
 - b. sawhorse
 - c. rubber hammer
 - d. tack hammer

Lesson

1

Identifying Materials and Tools for a Task



What's In

Hi. How are you today? Welcome to a new learning opportunity. How do you feel that you are to be a skilled carpenter? Do you have tools and materials for carpentry in your home? In this lesson, you will know how to describe the different tools and materials used in the carpentry. They are the basic construction tools and materials that a carpenter needs to build a house or furniture that makes your family safe and comfortable.

At the same time, you will be guided on how to prepare the tools and materials for a task. Your house was built using tools and materials available in your locality. Can you see it around? Are you able to identify them? Do you know how to use them? Great job!



Notes to the Teacher

This module contains engaging activities where learners could do at their own pace. Guide the learners to do the learning tasks in the allotted time. Remind the learners to have fun while learning. Remind the parents as well to supervise or monitor their children while learning using this module.



What's New

Activity 1: Supply me!

How did you find your lesson so far? How many tools were you able to identify and use? At this time, this lesson will give you a clear understanding on how to identify such materials and tools used in carpentry. Also, you will be able to know their specific uses.

Directions: In each item, supply the missing letters to form a new word. Write your answer in your activity notebook.

1.	T			L	S					
2.		E		C					L	
3.	R				R					
4.		A	T	E						S
5.	L		N	E						
6.			S	K						
7.	L			B					R	
8.	C		M						T	
9.	H		R	I					A	L
10.	C	A			E	N			E	R

How did you find your lesson so far? At this time, the lesson will give you clear understanding on how to identify materials and tools in carpentry including specific jobs and its uses.



What is It

Description of Tools and Materials

In this lesson, you are now ready to describe materials and tools according to their job description. Also, you will describe the materials and tools according to their description per job requirement in carpentry.

Materials

Sand - fine gritty, substance found in the shore and desert

Plywood - thin cross laminated sheet of wood

Gravel - coarse aggregate of any hard-inert material mixed with cement to form a concrete

Lumber - are wooden boards or logs that have been sawn

Nails - made of metal used for fastening woods

Cement - a powdered substance which when mixed with water acts as binder of aggregate.

Water- added in the mixture of cement and aggregate

Reinforcing steel bar- used to reinforce the strength of construction works.

Corrugated Galvanized Iron Sheet- used for roofing.

Tools:

Plumb-bob - used for vertical alignment

Try square - used to test the squareness of a stock

Hack saw - fine toothed saw used to cut metals and pipes

Level Bar/Spirit bar - tool used in checking vertical and horizontal position

Pull-push rule - used for measuring long distances

Claw hammer - used for driving and pulling out nails

Shovel - used for mixing aggregates, cement, and water

Cross-cut saw - tool used for cutting across the grain

Ripsaw - used for cutting along the grain

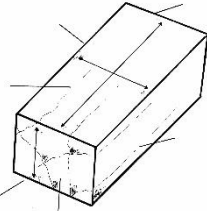
Twister -used to tighten the tire wire

Combination pliers-used to cut tie wires

Did you enjoy reading? Great! Have you learned the different materials and tools in carpentry? Good job! Now, let us continue the learning adventure in the next lesson.

Materials and Tools Used for Carpentry

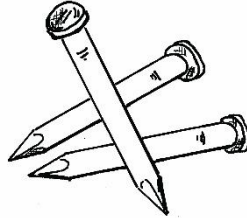
Materials



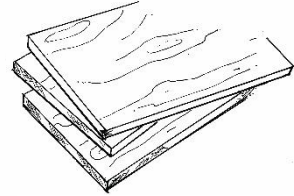
Lumber



Cement



Nails



Plywood

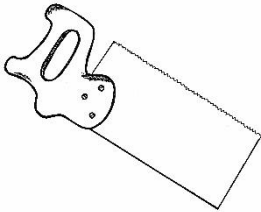


Gravel

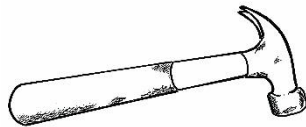


Sand

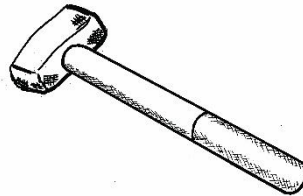
Tools:



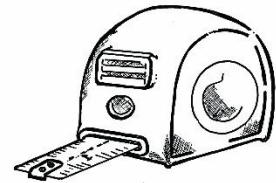
Hacksaw



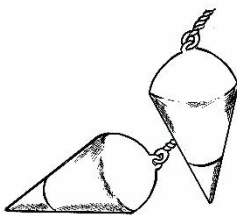
Claw Hammer



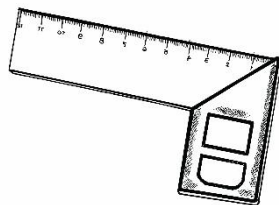
Mallet



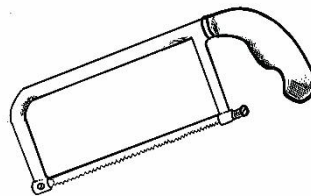
Pull-push rule



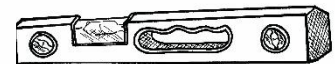
Plumb bob



Try square



Hack saw



Spirit Level/ Level Bar

Did you see the illustrations of the different materials and tools used in carpentry? Great! Now that you know them already and their description, do you know how to prepare and to use them? If not, you do not need to worry. The next lesson will be your guide on how to prepare these tools and materials in various tasks that you're going to do.

Prepare Tools and Materials for a Task

In preparing the tools and materials for a task it is essential to identify first the materials, describe the tools and materials and count them to suit a specific job requirement.

Prepare tools and Materials

Steps on Preparing Tools and Materials
1. Identify materials and tools applicable to a specific job requirement.
2. Describe tools and materials needed following the specific job requirements.
3. Count materials and tools according to job requirements.

Lesson 2. Prepare tools and materials for a task

In preparing the tools and materials for a task it is essential to identify first the materials, secure the requisition materials, and receive and inspect them.

Information Sheet 2.1

Prepare Tools and Materials

Steps	Things to remember
1. Identify materials	<ul style="list-style-type: none"> a. Identify materials and tools applicable to a specific job requirement. b. Count the description of the materials needed following the specific job requirements. c. Identify materials and tools according to the job requirements.
2. Secure requisition of materials	<ul style="list-style-type: none"> a. Request the needed materials and tools according to the prepared list. b. Follow the company standard operating procedures (SOP) c. Provide substitute materials and tools without sacrificing cost and quality of work.
3. Receive and Inspect Materials	<ul style="list-style-type: none"> a. Inspect materials and tools issued according to numbers and specifications. b. Check materials, tools, and accessories for damages according to enterprise procedures. c. Place the materials and tools in an appropriate location nearest to workplace.

Information Sheet 2.2

Secure Requisition of Materials

In this lesson, it will guide you how to accomplish the form to acquire or purchase the materials.

Procedure:

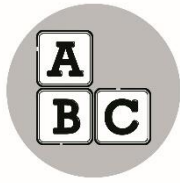
1. State the name of the carpentry project and date when you request for the materials.
2. Fill in the classification of the carpentry project and its purpose.
3. Write the number of required materials.
4. List the unit of the materials to be requested.
5. Enumerate the materials with their description.
6. List the cost per unit and the total cost.
7. Write your name as requisitioner.
8. Secure the approval of authorities concerned.

Information Sheet 2.3

Acquire and inspect materials/tools

It is important to inspect and check materials and tools for defects and damage before receiving them so that you can ask for replacements for those that you found defective.

1. Check if the materials and tools are complete in terms of quantity and specification (number of pieces, length, width, etc.)
2. Check the physical condition of tools, (check tools against the specification, quantity, and quality,) see to it that parts are complete, cutting edges or tooth free from damages,
3. Check the accessories of each material and tool. See to it that nothing is missing.
4. If any of the materials or tools is found missing or defective, report it immediately to the supply officer or teacher.
5. Get a replacement for the materials and tools found defective.
6. Sign the requisition form as you receive materials and tools.
7. Store the received materials and tools in a safe area or storeroom nearest your workplace. (store materials, in proper order, bulky and heavier materials at the bottom lighter and smaller items on top of the pile).
8. Always handle the materials and tools carefully. (avoid dropping the tools on the floor, do not expose tools and materials on sunlight or rains).



What's More

Activity 2. Check Me!

Since you are more familiar with the names of tools and materials in carpentry, you are getting better to becoming a carpenter. This time be excited of the next activity ahead of you. Let us see if you have already knowledge on how to prepare tools and materials for a given task.

Directions: Classify the following whether they are tools or materials in carpentry by putting a check (✓) on the column provided. Write your answer in your activity notebook.

	Tools	Materials
1. Claw hammer		
2. Sand		
3. Pull-push rule		
4. Cement		
5. Gravel		
6. Hacksaw		
7. Lumber		
8. Twister		
9. Shovel		
10. Plywood		



What I Have Learned

Activity 3. Search me in the Puzzle!

In this activity, search ten (10) materials and tools in the word search puzzle. Write your answers on your test notebook. Ready, set, and search!

C	N	G	P	R	L	P	X	R	H	P	M	H	R	G
L	W	X	A	S	C	E	J	D	Y	C	J	U	B	W
P	M	O	W	U	A	L	V	H	W	X	K	D	T	A
V	T	G	P	N	Z	E	A	E	S	D	Q	J	N	S
S	H	O	V	E	L	Q	R	W	L	Z	Y	D	E	K
I	S	W	F	D	G	A	R	R	H	B	R	X	M	C
W	A	T	E	R	U	E	E	O	Q	A	A	Y	E	A
E	N	W	A	Q	B	T	P	N	Y	Z	M	R	C	H
Q	D	L	S	M	S	L	A	L	X	O	W	M	S	A
H	N	Y	U	I	Z	I	E	K	U	P	E	F	E	L
D	R	L	W	B	L	U	C	V	W	M	L	O	T	R
T	B	T	O	S	P	R	I	P	A	H	B	Q	D	V
P	D	P	L	Y	W	O	O	D	F	R	D	B	N	S
I	U	C	R	I	P	S	A	W	Z	Q	G	J	O	Z
T	A	S	T	E	E	L	B	A	R	H	D	C	U	B

Have you searched the words such as lumber, nails, sand, plywood, gravel, water, steel bar, plumb bob, try square, hacksaw, level bar, pull-push rule, claw hammer, shovel, cross-cut saw, rip saw, twister, combination pliers, cement, and galvanized iron? If you found them, you are doing very well. Great job!



What I Can Do

Activity 4. Describe Me!

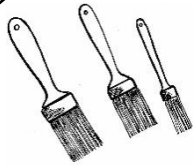
Since you are now familiar with the names of tools and materials in carpentry, you are getting better to becoming a carpenter. This time be excited of the next activity ahead of you.

Directions: Complete the table by describing the uses different tools and materials used in carpentry. Write your answers in your activity notebook. Follow the format given below.

Materials/Tools	Uses
1. Ripsaw	
2. Twister	
3. Cross-cut saw	
4. Nails	
5. Combination Pliers	
6. Hacksaw	
7. Try square	
8. Corrugated Galvanized Iron Sheet	
9. Level bar	
10. Claw hammer	

Activity 5. Draw me, car-PAINTER!

This is a continuation of the previous activity you have done. Draw a total of five tools and materials you have found in the previous activity. Draw it in your activity notebook.



Draw ME!

Wow! Great job! You are truly an artist in carpentry. It is a much-needed skill you can use to become a successful carpenter soon.



Assessment

Directions: Choose the letter of the best answer. Write the chosen letter on your activity notebook.

1. Which tool/material is used for roofing?
 - a. plywood
 - b. gravel
 - c. corrugated galvanized iron sheet
 - d. nails
2. Which is added in the mixture of cement and aggregate?
 - a. sand
 - b. water
 - c. shovel
 - d. gravel
3. Which of the following is made of metal used for fastening woods?
 - a. plywood
 - b. twister
 - c. nails
 - d. sand
4. Which is used to cut tie wires?
 - a. plumb-bob
 - b. ruler
 - c. combination pliers
 - d. twister
5. Which is a fine-toothed saw used to cut metal and pipes?
 - a. cross-cut-saw
 - b. hacksaw
 - c. ripsaw
 - d. try square
6. Which is used to cut along the grain?
 - a. circular saw
 - b. rip saw
 - c. claw hammer
 - d. cross-cut-saw
7. Which is used for measuring long distances?
 - a. level bar
 - b. push-pull-rule
 - c. plumb-bob
 - d. try square
8. Which is used to test the squareness of a stock?
 - a. try square
 - b. level bar
 - c. pull-push-rule
 - d. claw hammer
9. Which is a coarse aggregate?
 - a. sand
 - b. gravel
 - c. cement
 - d. nails
10. Which is a fine gritty, substance found in the shore and desert?
 - a. gravel
 - b. sand
 - c. water
 - d. cement

11. Which of the following is a powdered substance which when mixed with water acts as a binder of aggregate?

- a. cement
- b. nails
- c. sand
- d. water

12. Which is used for vertical alignment?

- a. try square
- b. level bar
- c. plumb bob
- d. twister

13. Which of the following tools is used in checking vertical and horizontal positions?

- a. level bar
- b. shovel
- c. ripsaw
- d. claw hammer

14. Which is used for mixing aggregate, cement, and water?

- a. shovel
- b. cement
- c. hacksaw
- d. nails

15. Which is used for cutting across the grain?

- a. push-pull-rule
- b. combination pliers
- c. twister
- d. cross-cut-saw



Additional Activities

You want more challenge? Try this activity to measure how you mastered this lesson. Go ahead!

Let's end this lesson by doing something new. You will draw the different materials and tools in carpentry and write its uses. Are you ready to draw some tools and materials you have learned today? Test your ability through drawing. Use the boxes given below and supply the uses of each tool and material. Write the activity in your activity notebook.

Uses: _____

Uses: _____

Uses: _____

Uses: _____



Answer Key

Assessment	1. C 2. B 3. C 4. C 5. B 6. B 7. B 8. A 9. B 10. B 11. A 12. C 13. A 14. A 15. D
-------------------	--

What Can I Do	1. Cut along the grain 2. Tighten the wire 3. Cut across the grain 4. To fasten the woods 5. Cut tie wires 6. Cut metal and pipes 7. Test squareness 8. Used for roofing 9. Check vertical and horizontal position 10. Driving and pulling out nails
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What I Have	Learn
1. Steel bar 2. Lumber 3. Nails 4. Plywood 5. Gravel 6. Try square 7. Ripsaw 8. Twister 9. Cement 10. Galvanized iron	

What's More	1. Tools 2. Materials 3. Tools 4. Materials 5. Materials 6. Tools 7. Materials 8. Tools 9. Tools 10. Materials
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What's New	1. Tools 2. Pencil 3. Ruler 4. Materials 5. Line 6. Task 7. Lumber 8. Cement 9. Horizontal 10. Carpenter
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What I Know	1. C 2. B 3. A 4. D 5. A 6. A 7. D 8. B 9. A 10. B 11. B 12. C 13. D 14. A 15. A
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DISCLAIMER

This Self-Learning Module (SLM) was developed by DepEd SOCCSKSARGEN with the primary objective of preparing for and addressing the new normal. Contents of this module were based on DepEd's Most Essential Learning Competencies (MELC). This is a supplementary material to be used by all learners of Region XII in all public schools beginning SY 2020-2021. The process of LR development was observed in the production of this module. This is version 1.0. We highly encourage feedback, comments, and recommendations.

For inquiries or feedback, please write or call:

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