

TEACHER : Meagan S. Bulawin

LEARNING AREA : CIVIL
TECHNOLOGY

DATE : 09/10/2024

GRADE LEVEL: 9

SUBJECT : TLE

OBJECTIVES	
Content Standard	The students will be able to identify and describe the characteristics of at least five basic wood joints.
Performance Standard	The students should demonstrate after learning about the basic wood joints.
Learning Competencies	At the end of this lesson, the students will be able to: <ul style="list-style-type: none"> • identify and name the basic types of wood joint. • match the name of each basic types of wood joint. • to evaluate the effectiveness of different basic wood joints for specific woodworking projects, justifying their choices based on factors like strength, aesthetics, and ease of construction.

SUBJECT MATTER	
Topic	Basic Types of Wood Joints
Instructional Materials	Manila Papers and Cartolina
References	<p><i>Wood Joint and Their Uses - Definition, pictures and examples.</i></p> <p>https://www.datapowertools.co.uk/blog/different-types-of-wood-joints/?srsltid=AfmBOop6Ns-Yd_U1cOvrq27vcJQNXe7TwB-7zx1_S2X4JZz9i_mrRf56</p> <p><i>Wood Joint and Their Uses - Pictures, uses, and definition.</i> October 8, 2021.</p> <p>https://www.findbuytool.com/blogs/university/10-basic-types-of-wood-joints-and-when-to-use-them?srsltid=AfmBOoprRQnab8_utqoAL5GxEhzn81hFXMP19wRhN4FNyUuf0i4KZsLE</p>
Strategies	7E's (Elicit, Engage, Explore, Explain, Elaborate, Evaluate, Extend)

PRELIMINARIES		
Greetings	<p>Good afternoon class!</p> <p>How are you?</p> <p>That's good to hear that, class.</p>	<p>Good afternoon, Ma'am</p> <p>Okay ra Ma'am,</p>

<p>Prayers</p>	<p>Before we formally start our class, let's have a prayer first. Let's all stand up.</p> <p>And _____ please lead the prayer.</p> <p>Thank you_____.</p> <p>Okay, you may now take your seats.</p>	<p>(Students who were assigned to today's prayer)</p>
<p>Checking of Attendance</p>	<p>Are there any absent today?</p> <p>Okay Thank You.</p>	<p>None, Ma'am</p>
<p>Classroom Management</p>	<p>How are you today, class?</p> <p>Good to know. Before we start, kindly arrange the chairs properly and pick up pieces of papers under your chairs.</p> <p>Now, I will be showing you what are the classroom rules.</p> <ul style="list-style-type: none"> • Be kind and polite to each other's. • Obey all school rules. • Listen and follow directions. • Raise your hand before speaking • Be attentive to teachers while teaching <p>Is it clear class?</p>	<p>We are fine, Ma'am</p> <p>(Students pick their trash and arranged their chairs)</p> <p>Yes Ma'am.</p>
<p>Collection of Assignments</p>	<p>Now, kindly submit your assignments, forward it in front.</p> <p>Let's see if you really did your assignment.</p> <p>What was your assignment all about?</p> <p>Yes please</p> <p>Alright, thank you for answer, you really did your assignment.</p>	<p>Okay Ma'am.</p> <p>(Raise hand)</p> <p>Ma'am our assignment was about to research what are the Basic Types of Wood Joint.</p> <p>Basic types of wood joints include the butt joint, lap joint, and miter joint, which are simple yet commonly used in woodworking. These joints can be crafted by hand or with basic tools, providing essential connections in various wood projects.</p>

LESSON PROPER	
Teacher's Activity	Student's Activity
I. Elicit	
<p>Once again good afternoon, class!</p> <p>Today, we're going to discuss the Basic types of Wood Joints</p> <p>Before we discuss our lesson, does anyone here has the idea what were this topic would be?</p> <p>Okay please?</p> <p>Thank you for your answer.</p> <p>Now let's start from our objective for today.</p> <p>At the end of this lesson, the students will be able to:</p> <ol style="list-style-type: none"> 1. Identify and name the basic types of wood joint. 2. Match the name of each basic types of wood joint. 3. To evaluate the effectiveness of different basic wood joints for specific woodworking projects, justifying their choices based on factors like strength, aesthetics, and ease of construction. <p>Let's move on to the Basic Types of Wood Joints</p> <p>What are Wood Joints?</p> <p>Wood joints are the fundamental building blocks of woodworking, allowing craftspeople to combine pieces of wood into complex and functional structures.</p> <p>Today we will discuss the Basic Types of Wood Joints, and this are</p> <ol style="list-style-type: none"> 1. Butt Joint <p>is the simplest and most basic joint, where two pieces of wood are simply butted together at a right angle.</p> <ol style="list-style-type: none"> 2. Miter Joint <p>involves two angled cuts, typically at 45 degrees, that meet to form a 90-degree angle.</p> <ol style="list-style-type: none"> 3. Half-Lap Joint 	<p>Good afternoon, Ma'am</p> <p>(Raise hand)</p> <p>I think we're going to explore something that's the foundation of all woodworking.</p> <p>(Another raises hand)</p> <p>We're going to learn about the different ways to join pieces of wood together.</p> <p>(All the students read the objectives)</p>

in a half-lap joint, the ends of two pieces of wood are cut down to half their thickness, creating an overlap.

4. Tongue and Groove Joint

this joint feature a channel or groove on one piece of wood and a tongue or ridge on the other.

5. Dado Joint

resembles a tongue and groove joint, but the dado is cut across the grain of the wood, while a groove is cut along the grain.

6. Rabbet Joint

is formed by cutting a recess into the edge of a piece of wood.

7. Dovetail Joint

a dovetail joint is often recognized as a sign of high-quality craftsmanship. To form dovetail joints, we cut a series of trapezoidal-shaped interlocking pins and tails at the end of the boards.

II. Engage

Now let's take a closer look at our topic for today.

Let's have a group activity. I will divide you into 2 groups

I will give you this envelope, inside of this envelope has pictures.

Now, for instruction, just match the pictures and give the name of the pictures. You are given just 5 minutes to answer. Write the members of the group at the back of the bond paper.

Any more questions and clarifications?

None Ma'am

If none you may now begin.

<p>2 minutes left...</p> <p>Okay times up.</p> <p>Were you able to match the image to its definition?</p> <p>And that's great that you have something to learn for today's lesson.</p> <p>Don't forget to write to your members.</p>	<p>(Students started answering and trying to match the picture to its definitions.)</p> <p>Yes Ma'am.</p>
<p>III. Explore</p>	
<p>Now class since we already discussed the 7 types of wood joints. let's dig deeper, I will be going to show you a video of each joint.</p> <p>HOW TO MAKE BUTT JOINT https://www.youtube.com/watch?v=bqEiXN-Bq9U</p> <p>HOW TO MAKE MITER JOINT https://www.youtube.com/watch?v=MXBEVH4I_4</p> <p>HOW TO MAKE HALF LAP JOINT https://www.youtube.com/watch?v=OU_i8I-007c</p> <p>HOW TO MAKE TONGUE AND GROOVE JOINT https://www.youtube.com/watch?v=BSIQdLPccOE</p> <p>HOW TO MAKE DADO JOINT https://www.youtube.com/watch?v=uhcKoG3zDn0</p> <p>HOW TO MAKE RABBET JOINT https://www.youtube.com/watch?v=rCooxeLndDw</p> <p>HOW TO MAKE DOVETAIL JOINT https://www.youtube.com/watch?v=n0InNIDHxWU</p>	<p>Students watching the video instinctively.</p> <p>(Students listen attentively, preparing to take notes)</p>

IV. Explain	
<p>Thank You for watching and now may ask anyone, what the video tells about?</p> <p>As you observe on the video while watching...</p> <p>The 1st video is showing how to make a butt joint it explains the proper way in how to use it and a technique.</p> <p>The 2nd video shows how to make miter joint and explain the proper way in how to use it and a technique.</p> <p>The 3rd video shows how to make half lap joint and explain the proper way in how to use it and a technique.</p> <p>The 4th video shows how to make tongue and groove joint and explain the proper way in how to use it and a technique.</p> <p>The 5th video shows how to make dado joint and explain the proper way in how to use it and a technique.</p> <p>The 6th video shows how to make rabbet joint and explain the proper way in how to use it and a technique.</p> <p>The 7th video shows how to make dovetail joint and explain the proper way in how to use it and a technique.</p>	<p>(a student raise hand)</p> <p>All of the videos talk about the different types of wood joint on how they are going to make and use it.</p>

<p>Any questions regarding the video?</p> <p>Feel free to ask questions or share your thoughts as It's important that you know the different types of wood joint.</p>	
<p>V. Elaborate</p>	
<p>Now, I'm going to ask you a scenario in which what types of wood joint you'll going to use.</p> <p>Real-World Connections:</p> <p>Scenario 1: Constructing a Picture Frame</p> <p>Miter joints create a seamless, 90-degree corner that enhances the visual appeal of the frame. The angled cuts create a larger surface area for glue, ensuring a strong bond.</p> <p>Scenario 2: Building a Bookshelf</p> <p>Dado joints are ideal for creating strong and stable shelves that can support the weight of books. The dado, or groove, cut into the side pieces of the bookshelf provides a secure fit for the shelf boards.</p> <p>....</p>	<p>Miter joints</p> <p>Dado joints</p>
<p>VI. Evaluate</p>	
<p>It's time to assess your understanding about the types and uses of wood joint.</p>	

Identification test focusing on the basic types of wood joints.

You will be given 10 minutes to answer this quiz.

(show to the class the quiz)

Your time starts now.

Instructions:

Examine each image carefully and identify the type of wood joint depicted.

Write the corresponding letter (A, B, C, etc.) next to the description of each joint.

Take your time to analyze the details of each joint before making your selection.

Wood Joints:

- A. Butt Joint
- B. Miter Joint
- C. Half-Lap Joint
- D. Tongue and Groove Joint
- E. Dado Joint
- F. Rabbet Joint
- G. Dovetail Joint

1. A series of trapezoidal-shaped interlocking pins and tails at the end of the boards.

2. A rectangular notch is cut into the edge of one piece of wood, and the other piece is joined at a right angle.

3. A groove is cut across one piece of wood, and the other piece is fitted into it.

4. One piece of wood has a channel or groove, and the other has a tongue or ridge that fits into it.

5. The ends of two pieces of wood are cut down to half their thickness and overlapped.

6. Two pieces of wood joined at complementary angles to form a 90-degree angle.

7. A simple joint where two pieces of wood are joined end-to-end.

Answer Key:

- 1. G. Dovetail Joint
- 2. F. Rabbet Joint
- 3. E. Dado Joint
- 4. D. Tongue and Groove Joint
- 5. C. Half-Lap Joint
- 6. B. Miter Joint
- 7. A. Butt Joint

VII. Extend

In a short bond paper for your assignment.

Objective: To demonstrate a deep understanding of wood joint principles and design a new, innovative joint that addresses a specific challenge in woodworking.

Choose a common challenge or limitation faced by woodworkers when constructing projects.

This will be submitted at the next meeting.

That is, it for today's class! Thank you for listening and participating.

Goodbye and God Bless class! See you next meeting.

(Goodbye, Ma'am)

