Grade 10 Unit 10 of 18

Unit 10 - Woodworking- Estimation & Procedures



Unit Length:	5 periods
Number of Tasks	5
Lectures:	2 - 20 minute Costing sheet & solid
	1 - 15 minute Gluing demonstration
Topics include:	Joinery Techniques
	• Estimating Projects
	Solid wood identification
	Sheet stock identification
	Gluing and Clamping



Let's Get Started

Learning Goals - By the end of this unit you will be able to...

Overall Goals: I can apply the mathematical skills required in the planning and building of construction projects.

Specific Goals:

- I will apply relevant mathematical concepts and formulas when preparing components of a construction project (e.g., determine dimensions, shapes, quantities, areas, and angles);
- I will convert fractions to decimals and vice versa for typical construction tasks (e.g., determining length, circumference, radius, diameter, perimeter, area, or volume);
- I will prepare estimates, using appropriate metric and/or imperial units (e.g., centimetres, square metres, cubic metres, litres, inches, board feet, square feet, cubic yards), of the materials required to complete construction projects (e.g., volume of concrete, area of roofing, number and type of fasteners), and estimate the cost of these materials.

Overall Goals: I can use fabrication and assembly techniques safely, accurately, and in the correct sequence.

Specific Goals:

- I will construct projects in accordance with specifications (e.g., sketches, working drawings, lists of materials);
- I will fabricate and/or assemble project components in a logical and efficient sequence (e.g., select appropriate materials and tools, follow step-by-step instructions).

Construction Technology

Tasks to Complete

- Types of Wood Joints
 Worksheet
- Sheet Stock Note
- ♦ Costing Sheet Stock
 Note
- **♦ Worksheet**
- Solid Stock Note
 - ♦ Costing Solid Stock
 Note
 - **♦ Worksheet**
- Gluing and Clamping Worksheet
- Unit Completion:
- ♦ Test Solid, Sheet Stock & Gluing and Clamping

Required Resources

- Types of Wood Joints
 Worksheet
- Costing Sheet
 Stock Worksheet
- Costing Solid
 Stock Worksheet
- Gluing and Clamping Worksheet
- Resource Manual

Types of Wood Joints Worksheet 10



Task 1. Answer the following question on wood joints. Maybe you will incorporate some of these joints into your major project and it will last for many years. Use the section "*Making Strong Joints*" in the **Resource Manual** to find the answers.

	Making Corner Joints 1. What type of joint can be used for trim and picture frames and what other uses are there for this joint (3 points)	
	2. How is this joint cut and at what angle? (2 points)	
ろのの	Joining a Top Piece of Wood to a Side Piece 3. What is the name of this joint and how is it cut? (3 points)	
	4. How is this is int hold to goth on /4 points)?	
	4. How is this joint held together (4 points)? 5. Why is this joint better than a butt joint (2 points)?	
	Joining One Board in the Centre of Another	
	6. What are the advantages of the dado joint over the butt joint? (2 points)	
Str	7. Name the 4 methods of cutting a dado joint? How would you cut it in this class? (2 points)	
		You Nailed It