Unit 3 - Joinery & Cabinetmaking

Content Area:	Arts
Course(s):	Wood Arts Tec 2
Time Period:	Semester 1 & 2
Length:	6 Weeks
Status:	Published

Standards

VA.K-2.1.5.2.Cr1b	Engage in individual and collaborative art making through observation and investigation of the world, and in response to personal interests and curiosity.
VA.K-2.1.5.2.Cr2b	Demonstrate safe procedures for using and cleaning art tools, equipment and studio spaces.
MA.G-MG.A.3	Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).
CS.K-2.8.2.2.ED.3	Select and use appropriate tools and materials to build a product using the design process.
CAEP.9.2.12.C.3	Identify transferable career skills and design alternate career plans.

Enduring Understandings

1. Joinery is used on most woodworking projects and cabinetmaking to produce a strong quality product.

- 2. Cabinetmaking requires mathematical calculations to fit properly
- 3. The joinery and tooling methods associated with cabinetmaking can transfer to real world careers paths.

Essential Questions

- 1. What type of joinery can you find around your home?
- 2. What cabinetmaking skills have you used on prior projects and see using in future projects?
- 3. Why is joinery methods preferred over the reliance of fasteners and hardware?

Knowledge & Skills

Joinery & Cabinetmaking Students will be able to:

- Identify methods to create joinery.
- Create a project that includes joinery using tools and machines.
- Apply mathematical calculations to determine lengths and widths.
- Connect skills associated with cabinet making and joinery to real world problems and careers.

Joinery Types:

- Dowelled Joint
- Pocket Hole
- Mortise & Tenon
- Rabbet
- Dado
- Tongue & Groove

Transfer Goals

1. Students will be able to create a product using woodworking joinery and mathematical principles to calculate lengths and widths.

2. Students will be able to identify joinery that improves product strength and reduces the reliance on hardware to provide rigidity.

Resources

Resources:

- Lumber
- Table Saw
- Router Bits for tongue and groove
- Pocket-hole jig
- Dowels
- Doweling jig
- Machines and tools

Assessments

Assessments

Modifications

Modifications