

**Pequea Valley School District
Technology Department**

Unit: Power Tool Safety

Course: Wood I

Grade: HS

Planning the Focus Based on the Desired Result
What do you want all students to know, understand and do by the end of the unit?

Unit Essential Question(s)

How is safety maintained in the woodshop

Keystone Eligible Content/PA Core Standard

3.7.10 A. Identify and safely use a variety of tools, basic machines, materials and techniques to solve problems and answer questions

Pacing: Approximate number of class sessions per unit

15 Classes

Tier 3 Vocabulary (Content specific vocabulary)

Riving Knife, Kerf, Face, Edge, End Grain, Rip, Cross Cut, Square, Rough, Finish Cut, Thickness, Width, Length

Know - What do students need to **know** in order to be able to do and understand? *List concepts, such as facts, formulas, key vocabulary and knowledge “nuggets”.*

- Students need to know how to rip, cross cut, and plan material down to the final dimensions.

Understand - What do students need to **understand**? What is the **big idea**? *List broad concepts or “big ideas” in a statement of enduring understanding.*

- Students need to understand the proper way to process a board to final dimensions

Learning Outcome - What do students need to be able to **accomplish** by the unit’s end? *List skills and competencies.*

- Safely process material to specific dimensions to complete projects correctly.

Literature:

Software/Resources:

**Pequea Valley School District
Technology Education**

Unit: Processing Materials

Course: Wood I

Grade: HS

Planning the Focus Based on the Desired Result
What do you want all students to know, understand and do by the end of the unit?

Unit Essential Question(s)

How do i properly process material safely and efficiently

Keystone Eligible Content/PA Core Standard

3.7.10

Pacing: Approximate number of class sessions per unit

40

Tier 3 Vocabulary (Content specific vocabulary)

Ripping, Cross Cutting, Kerf, Fence, Miter Gauge, Miter Saw, Table Saw, Jointer, Planer, Length, Width, Thickness, Board foot, Grain, ReSaw, Miter Cut, Flush, Proud

Know - What do students need to **know** in order to be able to do and understand? *List concepts, such as facts, formulas, key vocabulary and knowledge “nuggets”.*

- Identify defects in a board that could be detrimental or unsightly. Proper work flow. Safety Techniques. Reading the grain.

Understand - What do students need to **understand**? What is the **big idea**? *List broad concepts or “big ideas” in a statement of enduring understanding.*

- How to safely operate power tools

Learning Outcome - What do students need to be able to **accomplish** by the unit’s end? *List skills and competencies.*

- Process boards to proper working dimensions safely and correctly.

Literature:

Software/Resources:

**Pequea Valley School District
Department**

Unit: Basic Wood Joinery

Course: Wood I

Grade: HS

Planning the Focus Based on the Desired Result
What do you want all students to know, understand and do by the end of the unit?

Unit Essential Question(s)

How do I select a wood joint that properly meets the needs of a project and also fits the correct aesthetic value?

Keystone Eligible Content/PA Core Standard

3.8.10

Pacing: Approximate number of class sessions per unit

10

Tier 3 Vocabulary (Content specific vocabulary)

Lap, Dovetail, Finger, Mortise, Tenon, Jig, Fixture, Flush, Proud, Sliding T Bevel, Square

Know - What do students need to **know** in order to be able to do and understand? *List concepts, such as facts, formulas, key vocabulary and knowledge “nuggets”.*

- Shoulder, Straight Bit, Half Blind Dovetail, Full Dovetail, Transferring Lines. FORM follows FUNCTION, Butterfly Joint, Lap and Pin

Understand - What do students need to **understand**? What is the **big idea**? *List broad concepts or “big ideas” in a statement of enduring understanding.*

- What is Jointery? Different Forms for Different Purposes.

Learning Outcome - What do students need to be able to **accomplish** by the unit’s end? *List skills and competencies.*

- Produce Dovetail, Lap, Finger Joints. Explain the differences and their applications

Literature:

Software/Resources:

**Pequea Valley School District
Technology Education**

Unit: Finishing Techniques

Course: Wood I

Grade: HS

Planning the Focus Based on the Desired Result
What do you want all students to know, understand and do by the end of the unit?

Unit Essential Question(s)

How do I choose a reasonable finish that meets the needs of the function of the furniture piece?

Keystone Eligible Content/PA Core Standard

3.9.10

Pacing: Approximate number of class sessions per unit

10

Tier 3 Vocabulary (Content specific vocabulary)

- Shellac, Stain, Lacquer, Milk Paint, Solvent, Sanding Technique, Orbital Sander.

Know - What do students need to **know** in order to be able to do and understand? *List concepts, such as facts, formulas, key vocabulary and knowledge “nuggets”. “With the Grain”,*

- “Raising the Grain”, “Rounding the Edge” “Surface Area” Moisture Content

Understand - What do students need to **understand**? What is the **big idea**? *List broad concepts or “big ideas” in a statement of enduring understanding.*

- Finish application, Clean up procedure, how to build a finish, prep work prior to finishing

Learning Outcome - What do students need to be able to **accomplish** by the unit’s end? *List skills and competencies.*

- Apply a finish properly to create the desired effect.

Literature:

Software/Resources: