

Topic: Jewelry Box Construction

**Subject(s):Tech - Ed
Grade(s): 9-12**

Days: (21)

Key Learning(s): Students will use the Manufacturing Lab to construct a Jewelry Box

Unit Essential Question(s): How do we safely use the Manufacturing Lab to construct a Jewelry Box?

Optional Instructional Tools:

- Programmable Router
- Wood Technology and Processes text
- handouts

Concept:3.4.10.B4, 3.4.10.D1, 3.4.10.E6, 3.4.10.E7 Shop Safety	Concept: 3.4.10.B4, 3.4.10.D1, 3.4.10.E6, 3.4.10.E7 Measurement and Design	Concept: 3.4.10.B4, 3.4.10.D1, 3.4.10.E6, 3.4.10.E7 Material Requirements
Lesson Essential Questions: What is the safe attitude?	Lesson Essential Questions: Can I measure accurately to 1/16 of an inch?	Lesson Essential Questions: What is furniture grade lumber?
Vocabulary: personal protective equipment, push boards, MSDS sheets, coasting	Vocabulary: Metric, customary, fractional, decimal equivalent, dimension, function, scale, bill of materials	Vocabulary: Board foot, grading, hardwood, softwood, kiln dried

Concept: 3.4.10.B4, 3.4.10.D1, 3.4.10.E6, 3.4.10.E7 Hand Tools	Concept: 3.4.10.B4, 3.4.10.D1, 3.4.10.E6, 3.4.10.E7 Machine Operation	Concept: 3.4.10.B4, 3.4.10.D1, 3.4.10.E6, 3.4.10.E7 Assembly
Lesson Essential Questions: How do I use the proper hand tools to construct the Jewelry Box?	Lesson Essential Questions: How do I safely use the Machinery in the Manufacturing Lab?	Lesson Essential Questions: How do I assemble the Jewelry Box?
Vocabulary: Combination square, block plane, nail set, punch, Phillips screwdriver, chisel	Vocabulary: Radial arm saw, jointer, table saw, planer, power miter saw, band saw, belt sander,	Vocabulary: Glue, end grain, long grain, hinges, gains

<p>Concept: 3.4.10.B4, 3.4.10.D1, 3.4.10.E6, 3.4.10.E7 Sanding and Finishing</p>

<p>Lesson Essential Questions: What is our finishing technique?</p>

<p>Vocabulary: Sandpaper, grit, mill marks, stain, topcoat</p>

Days: (21)

Key Learning(s):
The Students will use the Manufacturing Lab to construct a small table

Unit Essential Question(s):
How do we safely use the Manufacturing lab to construct a small table?

- Optional Instructional Tools:**
- Programmable Router
 - Wood Technology and Processes text
 - handouts

<p>Concept:3.410.B4, 3.410.B1, 3.4.10E6, 3.4.10.E7 Material requirements</p>	<p>Concept: 3.410.B4, 3.410.B1, 3.4.10E6, 3.4.10.E7 Design requirements</p>	<p>Concept:3.410.B4, 3.410.B1, 3.4.10E6, 3.4.10.E7 Machine operation</p>
<p>Lesson Essential Questions: What is the board foot requirement for the table project?</p>	<p>Lesson Essential Questions: What are the table components?</p>	<p>Lesson Essential Questions: How do we use the additional machinery necessary to construct the table?</p>
<p>Vocabulary: Poplar, select grade, board foot</p>	<p>Vocabulary: Spindle, legs, 5 inch square, top, spindle pattern</p>	<p>Vocabulary: Lathe, spindle sander, drill press, router table</p>

<p>Concept:3.410.B4, 3.410.B1, 3.4.10E6, 3.4.10.E7 Assembly</p>	<p>Concept:3.410.B4, 3.410.B1, 3.4.10E6, 3.4.10.E7 Sanding and Finishing</p>
<p>Lesson Essential Questions: What joinery methods are used to assemble the table?</p>	<p>Lesson Essential Questions: What is a surface type finish?</p>
<p>Vocabulary: Sliding dovetail, wedge, caliper</p>	<p>Vocabulary: Polyurethane, shellac steel wool</p>