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| Lesson Plan: Table Router | Date: January 2017 |
| Course: Wood 9-10 | Estimated time: 70 minutes |
| Lesson Objectives:* Big Idea - Complex tasks require the sequencing of skills.
* Curricular Competencies
	+ Identify and use appropriate tools, technologies, materials, and processes for production
	+ Demonstrate an awareness of precautionary and emergency safety procedures in physical environments
	+ Functions and role of portable and stationary power equipment in the creation of a project
	+ Techniques for stock breakout and woodworking using a variety of tools and equipment, including stationary power equipment
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| Introduction |  |
| * Show students example of completed project and several router bits with different decorative profiles
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| Lesson Details | Important Points & Teaching Techniques/Strategies |
| * **Attendance**

5 min10 min15 min10 min30 min* **Introduction and question prior knowledge**
* **Demonstrate how to set up and use the table router**
* **Safety Notes**
	+ Wear safety glasses
	+ Secure long hair and loose clothing
	+ Move wood against cutter spinning direction (right-to-left)
	+ Adjust the fence to take light cuts
* **Procedure Notes**
	+ Set the router bit at the correct height
	+ Cut the end grain first to prevent tear-out
	+ Adjust the fence to make 2 cuts for jewelry project
* **Recap demo by asking students questions about each step of the procedure**
* **Students work on projects**
	+ Students who are ready to use the router begin working with teacher supervision

**Materials:*** Wood – scrap for demo
* Equipment – safety glasses, router bits, table router with fence
* Teaching aid – demo jewelry box lid and base

**Adaptations for ELLs:*** Vocabulary handout with images for the following terms:
	+ Router
	+ Router table
	+ Router bit
	+ Collet
	+ Collet wrenches
	+ Fence
	+ PPE (safety glasses)
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| Questions |  |
| * Which direction does the cutter spin?
* Should you move your wood with or against the cutter direction?
* How can you prevent tear out? (end-grain first)
* How can you prevent kick back? (take light cuts)
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| Closure |  |
| * Ask students if they will be ready to use the router on their project soon and remind them that they need to check with a teacher before using the router and that they need teacher supervision the first time that they use it.
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| Reflection |  |
| * What went well? What might you change?
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