|  |  |  |
| --- | --- | --- |
| 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 | | |
| Introduction |  | |
| * Show students example of completed project and several router bits with different decorative profiles | | |
| Lesson Details | Important Points & Teaching Techniques/Strategies | |
| * **Attendance**   5 min  10 min  15 min  10 min  30 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) | | |
| 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) | | |
| 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. | | |
| Reflection |  | |
| * What went well? What might you change? | | |