

## Bachelor of Education (Elementary) & Bachelor of Education (Secondary) STEM/BETT Lesson Plan

Lesson Title: Garden spade Lesson #                      Date: Dec 13/23  
 Name: Rory Campbell Subject: Metal Grade(s): 8

### Rationale:

Enhancing skill development, hand eye coordination and learning to be responsible with tools

### Core Competencies:

Communication	Thinking	Personal & Social
<b>Collaborating</b> – Share ideas, work together in a tight area, share tools <b>Communicating</b> – Ask others what is working, work as a team while moving and cutting long pieces of steel	<b>Critical</b> – Taking pride in work, having an end goal for finished product <b>Creative</b> – Try different methods or tools, use method that works best for student	<b>Personal awareness and responsibility</b> – Set goals and monitor progress, regulate emotions <b>Social awareness and responsibility</b> – Working in close proximity to others, clean up area and tools

### Big Ideas (Understand)

Complex tasks may require multiple tools and technologies, there are no shortcuts in doing difficult tasks to reach end goals

### Learning Standards

(DO)	(KNOW)
Learning Standards - Curricular Competencies	Learning Standards - Content
<ul style="list-style-type: none"> <li>Select, and as needed learn about, appropriate tools to complete a task</li> <li>Identify and evaluate the skills needed in relation to a specific task and develop as needed</li> <li>Identify and use appropriate tools and materials for production and carry out production plan</li> </ul>	<ul style="list-style-type: none"> <li>Metalworking techniques and processes using hand tools, specifically filing and cutting techniques</li> </ul>

### Instructional Objectives & Assessment

Instructional Objectives (students will be able to...)	Assessment
<ul style="list-style-type: none"> <li>Differentiate between files and use proper technique</li> </ul>	<ul style="list-style-type: none"> <li>Project to be inspected, compared to sample and approved by instructor before moving to next step</li> </ul>

### Prerequisite Concepts and Skills:

N/A – can be learned during lesson

### Indigenous Connections/ First Peoples Principles of Learning:

N/A

### Universal Design for Learning (UDL):

Students work at their own pace

--

**Differentiate Instruction (DI):**

If required, students can work with a partner
---

**Materials and Resources**

Files, vice, emery cloth and a piece of flatbar for each student
--

**Lesson Activities:**

Teacher Activities	Student Activities	Time
Introduction (anticipatory set – “HOOK”): Refresher demo, explanation of types of files, proper techniques and how to clean file if required	Watch demo and ask questions if unsure of techniques	5 min
Body :Assist as needed, communicate with each student	Continue cross filing and draw filing projects	60 min
Closure:	Clean up area, projects in drawers, all tools back into tool locker	10 min

**Organizational Strategies:**

Send one table at a time to pick out a file, each student works at their own vice
---

**Proactive, Positive Classroom Learning Environment Strategies:**

Teaching one step at a time, explain to faster students to help others before next step will be explained, keep positive interactions with students individually
---

**Extensions:**

Use emery cloth for an added finish to project
--

**Reflections (if necessary, continue on separate sheet):**

--