Elementary Teacher Training

4 Step Training

- Watch Safety Videos
- Teacher Demonstration
- 100% on Safety Quiz
- Student Demonstration and Passport Sign-Off

Keys to Success

Elementary Tool Safety

Essential Headings:

- Assess Existing Knowledge & Awareness of Technological Education
- Funding and Resources
- Essential Physical Resources
- Personal Protective Equipment (PPE)
- Effective Storage
- Professional Development for Staff
- Establishing Safety Protocols in the Classroom
- **Conducting Tool Training with Students**

***** Heading Covered In This Slide Deck*****

Training Overview

1. Become familiar with all tools and machinery
2. Watch Safety video for each major tool
3. Complete a demonstration for the entire class or small groups
4. Successfully achieve 100% on each major tool safety quiz
5. Complete student demonstration for each major tool/some hand tools and sign off the OCTE passport
6. Begin projects

Machines

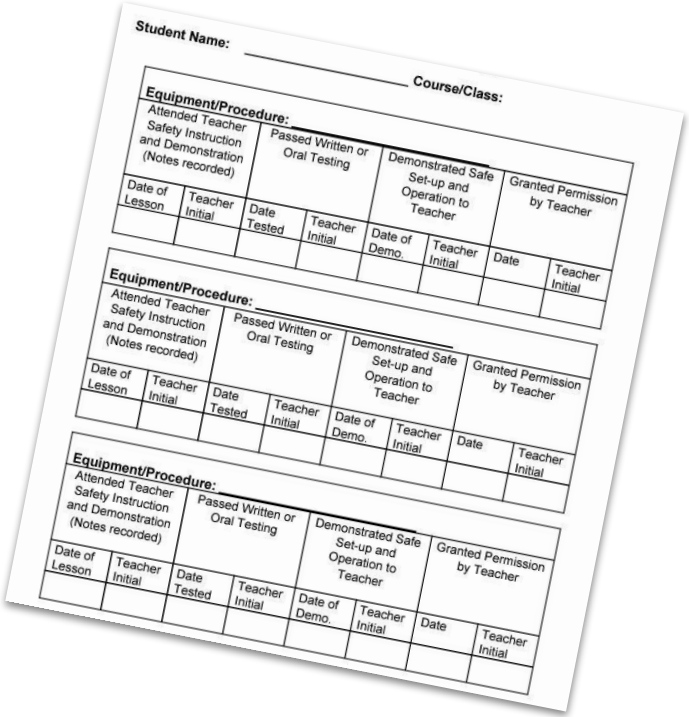
- Scroll Saw
- Drill Press
- Cordless Drill
- Hand Tools

Elementary Tool Safety

OCTE Tech Passport

[Student Demonstration Sign Off Sheet]

Use the provided document to log each student's safety completion for each machine by recording the date, student name, and machine, ensuring all entries are signed off by an instructor for accurate tracking and record-keeping.



Student Name: _____ Course/Class:

Equipment/Procedure:

Attended Teacher Safety Instruction and Demonstration (Notes recorded)		Passed Written or Oral Testing		Demonstrated Safe Set-up and Operation to Teacher		Granted Permission by Teacher	
Date of Lesson	Teacher Initial	Date Tested	Teacher Initial	Date of Demo.	Teacher Initial	Date	Teacher Initial

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Strategies for Teaching Tech

Safety is paramount when teaching technological education. Teachers must strictly enforce safety protocols to ensure the well-being of all students. Educators can equip grade 7 and 8 students with the necessary skills and knowledge to succeed in the modern workforce. (OCTE, Elementary Tool Safety)

To tailor the instruction, the teacher should demonstrate the safe and effective use of each tool with the provided equipment after every video.

There is a quiz following each video and demonstration, or alternatively, you can rearrange the slides to consolidate all quizzes at the end.

Scroll Saw

- Watch Video
- Teacher Demonstration
- Scroll Saw Quiz
- Student Demonstration
- OCTE Tech Passport

Drill Press

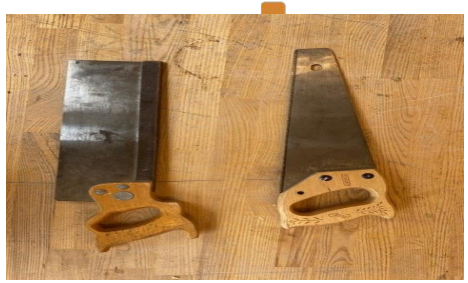
- Watch Video
- Teacher Demonstration
- Drill Press Quiz
- Student Demonstration
- OCTE Tech Passport

Cordless Drill

- Watch Video
- Teacher Demonstration
- Cordless Drill Quiz
- Student Demonstration
- OCTE Tech Passport

Hand Tools

- Watch Video
- Teacher Demonstration
- Hand Tools Quiz
- Student Demonstration
- OCTE Tech Passport



Hand Saws

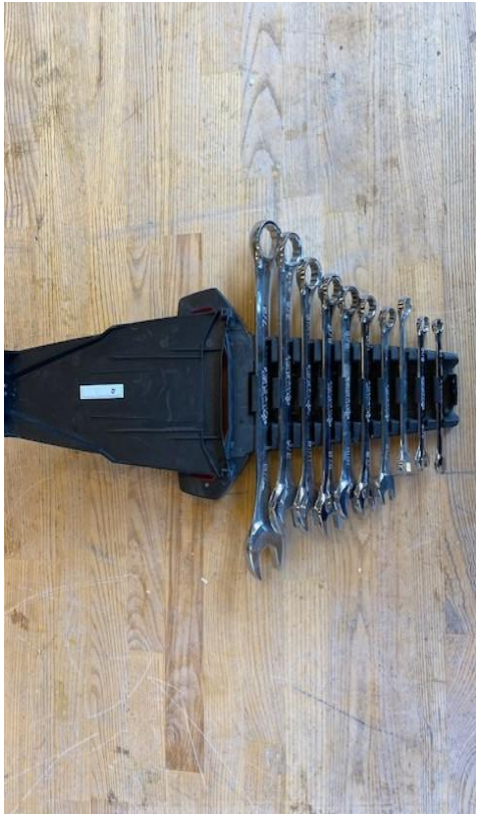
- **Sawing technique:** Use a slow and steady motion and move the saw on an angle through the material.
- **Hand placement:** Stand and grip the saw with one hand on the handle, stabilize yourself with the other hand on a stable surface.
- **Body positioning:** Avoid contact between the blade's teeth and your body. Keep your body clear of the saw's path.
- **Prevent blade damage:** Avoid using excessive force or twisting motions while cutting.

Files

- **Secure material:** All material to be worked on should be secured using either a clamp or a vise.
- **Two-hand grip:** Hold the file with one hand on the handle and the other holding the point between your figures.
- **Filing direction:** Contact the file on the material in a forward motion only to not damage the teeth.

Wrenches

- **Correct size:** Ensure that the wrench profile matches the size of the nut or bolt you intend to tighten or loosen.
- **Pinch check:** Ensure that there is ample space to turn the wrench without pinching your fingers or harming nearby objects.
- **Hand-tighten first:** Always hand tighten any nut or bolt unless a specific torque is provided to prevent damage to the fastener or materials being joined.



Hammers

- **Watch fingers:** Hold the nail in such a way as to not be hit by the hammer strike.
- **Firm grip:** Holding the handle closer to the hammerhead will increase accuracy, but decrease power. Holding the handle further away from the hammerhead will increase power, but decrease accuracy.
- **Centre strike:** Aim for the centre of the target to ensure a clean and accurate strike.
- **Appropriate use:** Do not use excessive force when using the hammer. Avoid using a hammer as a pry bar or chisel to prevent damage and injury.

Pliers

- **Inspect:** Make sure handles are in good condition and the jaws are in working order.
- **Secure:** Place your workpiece in a vise when necessary.
- **Opposite hand:** Make sure your opposite hand is safe from getting pinched.
- **Dominant Hand**: Use your stronger hand to operate the pliers.

Screw Drivers

- **Selection:** Use the correct size and type of screwdriver to complete tasks. Using the wrong driver can damage or strip the screw head.
- **Method:** Place and hold the screw you wish to tighten firmly with one hand while turning the screwdriver clockwise with the other.