

SKILLED**TRADES**<sup>BC</sup>

Skilled  
Trades  
Workshop  
Guide

# Contents

<b>1. Carpentry</b>	<b>03</b>
Students construct a bench with 2x4s. Each side of the bench will model the construction of a framed window. Students are introduced to key terminology related to framing and gain basic carpentry experience to help their transition into a foundation course or satisfy their curiosity.	
<b>2. Electrical</b>	<b>13</b>
Students explore the field of electrical through a fun and interactive project. The project includes building a functional electrical circuit and examining the difference between a parallel and series circuit.	
<b>3. Plumbing</b>	<b>25</b>
Students gain plumbing experience through the creation of a functional or decorative structure of either their own or a provided design. Exploring plumbing process's such as stock layout, breakout and soldering.	
<b>4. Automotive</b>	<b>37</b>
Students explore aspects of the Automotive Service Technician's role and gain practical knowledge and experience by performing a visual inspection as well as through assessing and repairing a flat tire.	
<b>5. Welding</b>	<b>49</b>
Students explore the artistic side of metal working by crafting a one-of-a-kind metal rose. The construction process explores basic tinsmithing tools and welding processes, while fostering students' creativity and curiosity.	
<b>6. Forms &amp; Additional Info</b>	<b>65-80</b>



## Project Description

Students construct a bench with 2x4s. Each side of the bench will model the construction of a framed window. Students are introduced to key terminology related to framing and gain basic carpentry experience to help their transition into a foundation course or satisfy their curiosity.

# Carpentry

## Learning Outcomes

- Identify common hand tools frequently used in carpentry.
- Acknowledge the important function carpentry plays in everyday life.
- Recognise education and career opportunities with in carpentry.
- Adopt safe workshop practices.
- Describe the components that make up a framed window.

## Equipment

- Claw Hammer
- Measuring Tape
- Speed or Combination Square
- Carpenter's Pencil
- Hand Saw

### OPTIONAL EQUIPMENT

- Miter Saw (SPECIAL SAFETY)

## PPE

- Safety Glasses (Eye Protection)
- Hearing Protection
- Steel Toe Boot (Close Toe)

## Materials

- 12 2x 4's 6ft long
- 3" Common nail

# Carpentry



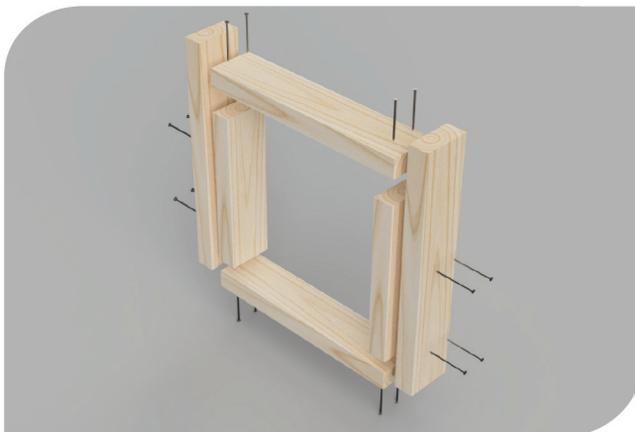
## Measure

- Measuring Tape
- Pencil
- Speed Square



## Cut

- Hacksaw
- Work surface (Saw horse)
- Technique



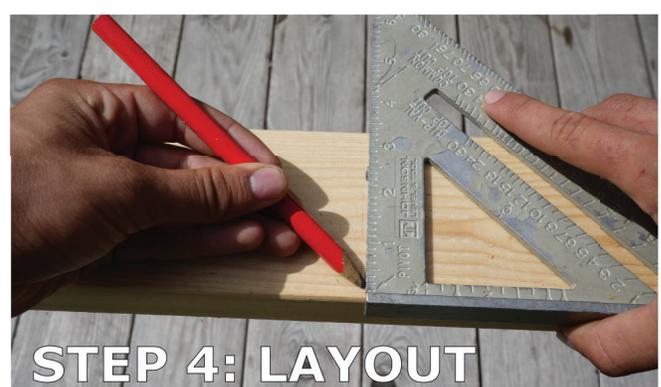
## Assemble

- Hammer
- 3" Nails

# Measure

## Process

- Hook the end of the tape measure to the end of the 2X4 and extend. (hook end and extend).
- Determine the desired length (refer to cut list). Increments of inches,  $\frac{1}{2}$ ",  $\frac{1}{4}$ " etc...
- Mark desired length with pencil and establish a straight line with speed square across the face and edge of 2X4.
- Finally mark an "x" on the side of the line that is the waste board.

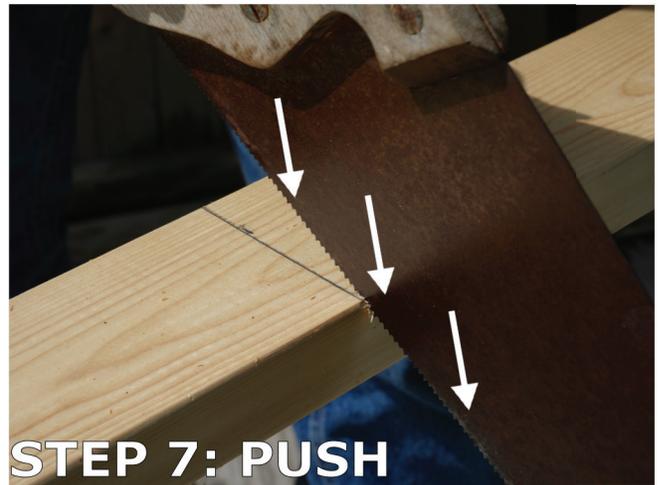




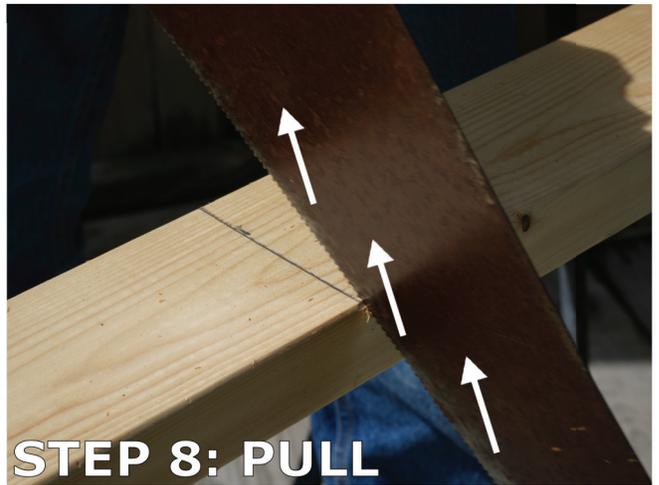
**STEP 5: HOLD**



**STEP 6: POSITION**



**STEP 7: PUSH**



**STEP 8: PULL**

# Cut

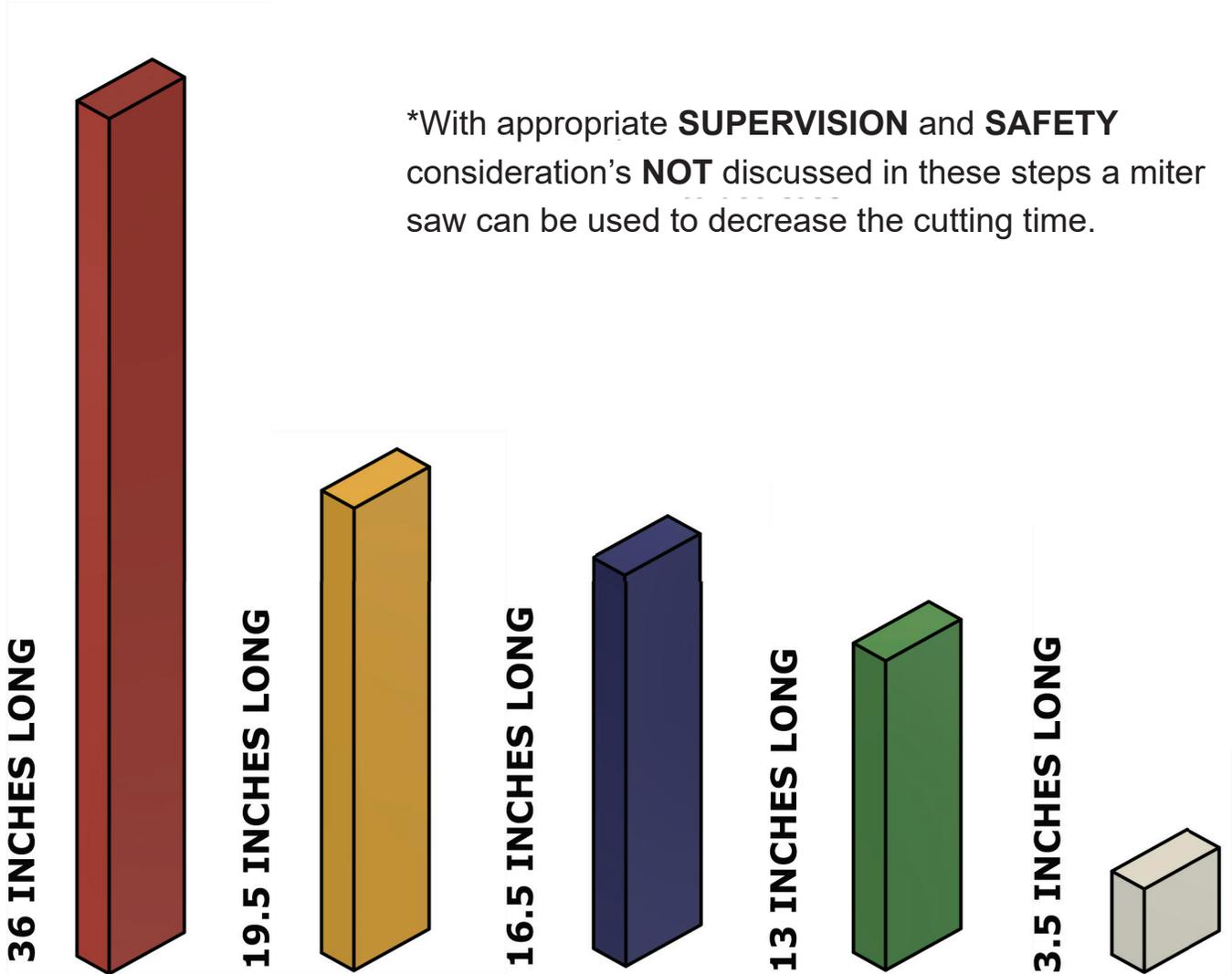
## Process

- On a steady work surface (workbench or saw horses) firmly hold the 2 X 4 down with non-dominant hand
- Position body in a stable stance as demonstrated in step 6 while holding the saw in dominant hand.
- Hold the saw firmly with a straight wrist. Apply light pressure during the push stroke easing off pressure during the draw. (Saws only cut on push cut). Let the saw do the work.
- To prevent tear out, adjust grip on material to match grip shown in step 8 or as a friend to support the end.



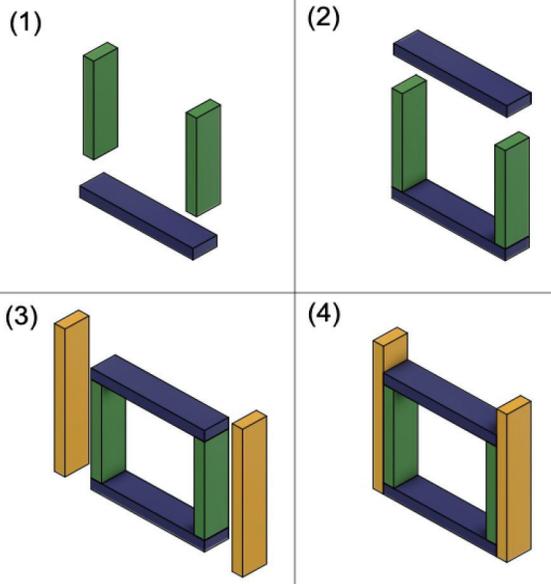
# Cut List

- **RED:** Quantity of 6 cut to 36 inches in length.
- **YELLOW:** Quantity of 4 cut to 19.5 inches in length.
- **BLUE:** Quantity of 4 cut to 16.5 inches in length.
- **GREEN:** Quantity of 4 cut to 13 inches in length.
- **GREY:** Quantity of 10 cut to 3.5 inches in length.



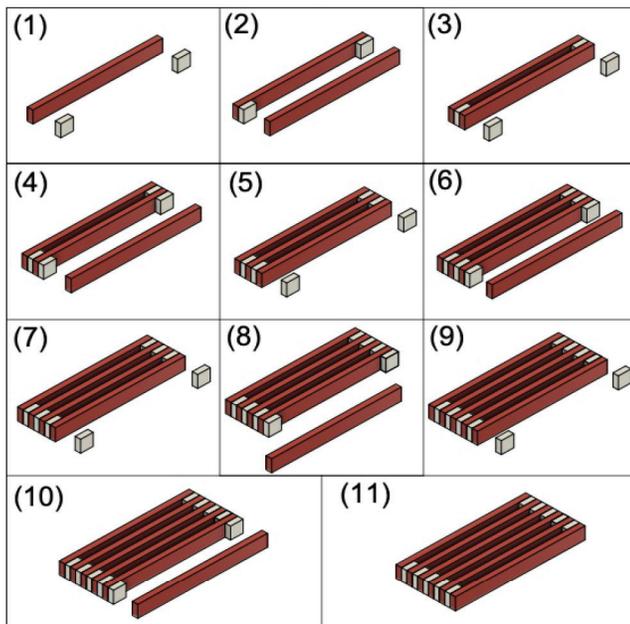
# Construction

## Leg

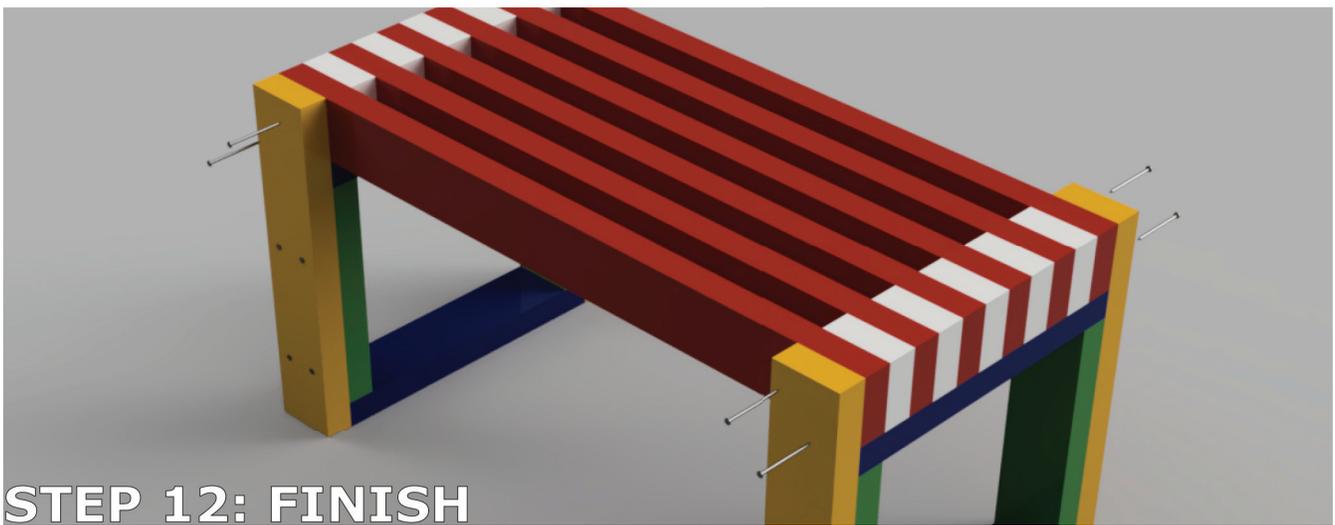
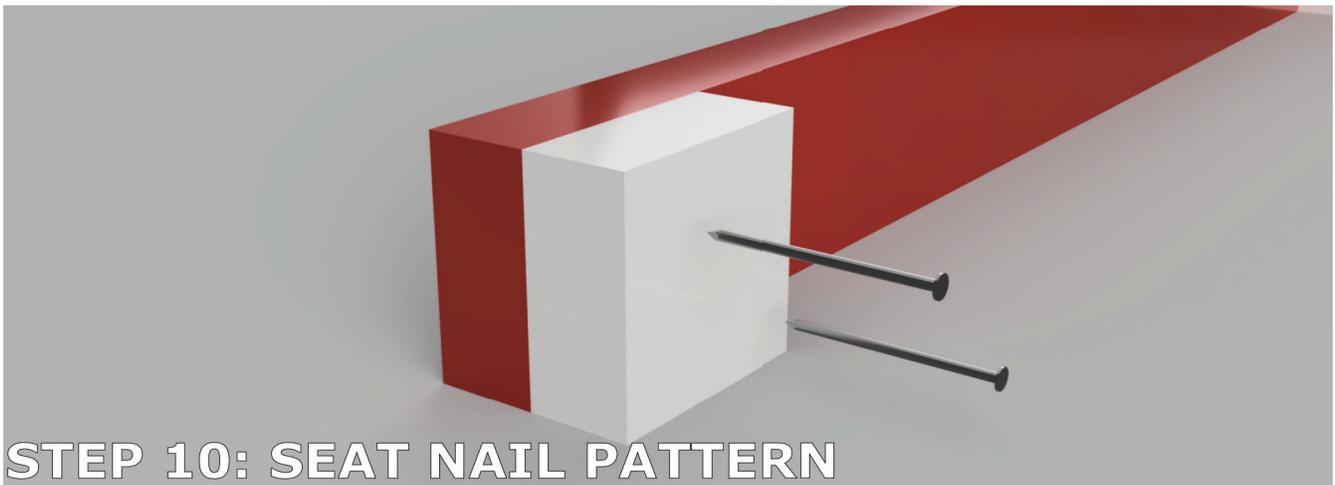
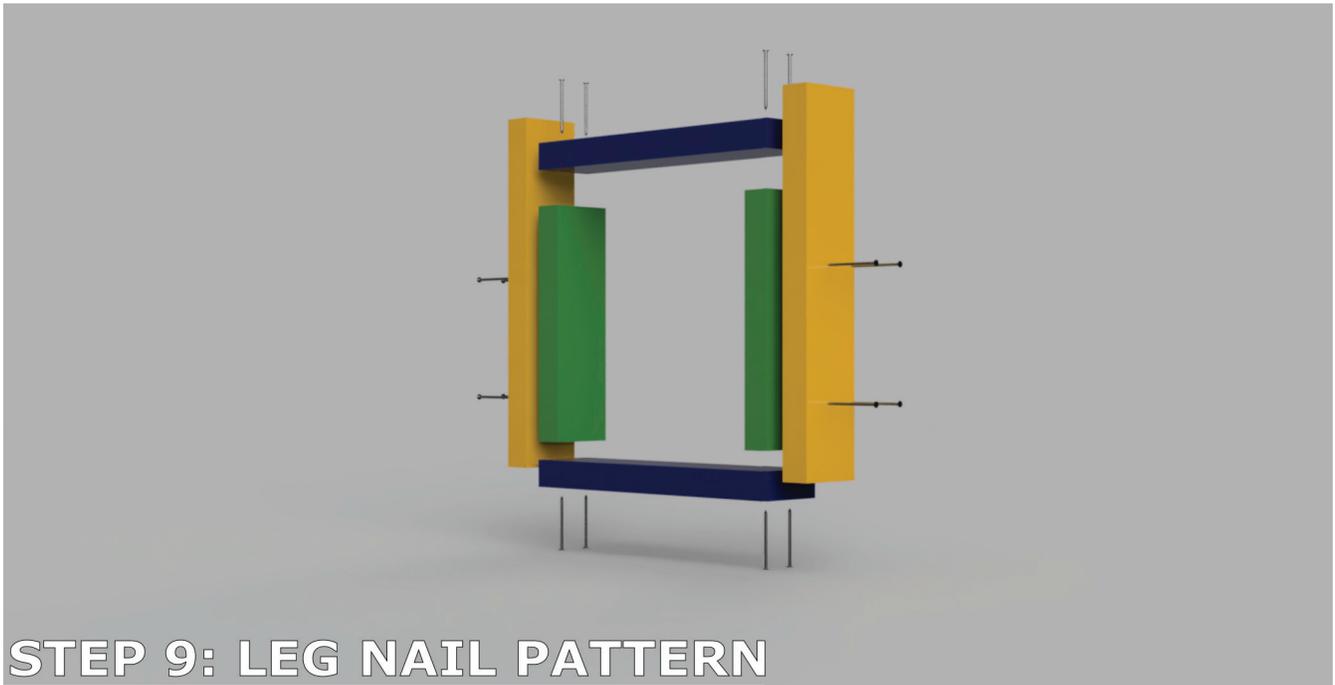


- Use 2 nails on each end to fix 16.5" & 13" stock together.
- Nail from the **face** of 16.5" stock into the **end** 13" stock.
- Fix 19.5" stock to newly formed frame with 4 nails on each side keeping one end **flush**
- Refer to nailing position on next page.

## Seat

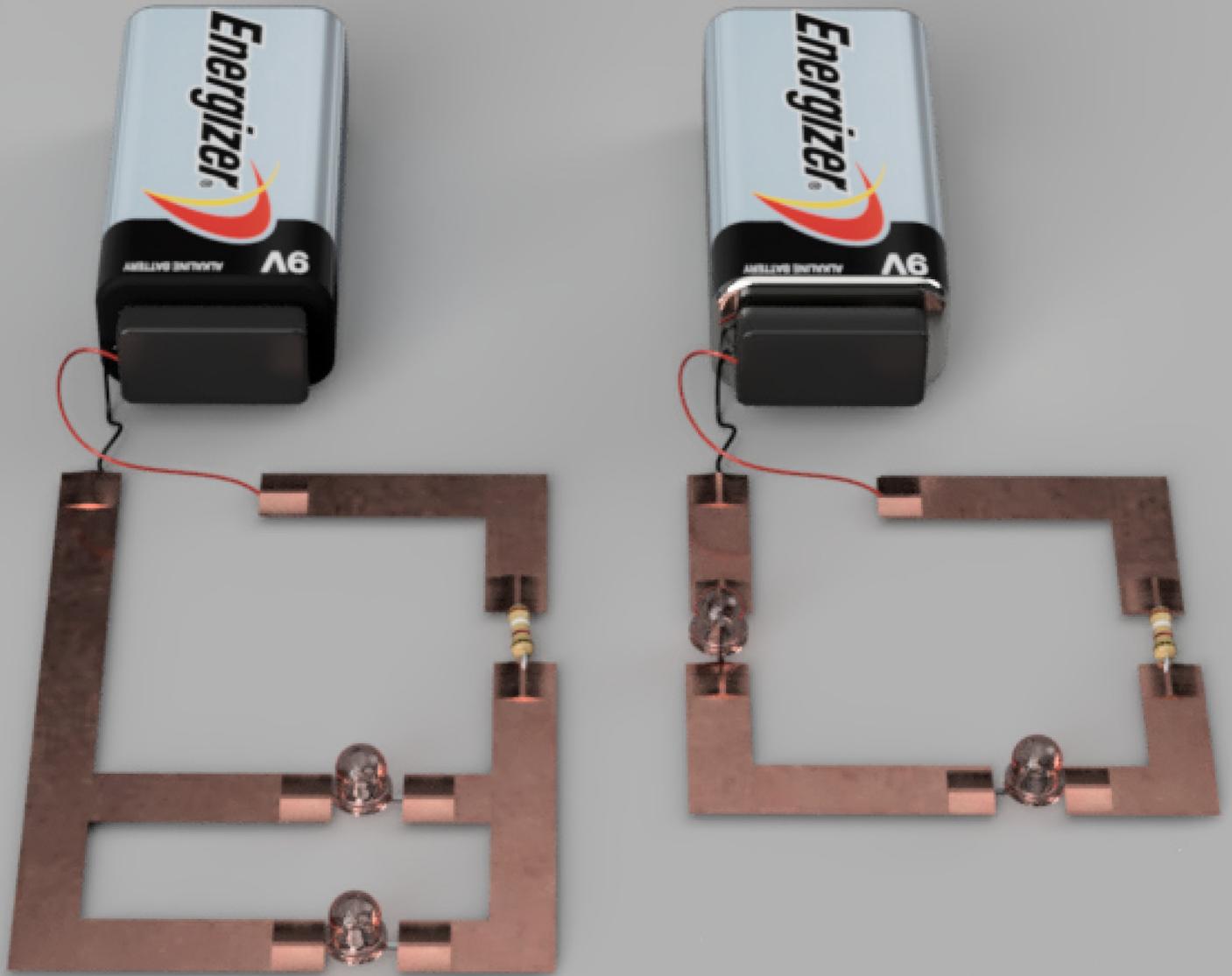


- **IMPORTANT:** work from one side to the other as depicted in photo.
- Join the face of both 36" and 3.5" stock together with 2 nails, alternating pattern. Refer to next page.





## Final Product



## Project Description

Students explore the field of electrical through a fun and interactive project. The project includes building a functional electrical circuit and examining the difference between a parallel and series circuit.

# Electrical

## Learning Outcomes

- Explain the 4 components that make up a basic electrical circuit.
- Prepare a circuit that is suitable for a 1 volt motor.
- Recognise 3 alternative power sources
- Observe the fundamental difference between a parallel and series circuit.
- Recognise career and education opportunities in the electrical field.

## Materials

- Mini solar cells (.5v)
- 1volt electric motor
- Conductive copper tape ¼”
- Wire leads
- Cardboard
- Various material for chassis and wheels  
(Recycle)

## Equipment

- Glue gun
- Scissors

## PPE

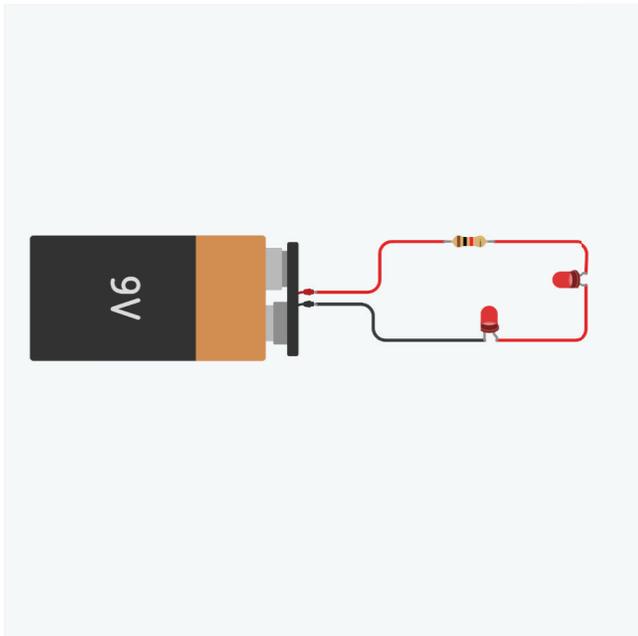
- Safety glasses

# Electrical



## Info

- Source
- Path
- Load



## Exercise

- Series & Parallel Circuit
- Materials
- Battery
- Copper Tape
- LED & Resistors



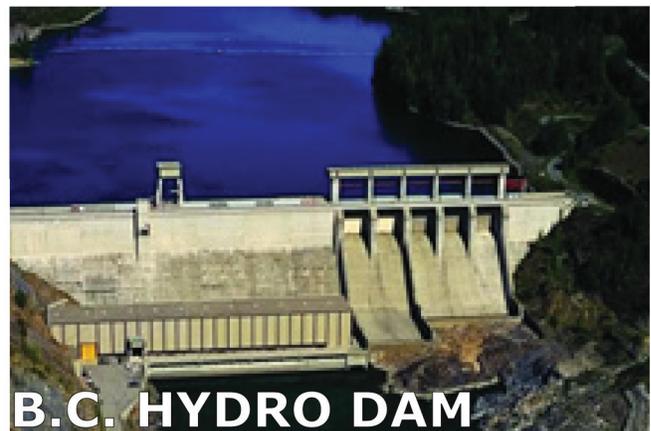
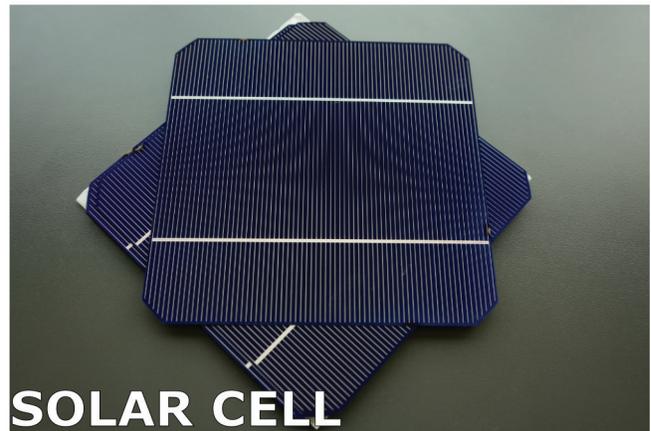
## Project

- DC Motor
- Wire/Tape
- LED Battery
- Solar Cell
- Various Materials

# Electrical

## Description

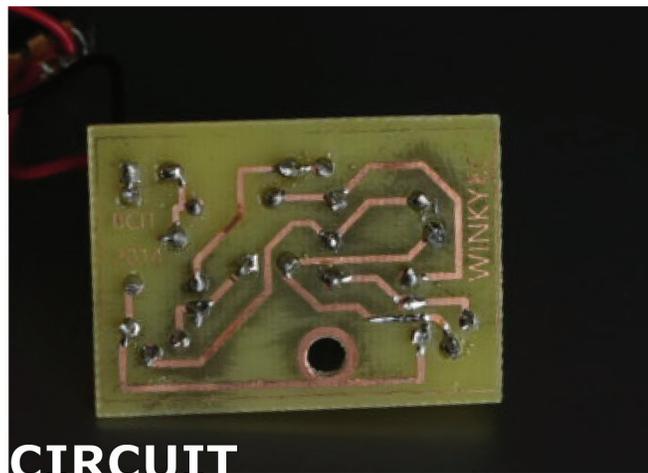
- A source provides an electrical circuit with electrical energy.
- Transforms energy into electrical energy.
- Some example of a source include: batteries, solar cell, generator and you! (static electricity)
- DID YOU KNOW! More than 90% of British Columbia's Power is sourced from hydro electricity.



# Path

## Description

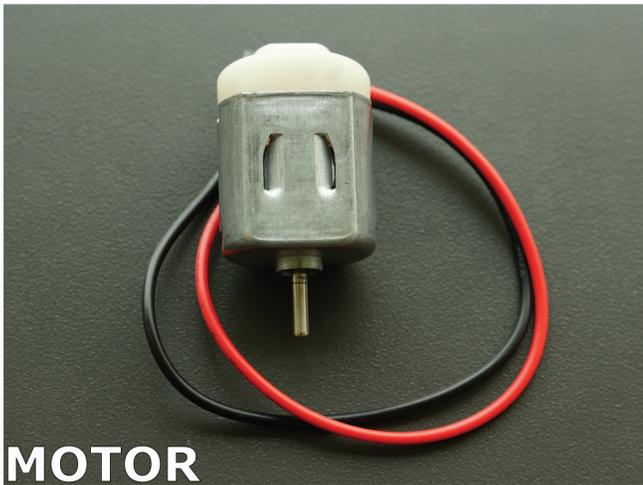
- A path is made of an electrically conductive material that allows electrons to move freely through it.
- For a circuit to function the path must be connected to and from the source
- Examples of a path includes: Copper wire & copper tape



# Load

## Description

- A load is what is powered by the electrical energy.
- Converts electric energy to another form to do work.
- An example of a load includes: light, heat, movement and sound.



**MOTOR**



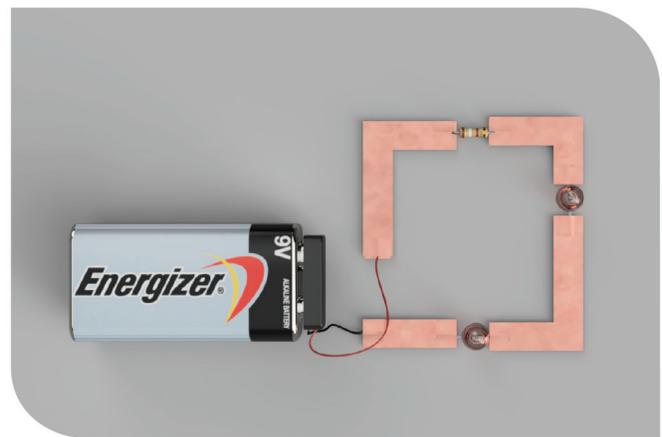
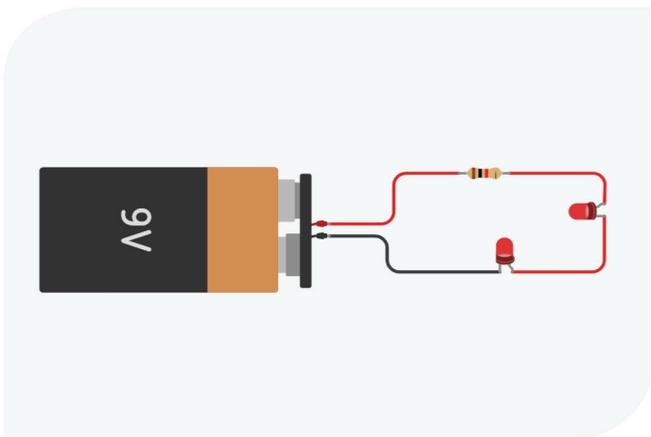
**LIGHT BULB**



**FAN**

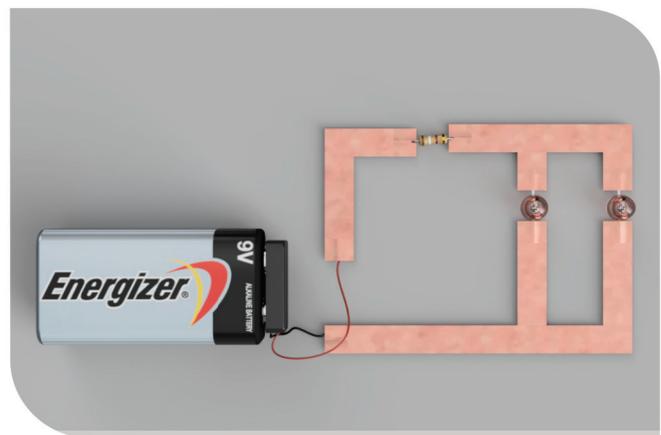
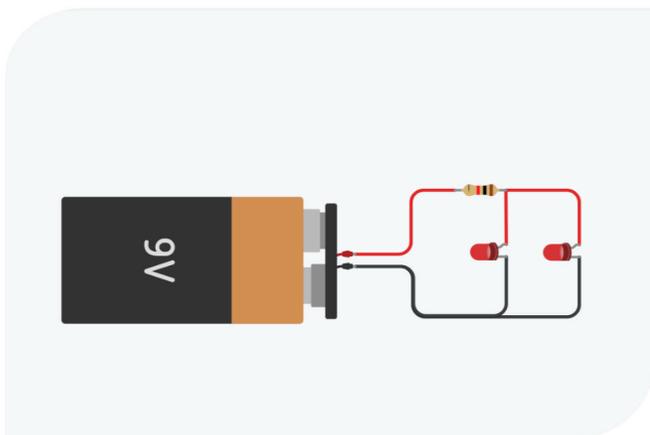
# Exercise

## Series



- Each component is connected in a line (ie. end to end). If the path is interrupted at any point, the whole circuit fails. Eg. water heaters, lamps

## Parallel



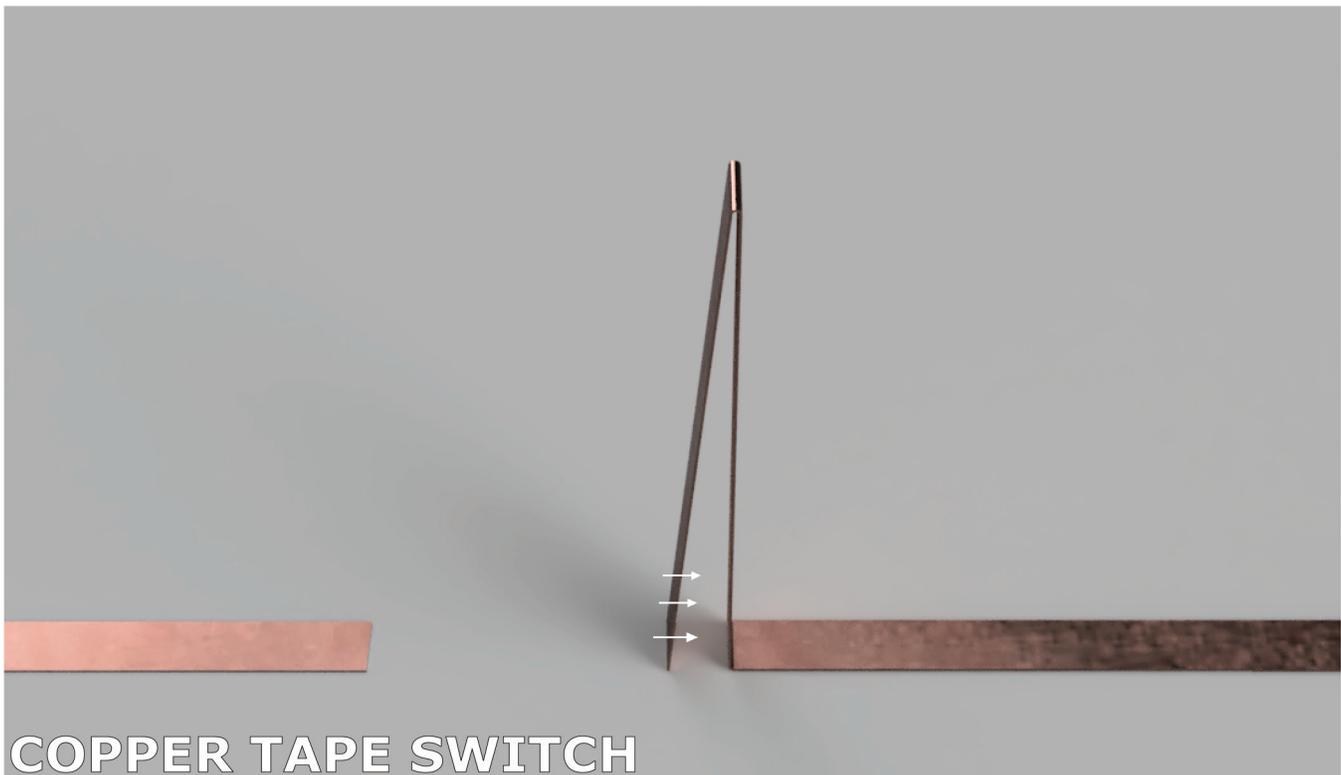
- Each component has its own path to ground. If one path is interrupted, the integrity of other path is not compromised. Eg. household wiring

# Optional

- Create a CONTROL for your circuit.
- A CONTROL turns the flow of electric energy on and off by opening and closing the circuit (eg. a switch)

## Directions

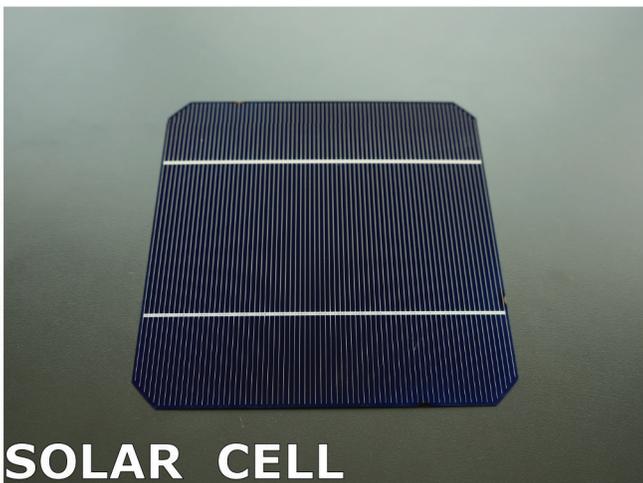
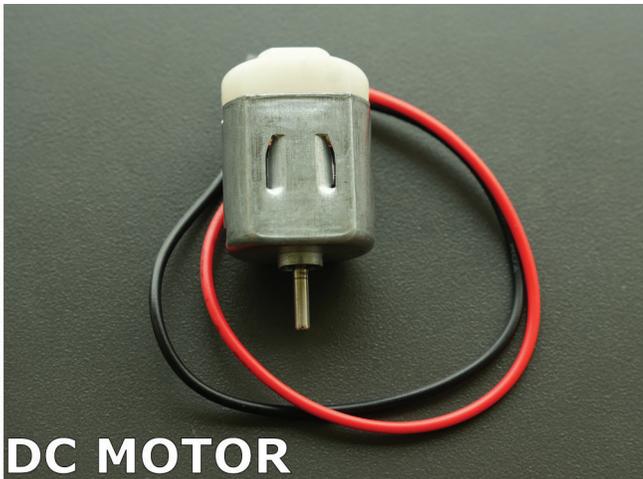
- Apply a new piece of copper tape in the location of the new break.
- Fold 1/3rd the length of the copper tape onto itself (sticky to sticky).
- Create a pad that will contact and complete the circuit when your new switch for the CONTROL is pressed down.



# Project

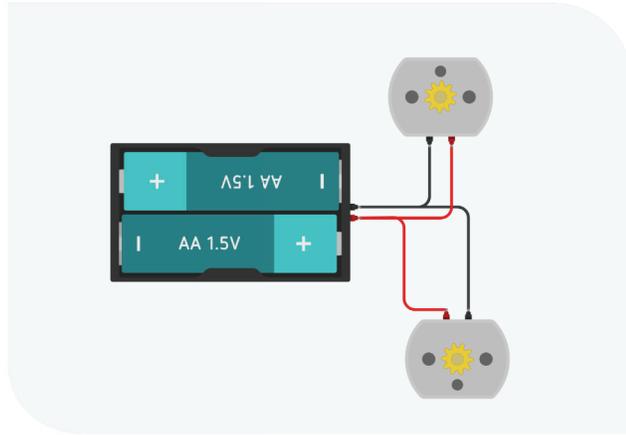
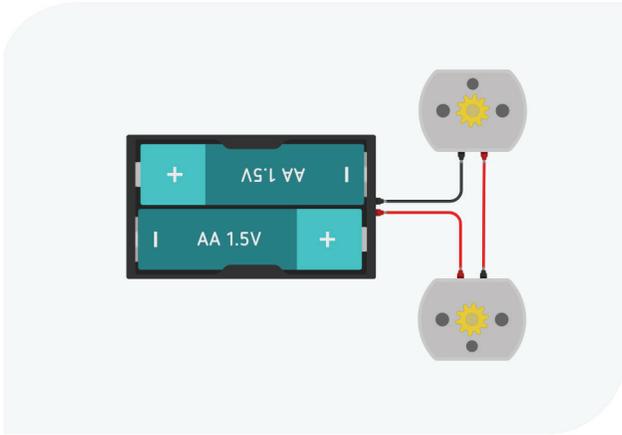
## Description

- NEW LESSON: Turning electric energy into motion.
- Create a parallel and a series circuit using both an alternative source (ie. solar cell) and load (ie. DC motor)
- The paths resemble the paths created in exercise.
- \*OPTIONAL: Create a rolling chassis for hold DC motors to power



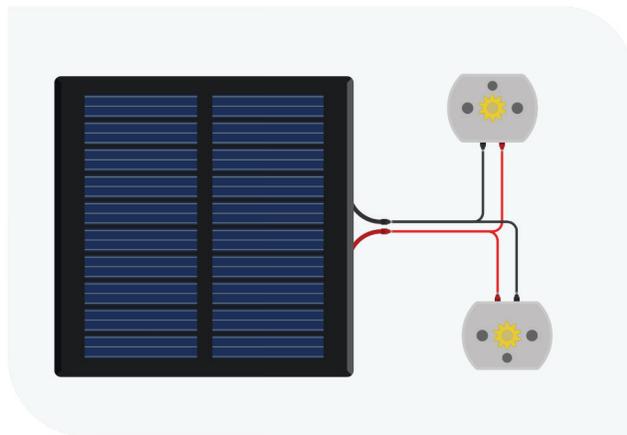
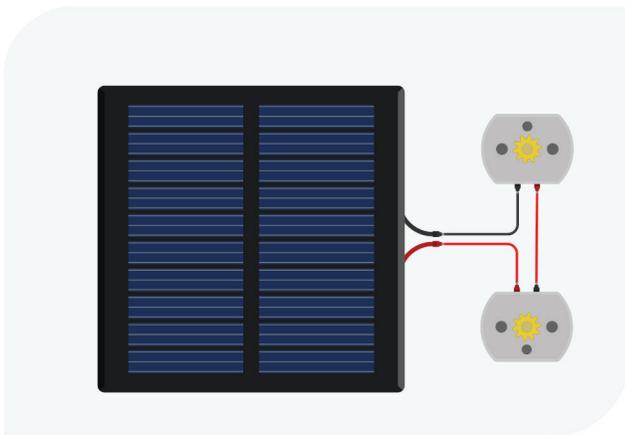
# Assembly

## DC Motor



- Using a battery, configure the DC motors into series and parallel circuits. Note which type of circuit generates a greater RPM (ie. spinning faster).

## Solar Cell

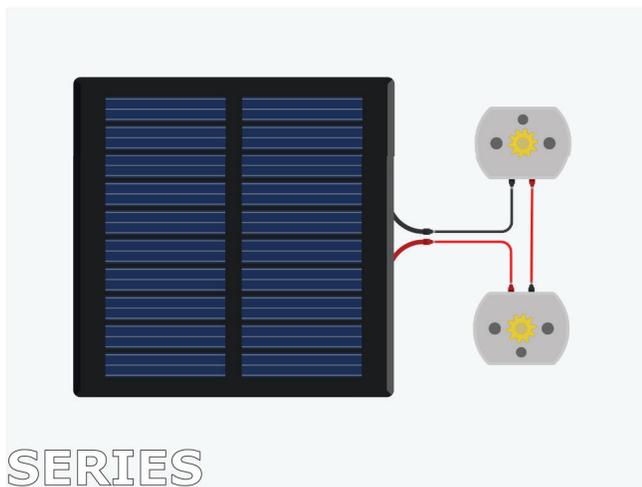
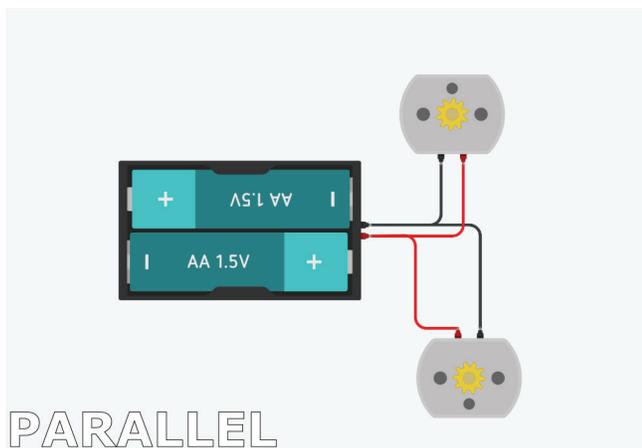


- Repeat the step above substituting a solar cell with the battery pack. Again, note which circuit maintains a greater RPM.

# Results

## Discussion

- Motors powered by the battery pack in parallel operate at a higher RPM because each motor has a direct path to the source.
- Whereas, motors powered by the solar cell operate at a higher RPM when in series because in a parallel circuit the current is divided reducing the power each motor receives.
- WHICH SOURCE WOULD POWER MOTORS LONGER?

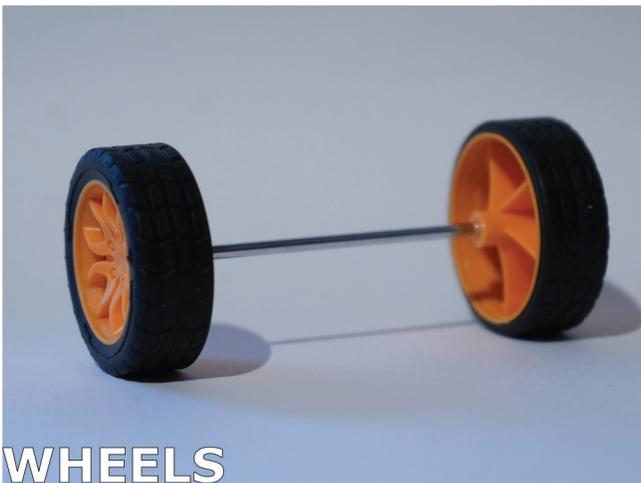


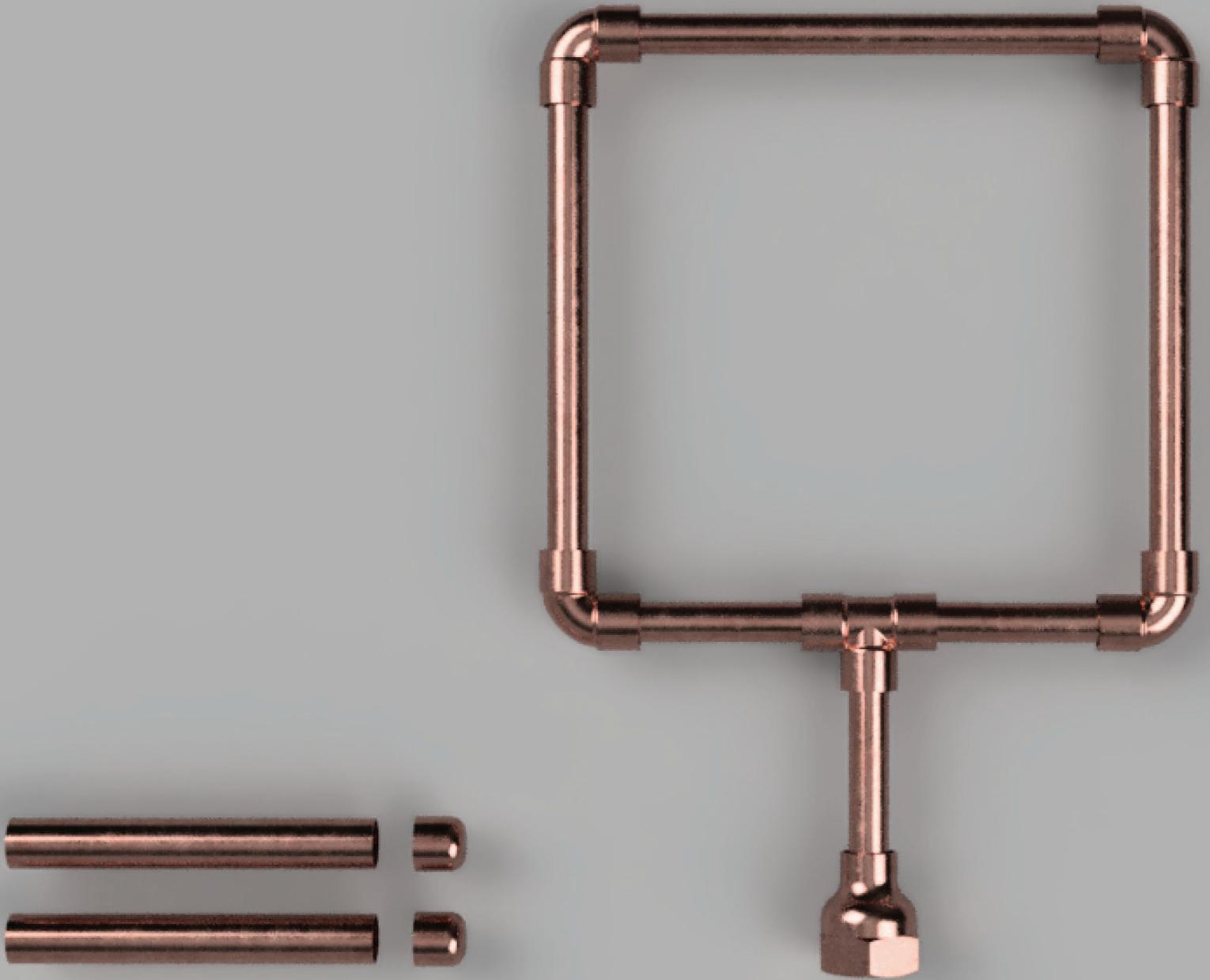
# Alternative

## Electric Car

### \*OPTIONAL

- Select which circuit would be best suited to power a small electric vehicle.
- Using available materials, construct a chassis that will be suitable to house the electric circuit.





## Project Description

Students gain plumbing experience through the creation of a functional or decorative structure of either their own or a provided design. Exploring plumbing process's such as stock layout, breakout and soldering.

# Plumbing

## Learning Outcomes

- List 3 different pipe fittings
- Build and design a functional or decorative structure from copper pipe and fittings
- Conduct safe work practices with common plumbing equipment
- Analyse a solder joint
- Recognise career & education opportunities

## Materials

- 3: feet of ½” copper pipe
- 4: 90° ½” copper fittings
- 3: ½” copper pipe caps
- 1: ½” copper TEE
- 1: ½” to ¾” male copper fitting

\*OPTIONAL Material

- Substitute all ½” copper pipe and fittings to PEX equivalent

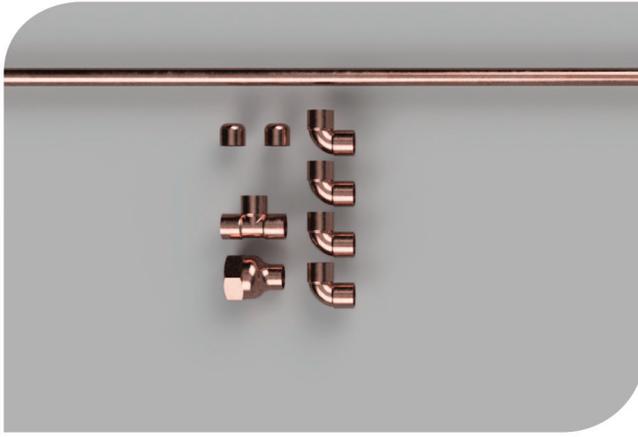
## Equipment

- Emery Cloth
- Pipe cutter (copper pipe)
- Propane torch and striker
- \*OPTIONAL EQUIPMENT
- PEX Pipe Cutter
- Crimpers

## PPE

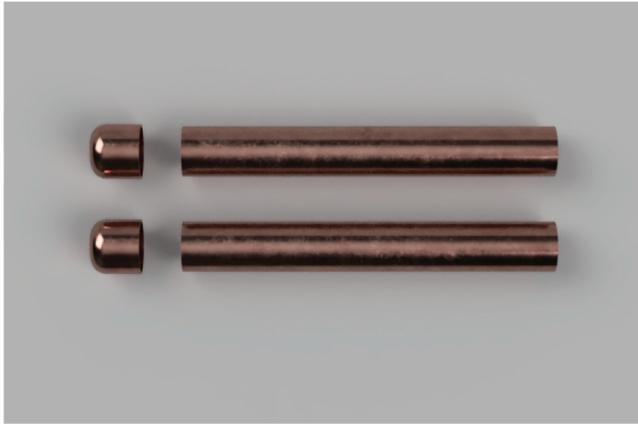
- Safety Glasses
- Steel Toe Boot (Close Toe)

# Plumbing



## Application

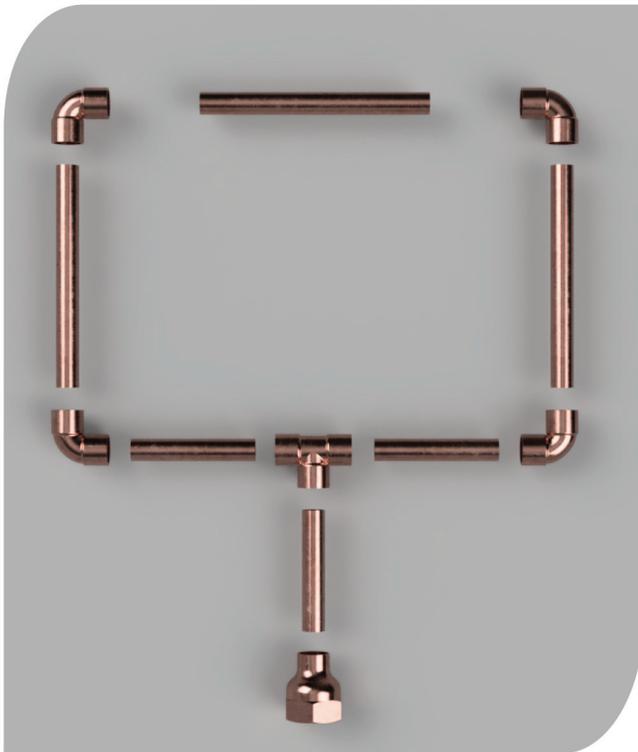
- Cutting
- Safety
- Torch
- Soldering



## Exercise

### Soldering

- No Flux
- Dirty



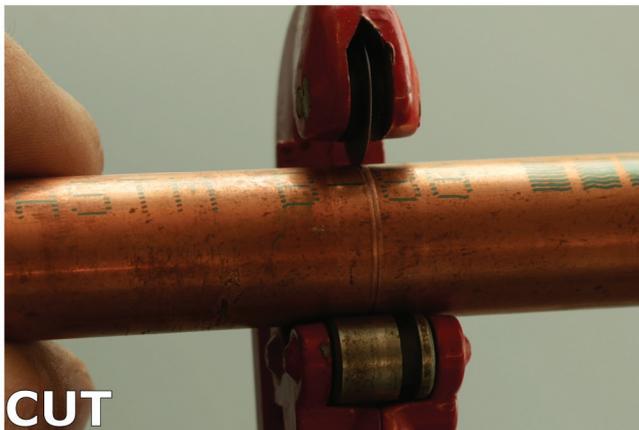
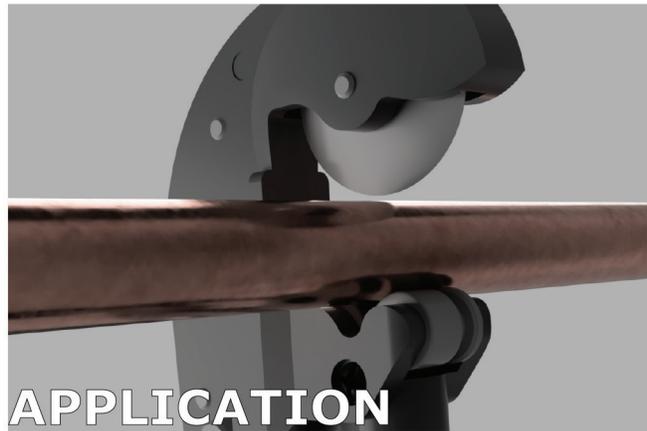
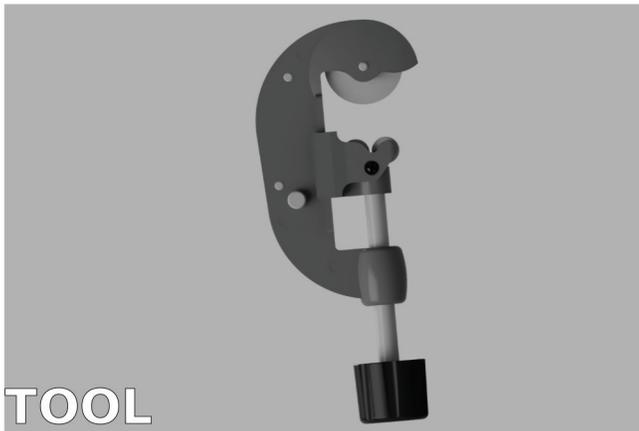
## Project

- Measure
- Cut
- Assemble

# Cutting

## Procedure

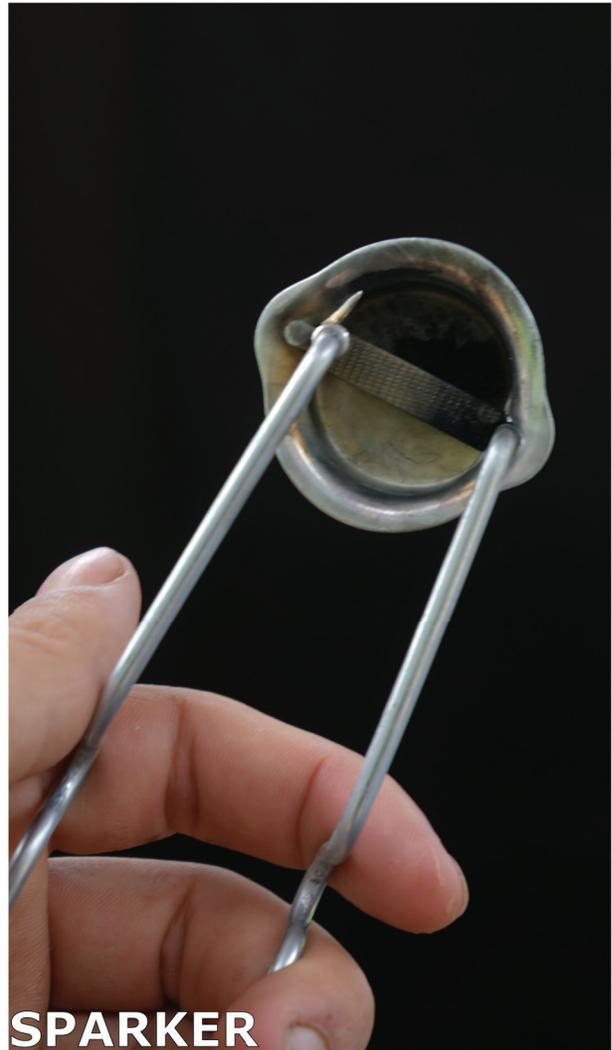
- From one end of the pipe mark 9 inches using your tape measure and sharpie.
- Using the pipe cutters, align blade and tighten the knob until snug (clockwise).
- Rotate the pipe cutter around the pipe, progressing the handle until you have successfully cut through the pipe.
- Repeat steps to cut the 9" stock into two 4.5" lengths.



# Safety

## Precaution

- Visually ACCESS the condition of the torch for bends and blemished. Only use maintained or new torches.
- NEVER POINT A TORCH AT ANOTHER PERSON.
- Only use a sparker to ignite a torch.



# Torch

## Procedure

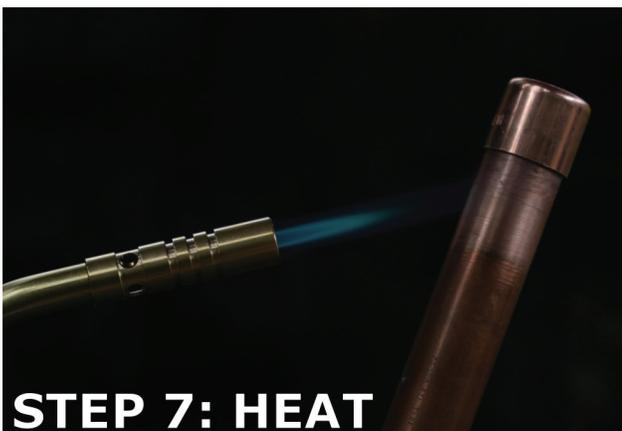
- Engage the knob to start a flow of propane.
- With your other hand, use the sparker to ignite the torch.
- Use the knob to increase or decrease the flame.
- Shut down the torch by decreasing the flame until it extinguishes
- **CAUTION HOT**



# Soldering

## Procedure

- Use emery cloth to insure all burrs are removed and that both ends of the pipe and fittings are cleaned to a polish.
- Assemble the pipe and fittings applying flux to both the inside of the fitting as well as the outside of the pipe.
- Apply heat to the bottom of the newly assembled form, keeping the flame moving and pointed towards the joint.
- When the colour of the copper starts changing apply solder to the top letting it flow into the joint.



# Exercise

## Dirty

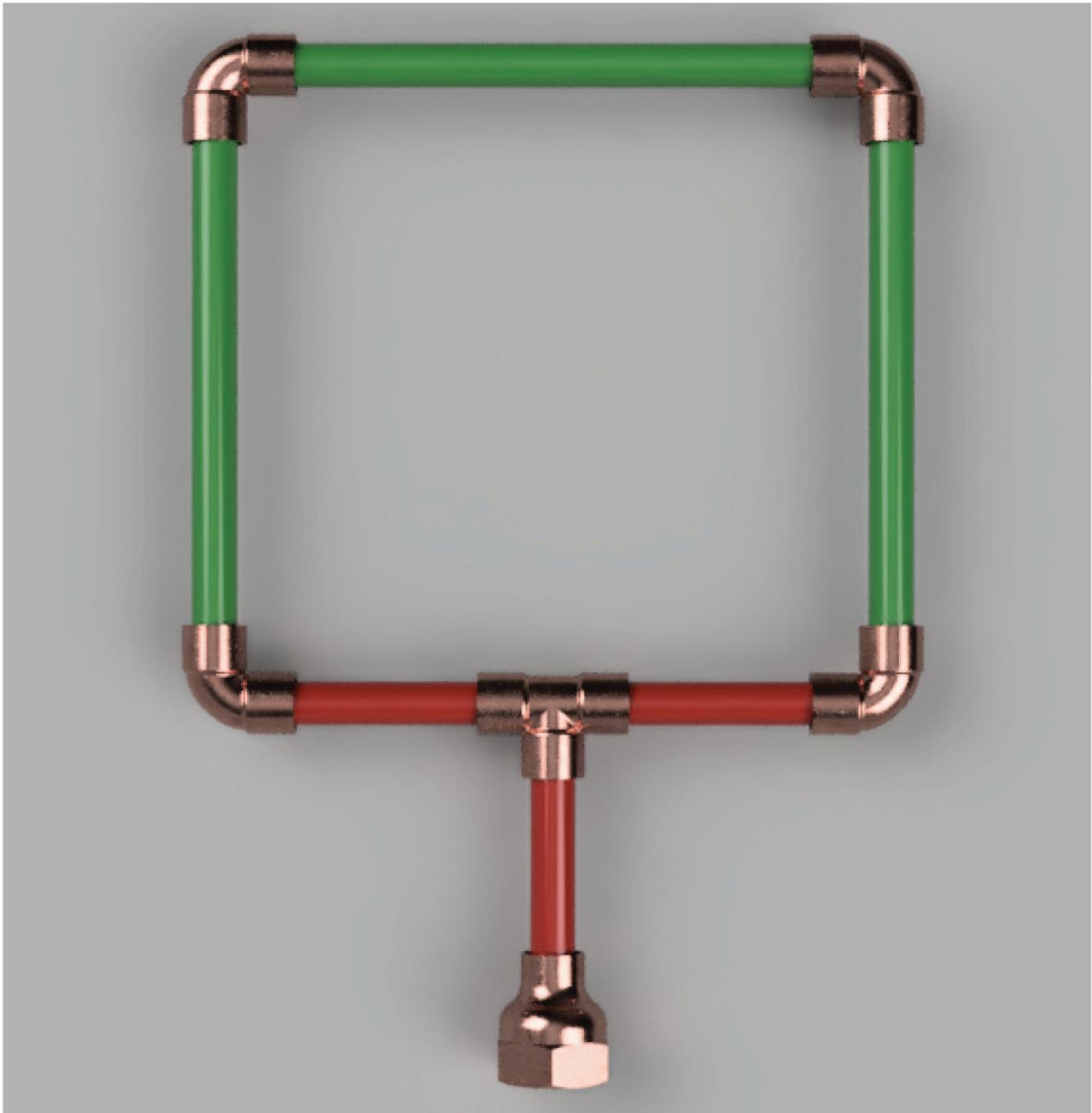


- Using one of 4.5" piece of pipe attempt to solder without cleaning the copper. Note the quality of solder joint

## No Flux



- Using the other piece of 4.5" copper pipe attempt to solder without applying flux. Note the behaviour of the solder



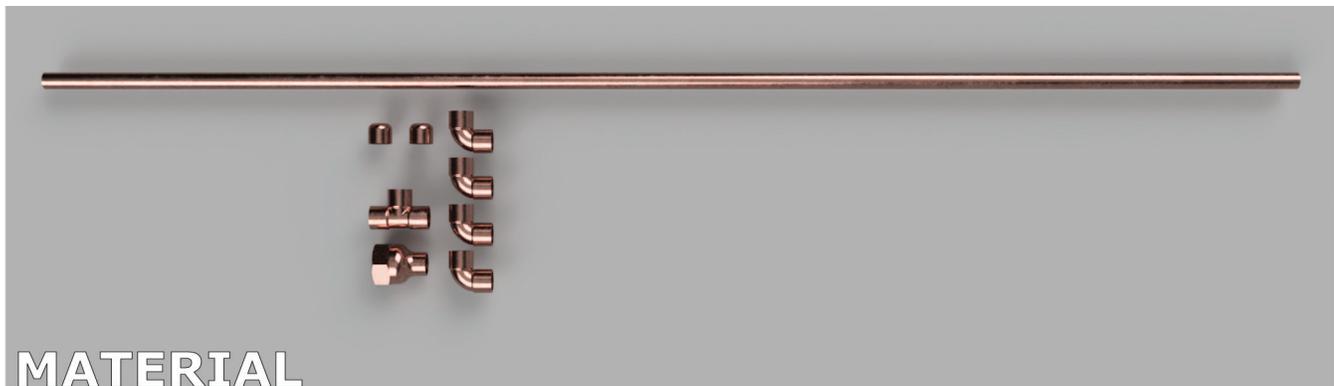
## Cut List

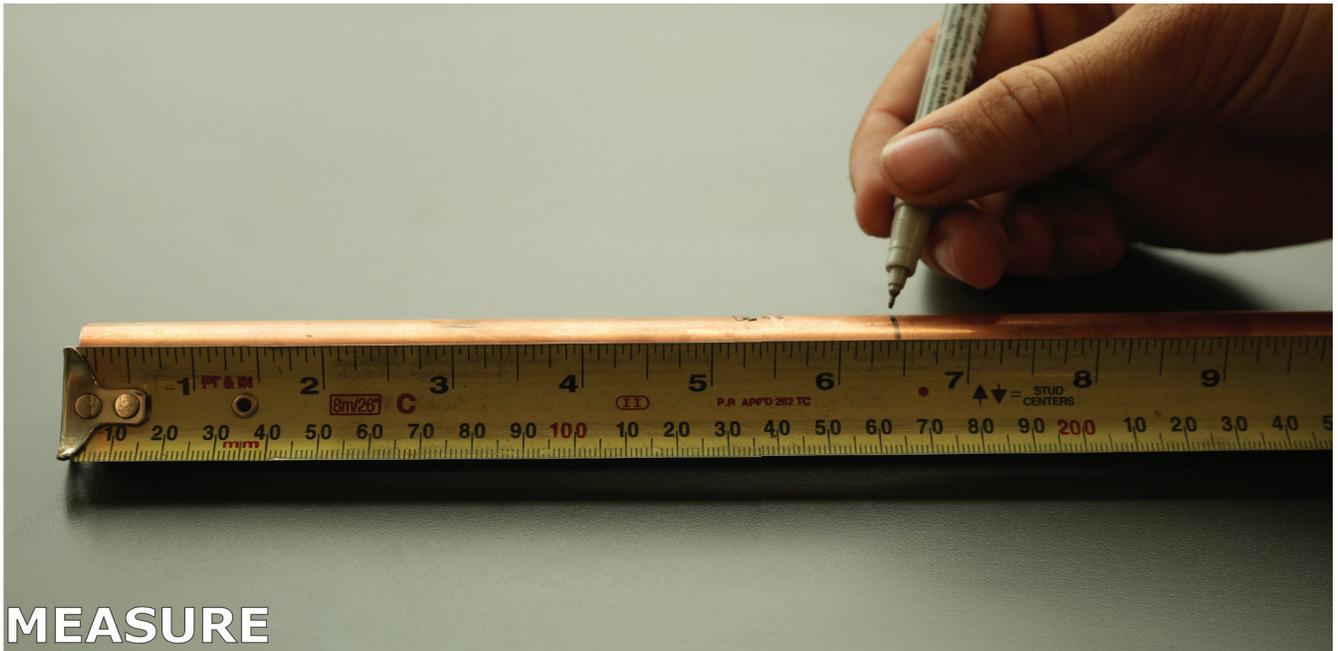
- RED: Quantity of 3 cut to 2.5 inches in length.
- GREEN: Quantity of 3 cut to 6.5 inches in length.

# Exercise

## Construct

- Cut 3 lengths of copper pipe that measure 2.5 inches and 6.5 inches.
- De-bur each end of the copper pipe, eliminating the risk of accidental cuts.
- Using emery cloth, clean each end of the pipe and fittings where flux and solder will be applied.
- Refer the pervious page to aid in soldering.
- With a damp cloth or water source, cool the copper pipe and fittings between solder joints. Reduce risk of burns and unwanted solder flow.

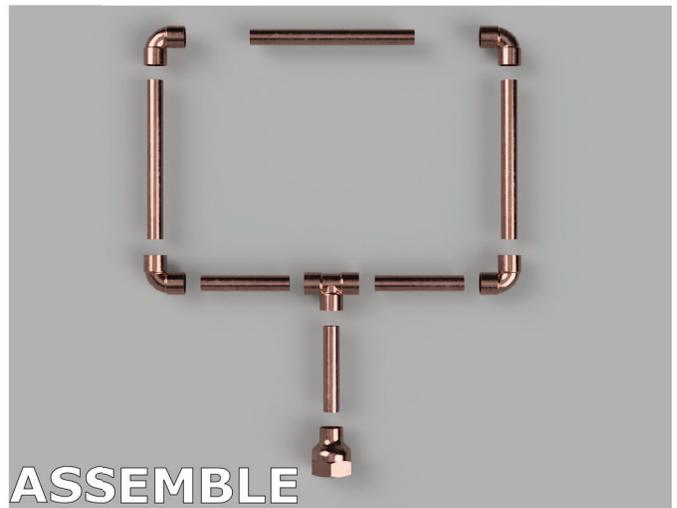




**MEASURE**



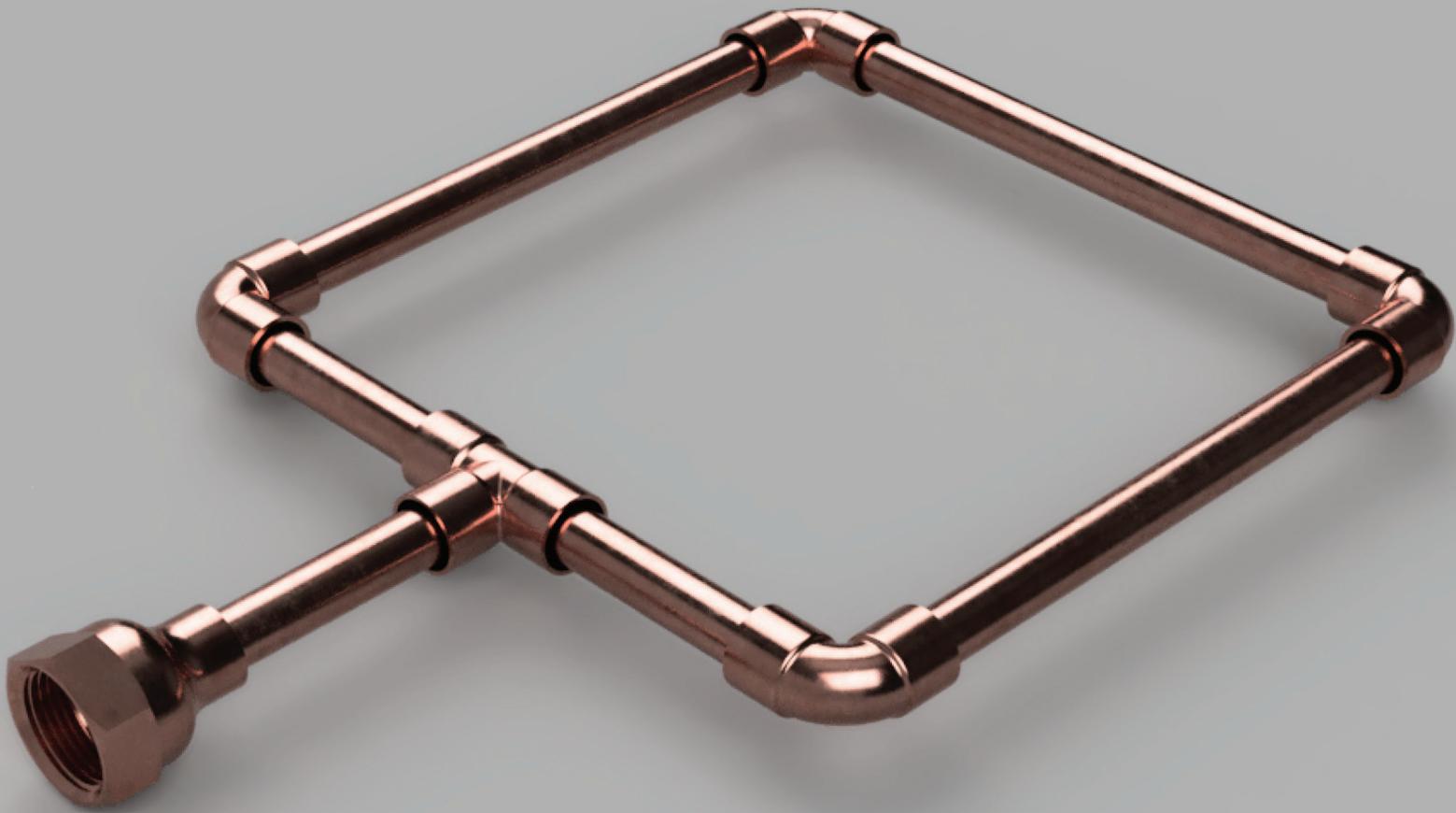
**CUT**



**ASSEMBLE**



**FINISH**



## Final Product



## Project Description

Students explore aspects of the Automotive Service Technician's role and gain practical knowledge and experience by performing a visual inspection as well as through assessing and repairing a flat tire.

# Automotive

## Learning Outcomes

- Recognise the key components examined in a 7 point inspection.
- Compare three different types of tire punctures and understand the appropriate repairs for each.
- Demonstrate safe work practices in an automotive shop setting.
- Locate available educational resources and supports to become an Automotive Service Technician.
- Acknowledge the duties of an Automotive Service Technician.

## Materials

- Demo Vehicle
  - Scrap tire, preferably on rim
  - Drill with 1/8" bit
  - Wheel Chocks
- \*Optional Equipment for tire removal
- \*Extra Safety Considerations\*
- Floor jack
  - Jack stands
  - Breaker bar & torque wrench

## Equipment

- Tru-flat tire plug repair kit

## PPE

- Safety Glasses
- Hearing Protection
- Steel Toe Boot (Close Toe)

# Automotive



## Application

- Safety



## Exercise

### Visual Inspection

- Walk Around



## Project

- Flat Tire Assessment and Repair
- Wheel / Tire Type

# Safety

## Precaution

- Before working on or near a vehicle, ensure the vehicle is in park and the emergency brake is engaged.
- Safety glasses are mandatory and gloves are recommended.
- There is a potential for oil or grease to get on cloth, wear coveralls or similar clothing.
- Harmful material such as gas, battery acid and brake dust are present but not directly in contact. Be aware of potential risks.



**SAFETY GLASSES**



**GLOVES**



**PARKING BRAKE**

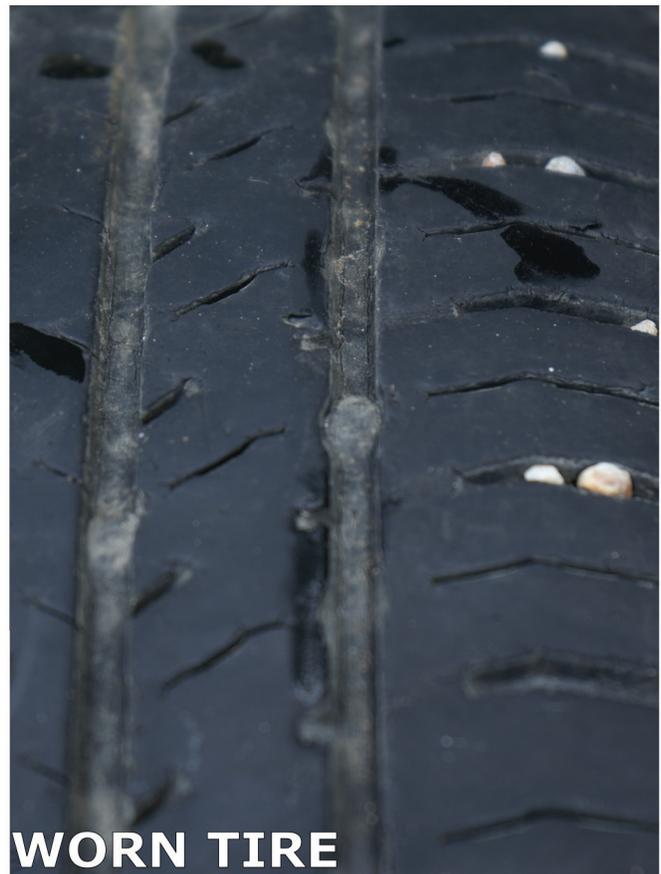


**BATTERY CORROSION**

# Inspection

## Visual

- Start by standing in one location and gather key vehicle identification information such as make, model, year.
- Proceed to walk around the vehicle noting condition of tires, windows and light.
- Finally open the hood of the vehicle and observe the engine bay.
- Look for cracks in hoses, oil leaks, fluid levels and battery corrosion.



<b>VISUAL INSPECTION</b>		STUDENTS NAME:	DATE:	LOCATION:
AUTOMOTIVE				
<b>VEHICAL INFORMATION :</b>				
MAKE:		YEAR:		
MODEL:		COLOUR:		
<b>OTHER VISUAL NOTES:</b>				
<b>WHEELS/TIRES CONDITION</b>				
HOLDS AIR? Y/N	OIL PRESENT? Y/N	MATCHING TIRES Y/N	TIRE WEAR GOOD/POOR	
<b>NOTES:</b>				
<b>WIND SHEILD &amp; LIGHTS</b>				
CRACKS? Y/N	WIPPER CONDITION? GOOD/POOR	HEADLIGHT Y/N	TAIL LIGHTS Y/N	
<b>NOTES:</b>				
<b>UNDER THE HOOD</b>				
OIL? Y/N	BATTERY? GOOD/POOR	FLUID RESERVOIR FULL/LOW	RADIATOR HOSE GOOD/POOR	
<b>NOTES:</b>				



**CRACKED WINDSHIELD**



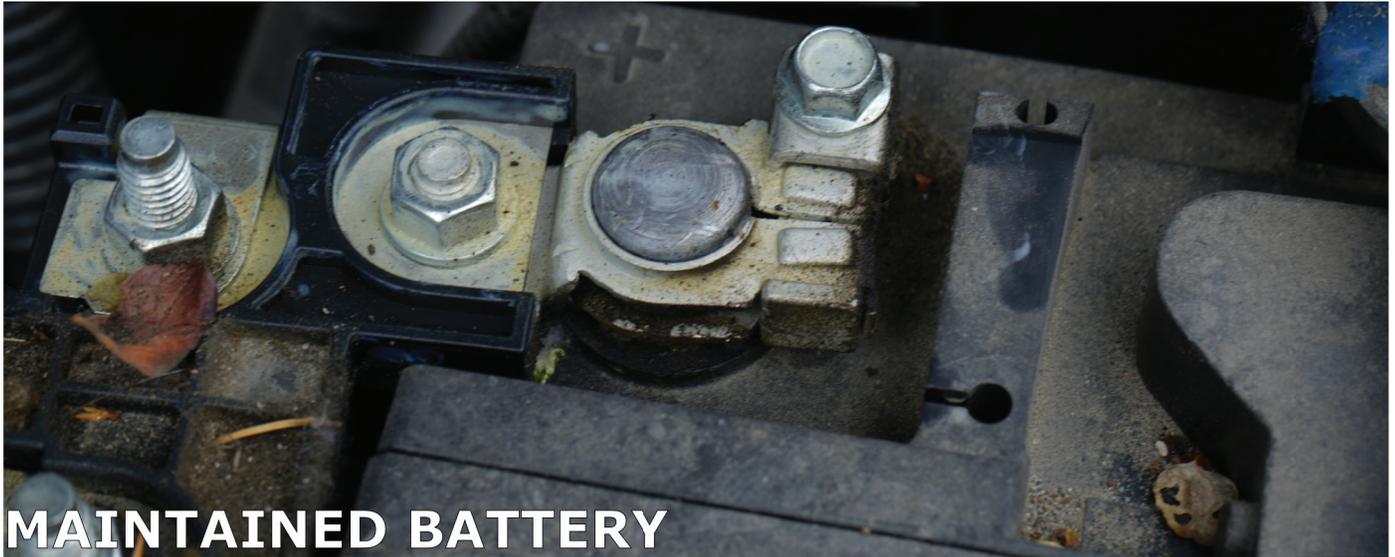
**POOR WIPERS**



**GOOD WIPERS**



**HEAD LIGHTS**



**MAINTAINED BATTERY**



**CORRODED BATTERY**

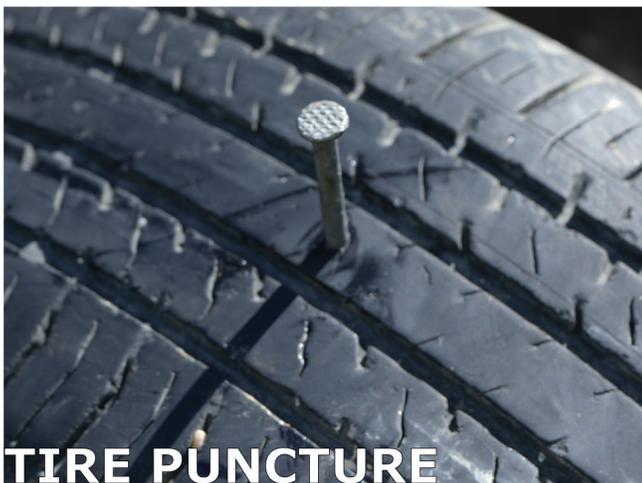
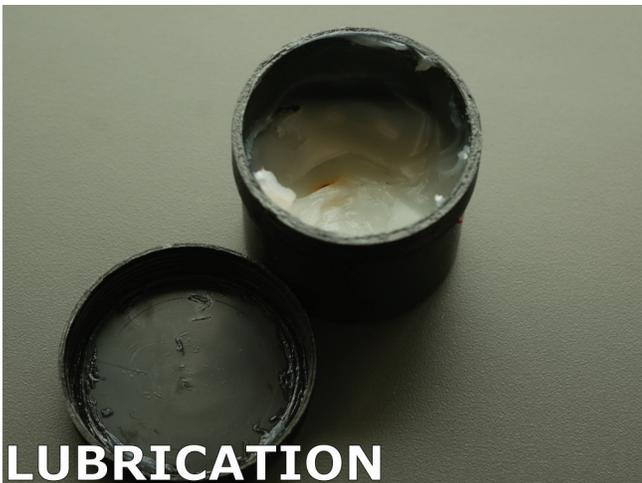


**RADIATOR HOSE**

# Project

## Repair Types

- PATCH: Best repair. Repaired from the inside of tire, requires the tire to be removed from rim.
- PLUG: Good for simple repairs (straight nail). Can be patched with tire on rim.
- NOT REPAIRABLE: SIDEWALL PUNCTURE, BEAD DAMAGE OR ANY HOLE GREATER THEN ¼"



# Preparing

## Procedure

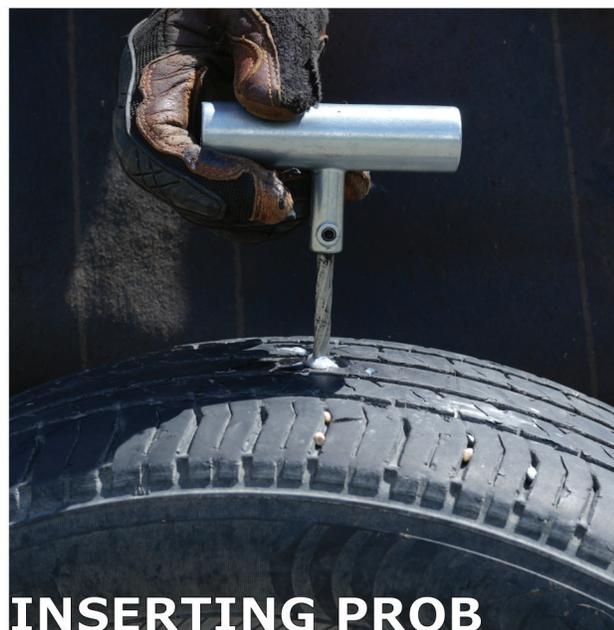
- Observe the tire condition and puncture type to determine suitability for PLUG REPAIR.
- In context to this project a hole will be needed to be created in the demo tire.

### CREATING PUNCTURE

- DEFLATE TIRE BEFORE DRILLING. Using a 1/8 drill bit drill into the tire tread, creating your hole.

### PREPARING PUNCTURE

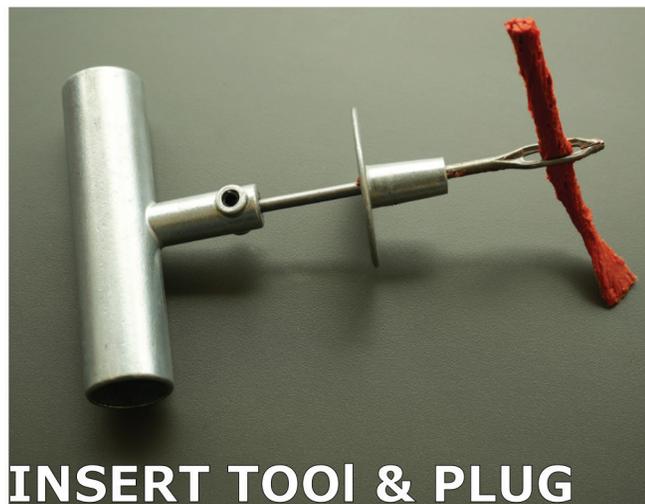
- After applying lubricant to the T-handle Spiral Probe Tool.
- Insert the tool into the puncture, rotating with the spiral.
- No Rubber should be removed. Tool only tire fabric displaced.



# Insert Plug

## Procedure

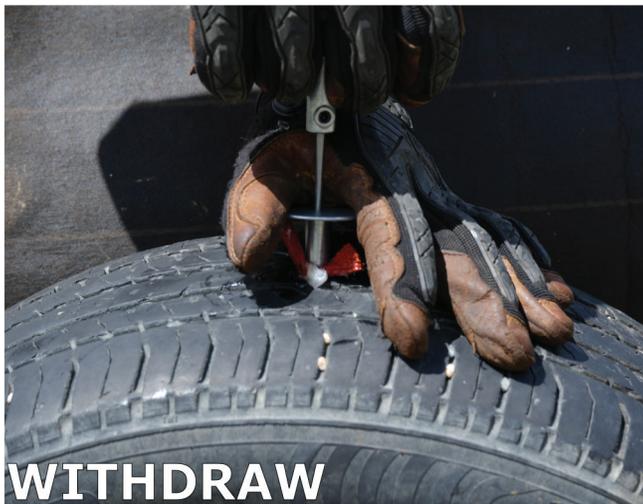
- Remove plug from packaging and insert it halfway through the eyelet of the Insert Tool.
- Apply a small amount of lubricant onto the insert tool.
- Remove Spiral Probe and embed the insert tool and plug into the tire. Insure the sleeve is flush to the tire.
- Hold the sleeve down and draw out the insert tool.



# Finish

## Procedure

- Once the insert tool is withdrawn from the tire tread trim any excess plug material extruding from the tire tread.
- Re-inflate the tire to manufactures specification.
- With a soapy water solution spray the repair location to check the plug. The soap solution will bubble if installed incorrectly.





## Project Description

Students explore the artistic side of metal working by crafting a one-of-a-kind metal rose. The construction process explores basic tin-smithing tools and welding processes, while fostering students' creativity and curiosity.

# Welding & Tinsmith

## Learning Outcomes

- Adopt safe practice with various metal working tools and equipment.
- Acknowledge that tools and machines should always be used for their intended purpose.
- Recognise the importance of careers welding and sheet metal (HVAC).
- Recognise career opportunities in related trade

## Materials

- Aviation snips (tin snips)
- Ball peen hammer
- Centre punch
- Flat file
- Blind rivets & tool
- 1/8 metal punch

## Equipment

- 11" X 8" of sheet metal 18 gauge or less. Eg 20,22 etc
- \*Alternative Material
- 10" of 1/8 round bar

## PPE

- Safety Glasses
- Steel Toe Boot (Close Toe)
- Welding PPE if required, helmet, gloves & jacket.

# Welding & Tinsmith



## Info

- Safety
- Materials
- Tools



## Application

- Layout
- Cut
- Prepare



## Assemble

- Joining Welding or Blind Rivit
- Bending

# Safety

## Considerations

- Eye protection must be worn at all times.
- After materials such as sheet metal are cut, edges become sharp with burrs. Handle with care.
- Gloves can be used to lower the risk of cuts.
- If welding all welding PPE should be provided. Including helmet, jacket and gloves.
- Welding produce a bright arc that can damage eyes.
- Welding should be done in a well ventilated area.



# Materials

## Types

- When choosing materials consider tool availability as well as age of students.
- A variety of materials or gauges sheet metal can be used.
- Eg. Sheet metal, round bar, tin and copper sheet.
- 20 gauge or thinner is ideal for younger students.
- 22 GAUGE SHEET & 1/8 ROUND BAR were used in this demonstration. Alternative tool & materials will be discussed.



# Tools

## Options

- Depending on the thickness of the chosen materials, cutting & joining tools may vary.
- Aviation snips: materials up to 18 gauge
- Angle grinder: thicker materials eg. 4 gauge

### • AVIATION SNIPS WERE USED IN THIS DEMONSTRATION



AVIATION SNIPS



ANGLE GRINDER



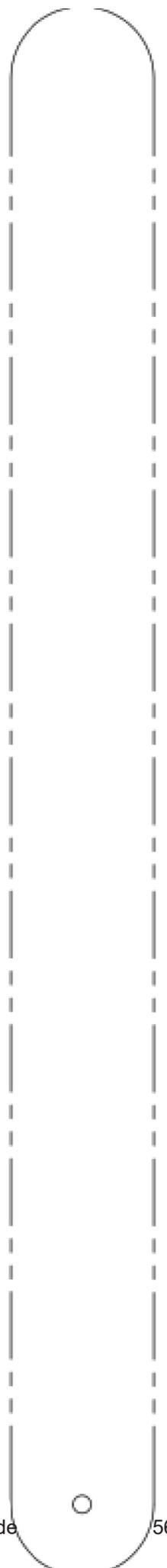
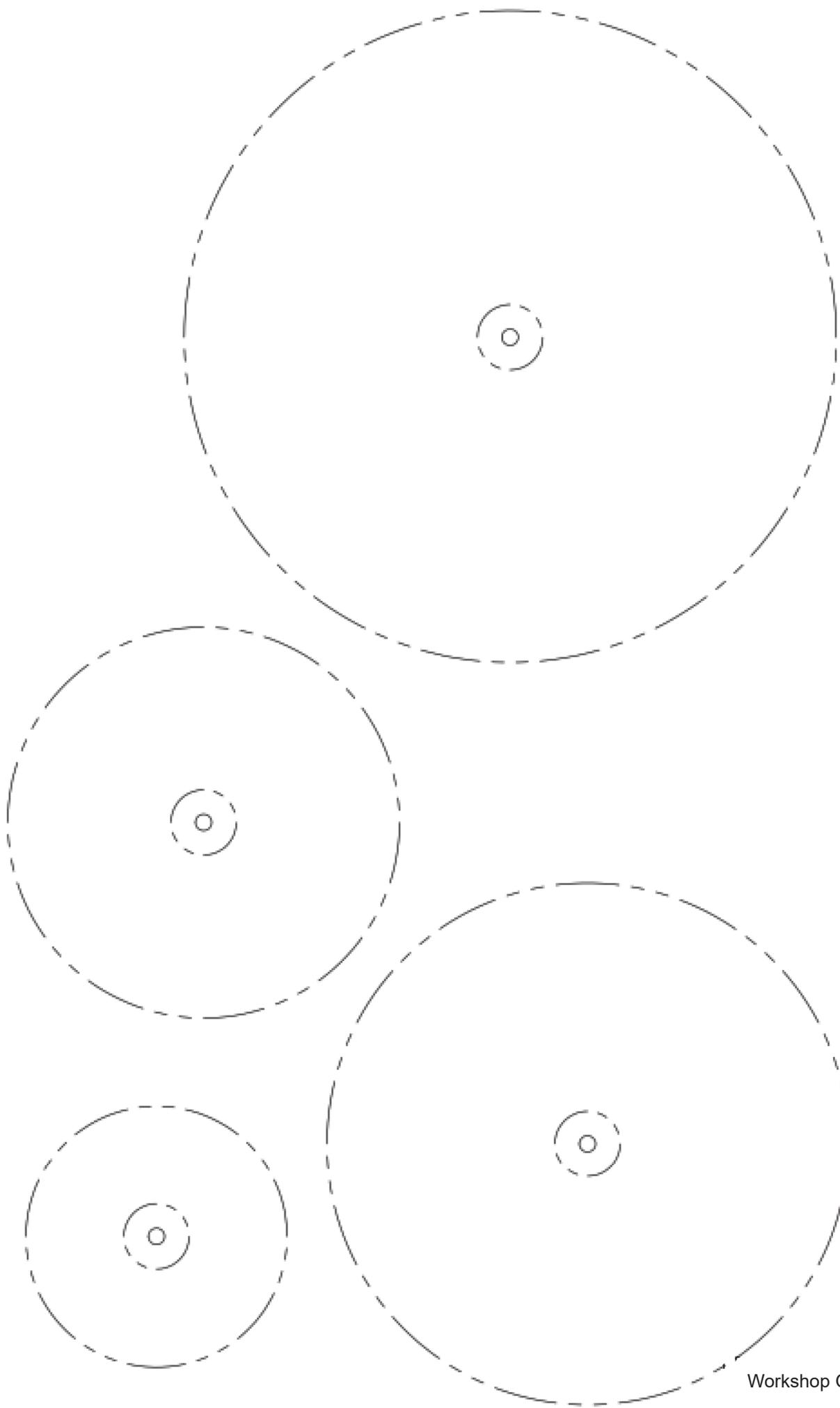
BEVERLY SHEARS

# Layout

## Demonstration

- Layout dye or large sharpie. \*OPTIONAL
- Use a centre punch to mark the centre of each circle.
- Scribe 4 - 5 circles ranging in size. 5" diameter being the largest 2" being the smallest
- Tight grouping to reduce waste.
- \*OPTIONAL: Cutout the next page and glue it on a 8.5"X11" piece of sheet metal using it as a template.





# Cut

## Process

- Using The appropriate tool (Aviation snips) cut out all circles & shape shown below.
- With a centre punch or 1/8 drill with material firmly clamped down proceed by removing centre.
- **\*SAFTEY CHECK\*** FILE NEWLY CUT EDGES TO REMOVE BURRS AND REDUCE RISK OF CUT.



# Shape

## Example

- With the same tool and safety considerations as cutting, shape the smallest circle like a star.
- Cut 4-5 impressions into the remaining circles and rounding each new corner.
- Left over materials can be used to make additional feature like leafs.



# Joining 1

## Welding

- Ensuring the MIG welders settings are correct for the thickness of steel.
- Start by tacking the star ½ inch from the end of the round bar.
- Flip over and proceed by tacking each circle to the bar, decreasing in size as you go. Big at bottom, small at top



# PPE

## Safety

- Welding helmet
- Gloves
- Jacket
- Close toe shoes
- INSURE WELDING IS DONE IN A WELL VENTED AREA AND ALL SAFTEY STEPS HAVE BEEN TAKEN.

### INSTRUCTORS DISCRETION



**WELDING PPE**



**MIG WELDER**

# Joining 2

## Blind Rivet

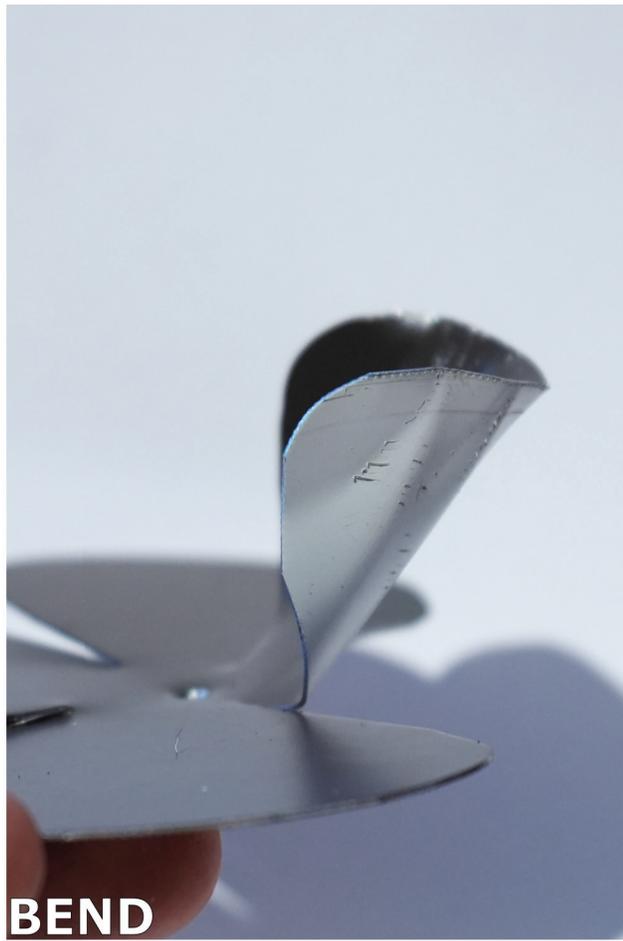
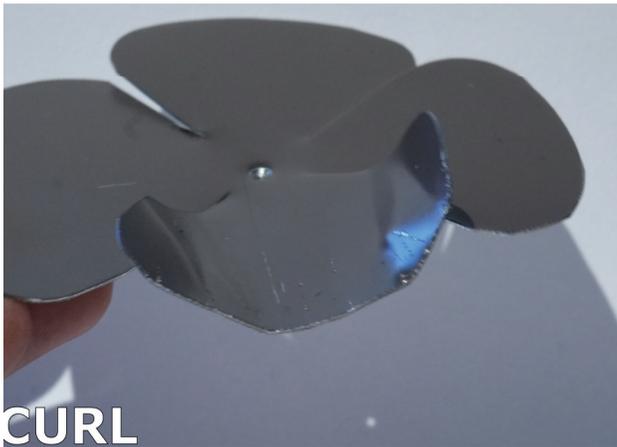
- Once all pieces are CUT, SHAPED and have the corresponding holes.
- Insert 1/8th blind rivet, through all pieces as shown in the image below.
- Engage the rivet gun with the rivet and squeeze the lever until it “POPS”



# Bending

## Technique

- Bending technique will be the same for all joining processes.
- With pliers in each hand grip a section of the top circle.
- Curl and Bend
- Work from top down.
- Add as much character to the rose as you feel fit.
- For thick gauge sheet, metal heat may be needed to make





# Welded Rose



## Riveted Rose

# Forms & Additional Info

<b>1. Instructor Guide</b>	<b>67</b>
<b>2. Host - Introduction Letter from SkilledTradesBC</b>	<b>70</b>
<b>3. Host - Commitment Form</b>	<b>73</b>
<b>4. Host - Example of Participant Confirmation Letter</b>	<b>74</b>
<b>5. Host - Example of Budget Breakdown</b>	<b>75</b>
<b>6. Host - Example of Emergency Contact Form</b>	<b>75</b>
<b>7. Host - Example of Incident Report</b>	<b>76</b>
<b>8. Host - Example of Waiver Form</b>	<b>77</b>
<b>9. Student - Example of Application Form</b>	<b>78</b>
<b>10. Host - Example of Media Consent Form</b>	<b>79</b>
<b>11. Publicity Agreement and Consent Form - SkilledTradesBC</b>	<b>80</b>

## Instructor Guide

The workshop is a combined partnership with SkilledTradesBC and the host organization. It was developed to offer Youth of varying ability levels an opportunity to develop skills that they can use in their everyday life and/or aid them in making career choices. The skills developed during this program should reflect industry standards. It is, however, important to remember that this is being taught in a workshop setting and not necessarily in an Industry Standard shop. You, as the instructor, set the tone of safety, learning and curious fun. This is infectious.

### Effective Teaching Strategies

#### Positive Expectations:

- As an instructor and leader in the community your skills are essential in creating a welcoming and caring environment free of bias
- Be organized along with starting and finishing on time
- Be clear
- Create a spirit of SAFETY and FUN.
- Make clear expectations to students regarding safety, behaviour, attendance, and classroom responsibilities.

#### Safety:

- Personal Safety Gear: Safety glasses and possibly ear plugs
- Emergency Response Plan
- Washrooms and general safety overview of space
- What is the first aid plan and is there a Level 1 First Aider
- Tie back long hair and do not wear loose clothing or jewelry. Leave all jewelry at home.

The school will, in no way, be responsible for any lost or stolen items.

- Closed toed shoes must be worn, steel toed boots are recommended.
- Pants (not shorts) must be worn when in the shop.
- Do not bring food or drink into the shop. No glass containers.
- Make sure your hands or gloves are dry when touching electrical cords, plugs, or sockets.
- When removing an electrical plug from its socket, pull the plug, not the cord.

## **Workshop Management:**

- Establish consistency – spend time with students explaining how the class will be structured and set guidelines to follow so the students understand what to do to be successful.
- Students will have varying abilities to exhibit self-control at this age. Speak to them like adults but remember many are teenagers.
- Students will vary in their skill level and the amount they can accomplish. Always over plan the amount of work to be done and be flexible with regard to the amount accomplished.

## **Student Rapport:**

- As an instructor and leader in the community develop a positive rapport with students and always remain professional, recognizing the separation between instructor/student roles.
- Create a safe environment for the students

## **Student Behavior:**

- Every student is responsible for the safety of themselves, as well as others.
- Students at all times must follow the rules and procedures established by the teacher
- All warning and verbal commands from the instructor will be obeyed immediately.
- No work can occur in the shop unless a qualified instructor is present.
- Students are expected to be on time and ready for each class
- If there is something you do not fully understand, ask for assistance. The instructor will clarify any area not fully understood by the student. Please ask questions
- Report to a instructor if you feel the behavior of another student indicates he/she is not well, or is acting in an unusual manner

## Housekeeping:

- At the end of each class, every student is responsible for helping everyone else clean the entire shop. During clean-up, everyone should be busy helping until the instructor dismisses them.
- Clean all tools and equipment before you put it away.
- Wash your hands with soap and water before leaving the shop.
- Work carefully and make sure that your work area is not cluttered.
- Remember: A clean and organized shop is a safe and productive shop

## Reporting Injuries and hazards:

- Report even the slightest injury whether or not you feel medical attention is necessary. Know the location of first aid.
- Report all hazards

## Remind students:

They, the student, are responsible for their own safety.

## Indigenous Land Acknowledgement: BELOW ARE SIMPLY EXAMPLES WHICH WILL DEMAND FURTHER DISCUSSION

A short answer for why a Land Acknowledgement is done is: “respect and protection of land”.

Respecting Indigenous traditions is important not only for the well-being of Indigenous people, but for everyone.

Example from Thompson Rivers University: Thompson Rivers University campuses are on the traditional lands of the Tk'emlúps te Secwépemc (Kamloops campus) and the T'exelc (Williams Lake campus) within Secwépemc'ulucw, the traditional and unceded territory of the Secwépemc. The region TRU serves also extends into the territories of the St'át'imc, Nlaka'pamux, T'silhqot'in, Nuxalk, and Dakelh.

## Host - Introduction Letter from SkilledTradesBC

### Dear host:

Congratulations on being selected to host a workshop. We know you will have an amazing introduction to the trades and learn new skills!

Your group hosting will be an integral part of the success of introducing youth to the trades and hands on learning. This workshop package is designed to act as a guide and standard to ensure that all participants and instructors first have fun and are introduced to the trades with a positive experience.

Please read through this material carefully as it outlines what a successful experience could look like. The workshop package includes examples of forms to be completed by the participants, parents, and institution/schools.

### Best Practice

The foundation is based on the care and safety of all participants.

The focus on continual enforcement of proper safe work procedures, appropriate conduct and student expectations is imperative.

For many of the participants, this is their first experience working within a shop setting and it is critical for students to learn within a culture of safety.

- Prior to start participants must have submitted Medical Forms and pre-assessment
- Suitable quantity/quality of volunteers (recommended 3:1 ratio)
- Daily safety talks with participants
- Active effort to incorporate safety into all aspects of activities
- Proper record keeping/reporting of incidents - Use signatory policies or provide guidelines

### Community Engagement

Community engagement is an important way to partner your school, club or community group in order to enhance the workshop experience. SkilledTradesBC encourages reaching out to local business, labour unions, schools, and other stakeholders.

For example:

- Local Employers
- Local Technical Training providers
- Apprenticeship Boards
- WorkSafeBC Youth Outreach
- SkilledTradesBC Advisors
- StepBC Advisors

Community involvement helps youth realize their own value along with the skills learned in the workshop which will hopefully provide insight into future learning goals. Community engagement can also provide real world examples of opportunities that exist within skilled trades.

## **Certificates**

It is important to acknowledge the participants efforts in completion. A certificate template is included in the workshop package and allows teachers/instructors to edit and customize for each individual participant.

Awarding the certificates to each participant, at a formal closing ceremony, provides an opportunity to recognize each individual in front of their peers and possibly families. Including pictures of the workshop in the folder allows participants to remember and reflect on the workshop experience.

Posting photos of the workshop activities throughout the week on social media can help your workshop to gain recognition.

## **Food**

This is not provided and it is up to the hosts to decide if they would like to provide food or ask participants to bring their own. Healthy snacks and juice boxes can help along with a celebration that may include food. Be sure to have plenty of water and healthy beverages on hand.

### **Steps and Forms for Service Providers:**

1. Application form from Service Provider to SkilledTradesBC for workshop approval
2. Letter back to Service Provider to approve or not
3. Once approved Budget submission to SkilledTradesBC for workshop
4. SkilledTradesBC sends package to Service Provider with greater detail including Posters for Advertising and Press Release
5. Workshop is then facilitated and completed
6. Feedback forms from Service Provider on workshop

### **Steps and Forms for Participant:**

1. Application and Waiver form completed by students
2. Students accepted and communicated to which will be based on Workshop Capacity.

All logistics will be provided at this time

3. It is critical that participants are committed to completing the program. This helps to ensure retention and completion for each participant.

## SkilledTradesBC

### Host Commitment Form

To be completed by the workshop host and returned via email to:  
grants@SkilledTradesBC.ca.

- I have read and understood all documents included in the workshop kit
- I commit to having each workshop attendee complete the Workshop Registration Form in its entirety. If the child does not complete the form, they will not be able to participate in the workshop.
- I commit to having each workshop attendee complete the Waiver/Release Form in its entirety. If the child does not complete the form, they will not be able to participate in the workshop.
- I commit to having each workshop attendee complete the Student Photo/Video Consent and Release Form in its entirety. I acknowledge that it is my responsibility to adhere to the requests made by the parent/child on this form and track all activities accordingly. Student who do not want their photo taken will be identified on their name tag.
- I agree to have all workshop attendees complete the Post Workshop questionnaire and return them to TBA within two weeks completion of the workshop.
- I agree to have all individuals (including volunteers) working with the students complete a vulnerable sector check within the province I reside, and to provide SkilledTradesBC with this information prior to
- I agree to absorb the cost of this through our workshop funding

---

Camp Host Signature and Date

## Example of Participant Confirmation Letter

Good afternoon all!

Congratulations, you have been accepted into the ITA TradeMakers 2.0–July 24–28 workshop. If your plans have changed please let me know immediately.

Please read below:

Just a few short days and the ITA TradeMakers 2.0 begins at Thompson Rivers University: **8:30 am sharp–Room # TT219 to 2 pm.**

Camp will begin at **8:30**. We will be meeting in **Room TT219 which is on the second floor of the School of Trades and Technology.**

Appropriate clothing for each day:

1. Long sleeve shirt–All cotton only
2. Jeans–or cotton pants (no shorts)
3. Full close toed shoes–Boots or hikers, etc.
4. No Jewelry–Chains, earrings, etc.
5. Please bring your own water bottle–and ensure that your name is on it. We will have water on hand as well.

Looking forward to seeing you all on Monday morning and should you have further questions please do not hesitate to send me an email.

Take care,

Dwayne Geiger

Good afternoon all,

As mentioned on the website each camp runs until 2 each day. The program starts each morning in TT 219–8:30 sharp in the Trades and Technology building. **Below is simply an example**

Monday, 8:30AM –2PM

Tuesday, 8:30AM –2PM

Wednesday, 8:30AM –2PM

Thursday, 8:30AM –2PM

Camp is free of charge and generously funded by the ITA.

Looking forward to seeing you all.

Take care,

Dwayne

## Example of Budget Breakdown

<b>WORKSHOP COST BREAKDOWN</b>			
<b>Program Expense</b>	<b>per day</b>	<b>per week</b>	<b>Actuals</b>
Instructor	\$ 400.00	\$ 1,950.00	\$ 1,950.00
Consumables (based on \$10/day/student)	\$ 200.00	\$ 1,000.00	\$ 246.11
Personal Protective Equipment (based on \$25/student)	\$ 500.00	\$ 500.00	
Recognition for volunteers and guest speakers	\$ 80.00	\$ 400.00	\$ 1,500.00
Incidentals & volunteer background check	\$ 140.00	\$ 700.00	
<b>TOTALS</b>	<b>\$ 1,320.00</b>	<b>\$ 4,550.00</b>	

## Example of Emergency Contact Form

Name	Email	Phone #	Allergies	Medications	Conditions	Medic Alert	Application Date	Guardian Contact Numbers



# Example of Waiver Form



## THOMPSON RIVERS UNIVERSITY

### RELEASE OF ALL CLAIMS AND WAIVER OF LIABILITY

WARNING: BY SIGNING THIS, YOU GIVE UP THE RIGHT TO SUE

To: THOMPSON RIVERS UNIVERSITY, its students, instructors, employees, officers, governors and agents.

In consideration of Thompson Rivers University permitting me to participate in **TradeMakers 2.0- August 26 and 27th at TRU**

I agree to this release of claims, waiver of liability, and assumption of risks (hereinafter collectively called “this Release”).

I waive any and all claims I may have against, and release from all liability and agree not to sue, Thompson Rivers University and its students, instructors, employees, officers, governors and agents (hereinafter collectively called “its Staff”) for any claim, loss or injury sustained by me as a result of my participation in the Activity arising out of any cause whatsoever including, but not limited to, negligence on the part of Thompson Rivers University and its Staff. I assume all risks associated with participating in the activity.

In participating in the activity, I am not relying on any oral or written representations or statement made by Thompson Rivers University or its Staff, including those in any brochures or calendars issued by Thompson Rivers University, to induce me to participate in the Activity.

I confirm that I have read and understood this Release prior to signing it, and agree that this Release will be binding upon me, my heirs, executors and administrators.

I agree that this Release is to be interpreted pursuant to the laws of the Province of British Columbia and I understand that if I have any questions regarding this Release, I should consult a lawyer prior to signing this Release.

WITNESS:

OR parent/Guardian if under age 19

Signature Guardian: \_\_\_\_\_ Signature of Participant: \_\_\_\_\_

Name Guardian:(please print) \_\_\_\_\_ Name of Participant (please print) \_\_\_\_\_

Address: \_\_\_\_\_ Address of Participant \_\_\_\_\_

# Example of Application Form



**THOMPSON RIVERS UNIVERSITY**

## APPLICANT INFORMATION

Participant's First Name \_\_\_\_\_ Participant's Last Name \_\_\_\_\_

Participant's Preferred Name \_\_\_\_\_ M/ F/ Choose not to Identify (Circle)

Current Date: \_\_\_\_\_

Date of Birth (mm-dd-yyyy) \_\_\_\_\_ Grade Completed \_\_\_\_\_

Address: \_\_\_\_\_ City \_\_\_\_\_

Postal Code \_\_\_\_\_ Email Address \_\_\_\_\_

Contact Number (please indicate who's #) \_\_\_\_\_

Alternative Contact in Case of Emergency \_\_\_\_\_

#1 Name/Relationship \_\_\_\_\_ Phone # \_\_\_\_\_

#2 Name/Relationship \_\_\_\_\_ Phone # \_\_\_\_\_

## MEDICAL INFO

Allergies: (Please write "none" if no allergies) \_\_\_\_\_

Medications: (List below, with doses and times)

Medical Conditions: Including ADHD, Epilepsy, or any other behavioral conditions within the last 3 years

(Please write "none" if no medical condition exists) \_\_\_\_\_

# Example of Media Consent Form



**THOMPSON RIVERS UNIVERSITY**

## Media Consent

Name: \_\_\_\_\_

Email: \_\_\_\_\_

I consent to the use and/or reproduction of all digital media taken of, or including me, and/or information gathered about or including me, by Thompson Rivers University (TRU) or by any nominee of TRU (including any agency, client, publication or other organization or institution) in whole or in part, in all forms and media, for distribution to the general public for the purposes of publicity and promotion of TRU.

I further consent to the reproduction or use of the photographs/ information with or without my name, and consent that TRU may seek copyright of the photographs/information in their name. In giving this consent, I release TRU and its nominees from liability for any violation of any personal or proprietary right I have in connection with any sale, reproduction or use of the digital media. I certify that I am 19 years of age or older.

Signature \_\_\_\_\_

Date \_\_\_\_\_

Guardian (if model is 18 years and younger) \_\_\_\_\_

Date \_\_\_\_\_

INTERNAL USE ONLY:

Event / Client \_\_\_\_\_

Photographer / Assistant \_\_\_\_\_

Description of Model \_\_\_\_\_

# PUBLICITY AGREEMENT AND CONSENT

This Publicity Agreement and Consent is made and effective [Date]: \_\_\_\_\_

I, \_\_\_\_\_, confirm that I am providing the SkilledTradesBC with all rights and license to use the photographs and/or video of me, in any form, including electronic, negatives, positives, and prints, without compensation.

I acknowledge this notice that the photographs and/or video are being collected pursuant to B.C's *Freedom of Information and Protection of Privacy Act* for the purposes of marketing and promotion of SkilledTradesBC, its programs and services, or any programs or services related to SkilledTradesBC and its mandate.

I consent and authorize SkilledTradesBC and its service providers and agents, to collect, use, reproduce and disclose my photographic images and/or video and name, trade, education (including level), and region (defined as personal information), for the above purposes. I also agree that SkilledTradesBC and its service providers and agents may access, store, use, reproduce and disclose my personal information and photographic images and/or video in print and electronic media in Canada and worldwide in perpetuity.

I hereby acknowledge that I am 18 years of age or older, or I am the parent or legal guardian of the individual appearing in the photographs and/or video, and have read and understood the terms of this agreement and consent.

Name of individual in video/photos	
Signature of individual	
Address	
Phone and/or email	
Signature of parent or legal guardian (if under the age of 18)	

**For any questions or concerns, please email [externalrelations@skilledtradesbc.ca](mailto:externalrelations@skilledtradesbc.ca).**

**Note, a digital version of this form is also available at:**  
<https://analytics.clickdimensions.com/cn/adufq/consent-form>



SKILLED**TRADES**<sup>BC</sup>