**How to cut a piece of metal properly with a Hack Saw:**

1. **Gather the materials together that you need.**
	1. Hack Saw
	2. Metal Strip
	3. Ruler
	4. Safety Glasses
	5. Marker
	6. Clamp
	7. Scrap Wood block
	8. Sturdy table to clamp your metal to.
2. **Follow the correct steps to cut the metal;**
	1. Put on your safety glasses
	2. Using your ruler, mark your metal at the appropriate length with the marker.
	3. Clamp your metal in place with the cut line off the edge of the desk. Allow clearance for your saw. Place your cut line Close to the scrap block, but not too close. If your mark is not close to the scrap wood block, your metal will flex as the saw moves across the metal and make it difficult to cut.
	4. Check your saw blade to be sure all the teeth are in good shape before starting your cut.
	5. To START your cut, drag the Hack saw across the line by pulling the saw toward you several times. (Creating a small “KERF” (notch) in the metal)
	6. The Hack Saw cuts on the forward stroke, so you want to “PUSH” forward with a bit of force and then glide backward to start the next stroke.
	7. Excessive FORCE is not required to cut metal. Smooth consistent strokes will get the job done.
	8. Hold the END of the metal you are cutting with your free hand. This will STEADY the metal as you cut through. **Using the hack saw, NOW make your cut!**
	9. The Joint where the metal is cut will be hot when done because you have created a lot of friction at the cut point.
	10. Also, be careful with the “CUT” edges because they will need to be FILED smooth to remove all the metal burrs created by the saw.
3. **SAFETY PROCEDURES:**
	1. If you cut your finger, even slightly with a piece of metal, report to your teacher immediately.
	2. Never talk to another student or with another student while cutting.
	3. If the blade gets dulled by cutting or teeth get broken off of the saw blade, report this to your teacher.
	4. Always wear safety glasses.