

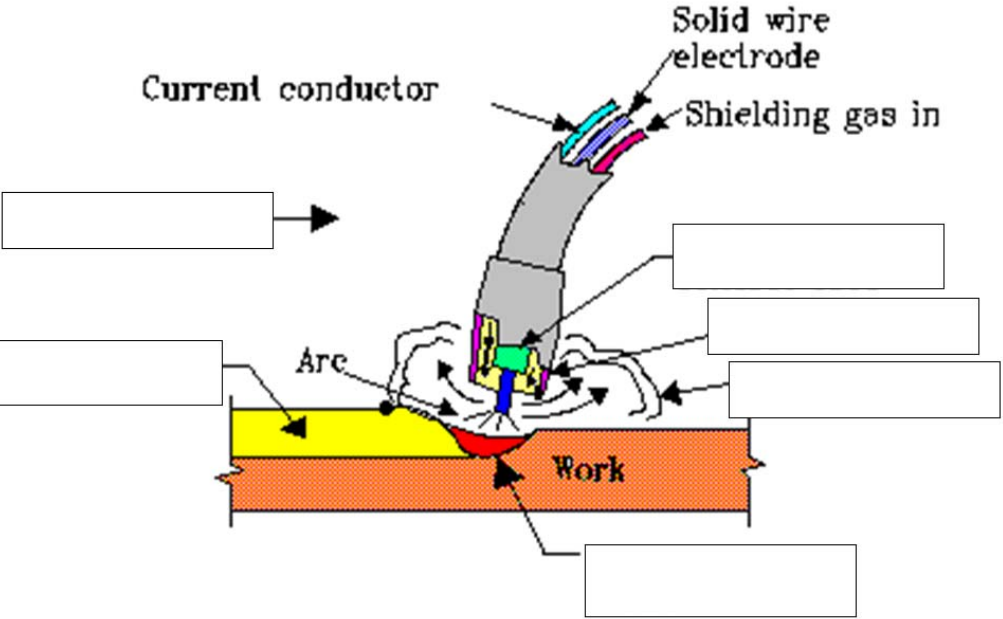
# MIG WELDING

The Basics

NAME: \_\_\_\_\_



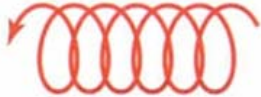










Complete the following table neatly:

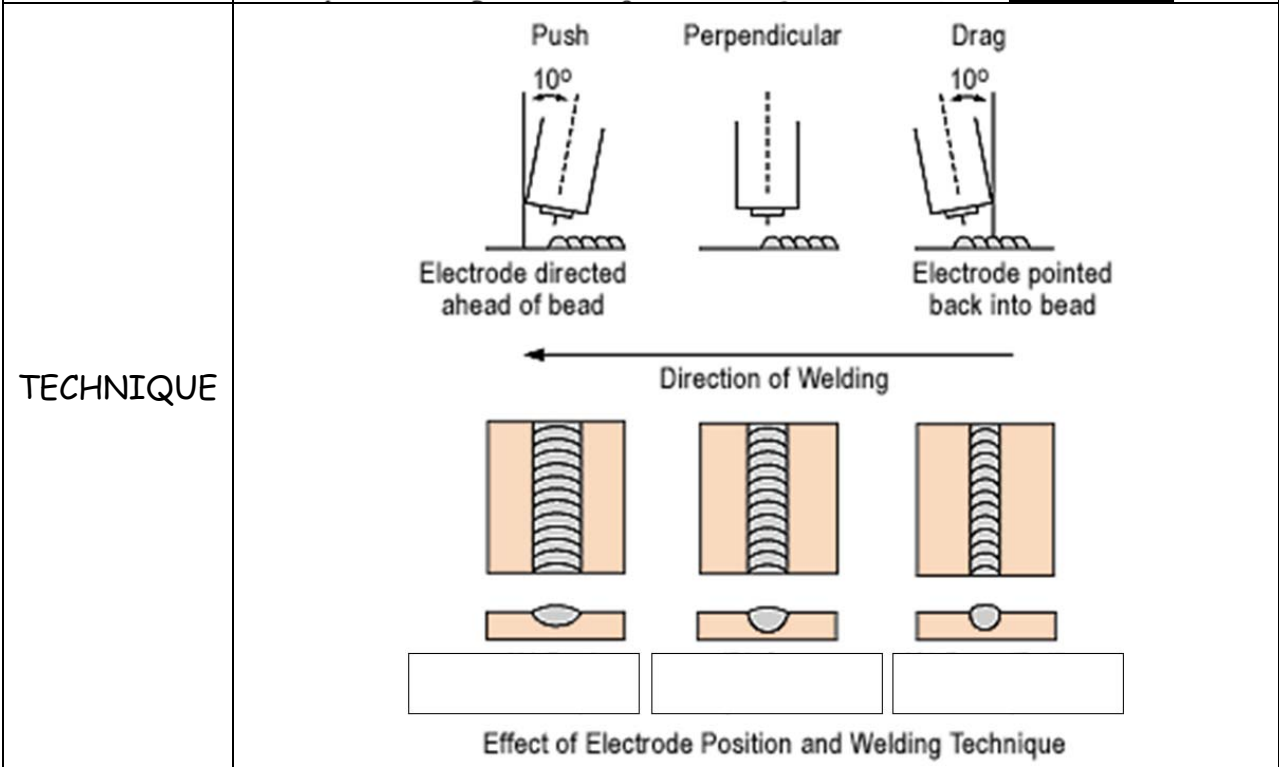
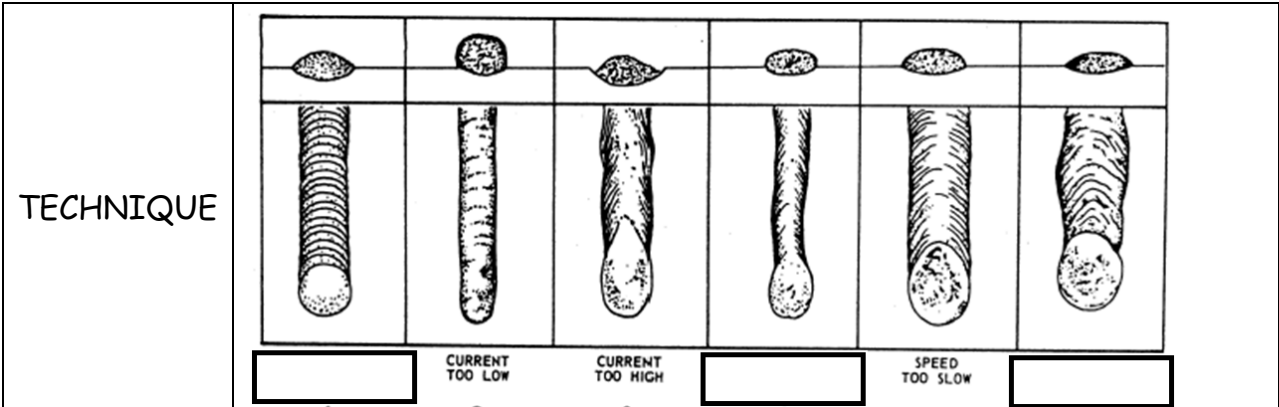
NAME	PURPOSE, TIPS, SAFETY, & THINGS TO LOOK OUT FOR
WHAT IT'S ABOUT	<ul style="list-style-type: none"><li>• One of the _____ to learn</li><li>• Fast - great for _____</li><li>• Can weld:<ul style="list-style-type: none"><li>○ _____</li><li>○ _____</li><li>○ _____</li></ul></li></ul>
HOW IT WORKS	<ul style="list-style-type: none"><li>• _____ melts the base metal</li><li>• _____ added automatically</li><li>• Weld bead is _____ by an _____ shielding gas</li></ul>
WATCH WELD VIDEO	

<p>GROUND CLAMP</p>	<ul style="list-style-type: none"> <li>• Electricity needs an _____ path <ul style="list-style-type: none"> <li>○ _____ the metal</li> <li>○ Clamp the ground cable as _____ as you can to the weld</li> </ul> </li> </ul>
<p>SHIELDING GAS</p>	<ul style="list-style-type: none"> <li>• Molten metal absorbs _____ = BAD</li> <li>• Shield the weld with an Inert Gas <ul style="list-style-type: none"> <li>○ "Inert"= " _____ "</li> <li>○ _____ (pretty welds)</li> <li>○ _____ Cheaper, better penetration</li> </ul> </li> </ul>
<p>COMPONENTS</p>	 <p>The diagram illustrates the MIG welding process. A 'Current conductor' cable is shown entering a torch. Inside the torch, a 'Solid wire electrode' is fed through a 'Shielding gas in' passage. An 'Arc' is formed between the tip of the electrode and the 'Work' piece. The work piece is shown as a cross-section of metal with a weld pool forming. Several empty boxes with arrows point to various parts of the torch and the work area for identification.</p>

<p style="text-align: center;">SAFETY</p>	<ul style="list-style-type: none"> <li>• Wear a _____ _____</li> <li>• Wear _____ gloves, coat, apron and pants <ul style="list-style-type: none"> <li>○ 15 minutes exposure = _____</li> </ul> </li> <li>• Well _____ area</li> <li>• NO _____!!</li> </ul>
<p style="text-align: center;">CABLE CARE</p>	<ul style="list-style-type: none"> <li>• NO _____</li> <li>• NO _____</li> <li>• _____ that cable <ul style="list-style-type: none"> <li>○ It's carrying electricity, filler wire, <i>and</i> shielding gas!</li> </ul> </li> <li>• Cables do _____ over time</li> </ul>
<p style="text-align: center;">NOZZLE CARE</p>	<ul style="list-style-type: none"> <li>• Clean the _____ out periodically (MIG Pliers)</li> <li>• Trim the "stickout" to _____</li> <li>• Do not _____ or _____ nozzle</li> <li>• Nozzle should be _____ with tip, and only _____ - _____ - _____</li> </ul>
<p>MIG PLIERS</p>	
<p>EYE PROTECTION</p>	

<p>SETTINGS</p>	<ul style="list-style-type: none"> <li>• Heat Setting <ul style="list-style-type: none"> <li>○ Thicker metal = _____</li> </ul> </li> <li>• Wire Speed Setting <ul style="list-style-type: none"> <li>○ Higher current = _____</li> </ul> </li> </ul>
<p>SETTINGS</p>	<ul style="list-style-type: none"> <li>• Every machine has a chart _____ for settings</li> <li>• Based on <ul style="list-style-type: none"> <li>○ _____ size</li> <li>○ _____ size</li> <li>○ _____ type</li> </ul> </li> </ul>
<p style="text-align: center;">WIRE, GAS, and CONTROL SETTINGS</p>	
<p>HEAT SETTINGS</p>	<ul style="list-style-type: none"> <li>• Run as high a heat as you can get away with, without: <ul style="list-style-type: none"> <li>○ _____</li> </ul> </li> </ul>
<p>FEED SETTINGS</p>	<ul style="list-style-type: none"> <li>• Run as slow a wire feed as you can get away with without: <ul style="list-style-type: none"> <li>○ _____</li> </ul> </li> </ul>
<p>FLOW SETTINGS</p>	<ul style="list-style-type: none"> <li>• Set gas flow to _____ CFH</li> </ul>

<p>TECHNIQUE</p>	<ul style="list-style-type: none"> <li>• _____ everything first             <ul style="list-style-type: none"> <li>○ No final welding until _____ is fully assembled AND tacked</li> </ul> </li> <li>• Keep the tip _____ (minimize stickout)</li> <li>• Travel _____             <ul style="list-style-type: none"> <li>○ Watch the _____ No puddle? No weld!</li> </ul> </li> </ul>
<p>TECHNIQUE</p>	<div style="display: flex; flex-wrap: wrap; justify-content: space-around; text-align: center;"> <div style="width: 45%;">  <p>V</p> </div> <div style="width: 45%;">  <p>UPSIDE DOWN V</p> </div> <div style="width: 45%;">   </div> <div style="width: 45%;">   </div> <div style="width: 45%;">  <p>SQUARE</p> </div> <div style="width: 45%;">  <p>J</p> </div> <div style="width: 45%;">   </div> <div style="width: 45%;">  <p>T</p> </div> <div style="width: 45%;">  <p>STRAIGHT STEPPED</p>  </div> </div>



- |      |   |  |
|------|---|--|
| TIPS | <ul style="list-style-type: none"> <li>• _____ the metal</li> <li>• _____ the metal</li> <li>• Get _____</li> <li>• Get _____</li> <li>• Watch _____</li> </ul> |  |
|------|---|--|