**TYPE NAME HERE**

**\_\_\_\_**

**48**

**½ for each question**

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**YouTube**

**Go WELDING SMAW HOMEWORK**

**TAKEAWAYS**

<https://gowelding.org/welding/stick-smaw/>

Directions: While observing the video, create a list of important facts, known as “takeaways”. These do not need to be in sentence form, but they must be precise and accurate. After this paper is graded, it will be returned for you for your notes.

**What is Stick Welding?**



**Stick Welding Equipment**



**IS Stick Welding AC or DC**



**How Much Power or Amperage DO I Need?**

1.

2.

**What is the difference Between Stick, MIG, and TIG Welding?**



**How Much Does Stick Welding Equipment Cost?**



**How Long Does it Take to Learn to Stick Weld?**



**What Can I Weld with a Stick Welder?**

1.

2.

**How Does Stick Welding Work?**



**Basic Welding Safety**



**What is welding flash burn on skin?**

**What causes a welding flash burn on skin?**

**What is welding flash burn to the eyes?**

**Weld Joint Preparation**



**Stick / SMAW Welding Electrode Designations**

What are the most commonly used welding electrodes?

What do the first two numbers on the electrode refer to?

60XX stands for what?

How strong is a 7018 electrode?

A weld is usually how many more times stronger than the steel it is welding?

What do the last two numbers stand for?

What is difference between an XX10 and a XX18 electrode?

What are the three best electrodes to use?

**Basic Stick Welding Machine Set-Up**



A proper welding bead sounds like what?

 The welding machine should be set \_\_\_\_\_\_\_\_ enough to burn the rod smoothly without \_\_\_\_\_\_\_\_\_, and the rod should not turn \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_, otherwise the settings are too high.

Once you have the sound of the electrode dialed in you later learn to \_\_\_\_\_\_\_\_\_\_\_\_\_ the \_\_\_\_\_\_\_\_\_\_\_\_\_ of the electrode \_\_\_\_\_\_\_\_\_\_\_\_\_ and that also tells you a lot about the weld. Finally you do your \_\_\_\_\_\_\_\_\_\_\_\_ inspection of the weld. Is it smooth, rough, too flat and so on.

**Basic Stick Welding Techniques**

Before you get started welding – and this is very important – get \_\_\_\_\_\_\_\_\_\_\_\_\_\_, use \_\_\_\_\_\_\_ hands to hold the \_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_ yourself in any and every possible way to make sure you are in a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ position. This is one of the \_\_\_\_\_\_\_\_\_\_\_secrets journeyman welders use all of the time. I was originally thought to weld with one hand and all that means for you is less control. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the biggest factor when it comes to welding technique!

**How to Strike an Arc**



Stick Welding Patterns – List the three techniques and what they look like

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The reason for using a slight motion during welding is because it helps \_\_\_\_\_\_\_\_\_\_ out the weld more \_\_\_\_\_\_\_\_\_\_\_\_\_\_. As a general rule you want the weld to be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the width of the electrode and no more than \_\_\_\_\_\_\_ electrodes wide.

**Whipping the Electrode Technique**



**Circles Welding Technique**



**Weaving Welding Technique**



**Stick Welding Position Rod Angles**



**Overview of Rod Angles and Positions**

* Flat or 1G you drag the rod between \_\_\_\_ to \_\_\_\_ degrees in the \_\_\_\_\_\_\_\_\_\_\_\_ of your movement.
* Horizontal or 2G you point the rod upward between \_\_\_\_\_ and \_\_\_\_\_ degrees and drag it toward your direction of travel with a side tilt of \_\_\_\_\_\_ to \_\_\_\_\_\_ degrees.
* Vertical up or 3G point the rod up between \_\_\_\_\_\_\_ to \_\_\_\_\_\_ degrees.