

Patch Knife classes
January 5, 2018
Morning classes 8:00am to 12:00 noon
Afternoon classes 1:00pm to 5:00pm
www.incandescent-iron.com



This four-hour class is aimed at young students, ages 12 and up. It teaches basic blacksmithing skills. Beginners will learn hammer skills and elementary heat treating, in making a “patch knife”: a small one-piece knife used by flint lock rifle enthusiasts.

Students should bring their lunch and a refillable water bottle. I provide all necessary tools, equipment and materials, though you may bring your own hammers or other tools if you wish.

Safety eyewear is required. You can bring your own safety eyewear, or use ours. Wear cotton clothing, not synthetics (synthetic materials will give you a much worse burn than cotton if they ignite). Leather shoes are a good idea, though not required. If you have a leather or denim apron it will help reduce the amount of grime that accumulates on your clothes. It is a good idea to bring a headband because even in the winter you can work up a good sweat hammering iron next to a hot forge.

The class is limited to a maximum of four students.

Googlemaps can bring you right to the smithy. Just plug in the address: 3610 S. Harrison Rd, Spokane, WA.

For additional details contact Steve McGrew at 509-998-2465 (cell) or stevem@incandescent-iron.com.

Safety Principles in the Smithy

- No alcohol unless the day has ended and all the forges and equipment are turned off.
- Always wear eye protection
- Always assume that anything made of metal is hot until you know otherwise. Most burns are from black iron.
- Always put hot metal *under the forge* to cool.
- Always quench your tongs, punches, drifts, chisels, fullers and slitters after each use
- If your hammer head is loose, put it head-down in water and get a different hammer.
- Wear a dust mask if you are working at the coke forge, brushing, sweeping, or grinding.
- When you burn yourself, immediately dunk the burned appendage in cold water until the cold hurts more than the burn; then put on some aloe vera and a bandage.
- When you discover that you are starting to get a blister, tape the affected area with duct tape and remember to wear your gloves.
- Do not hammer toward anyone else, and make sure nobody is near the arc of your hammer swing.
- Think about what how your workpiece is going to respond before you hit it.
- When you're carrying hot steel past other people, keep it in front of you and down low; make sure they know what you're up to.
- Always double-check that the gas is turned completely off
- Always make sure the ventilation fan is on if any gas forges are running
- Look before you move
- Plan your moves before you move
- Notice where others are around you and what they are doing
- Keep your tools where you can find them; only use your own set of tools.
- Do your best not to hit the anvil with your hammer: it can damage the anvil
- When cutting or slitting, protect the anvil with a cutting plate.

Ergonomics:

- Anvil face should be a bit higher than your knuckles
- Use a platform if you need it for higher work
- Let gravity do the work: don't push down on your hammer; just lift it higher to hit harder
- Keep your wrist and hand relaxed when hammering
- Breathe normally when you are hammering
- Don't use a heavier hammer than necessary.

hearing protection are recommended. I accept full responsibility to take the necessary steps to protect my child's safety, and I accept full responsibility for the safety of my child,

_____,'
in the shop.

Parent signature _____ Date _____

Parent name (printed) _____

Incandescent Ironworks Ltd., has my permission to take photos of my child during the class and use the photos on the company website, www.incandescent-iron.com, and the Columbia Fire and Iron website and Facebook sites.

Yes _____

No _____

Initials _____ Date _____