



PLUMBING

Merit Badge Requirements

1) Do the following:

- A) Make a drawing and explain the way the hot- and cold-water supply system in your home or that of a neighbor works. Tell how you would make it safe from freezing.
- B) Make a drawing and explain the drainage system of the plumbing in a house. Show and explain the use of drains and vents.

2) Show how to use five important plumber's tools.

3) Identify and describe the use of each of the following: washer, cap nut, force cup, half-and-half solder, flux, elbow, tee, nipple, coupling, plug, union, trap, drainpipe, water meter.

4) Tell what kinds of pipe are most often used in a plumbing system. Tell why.

5) Cut, thread, and connect two pieces of galvanized pipe.

6) Using a gas torch under supervision, solder three copper tube connections. Include on tee, two straight pieces, and one coupling.


7) Do the following:

- A) Replace a washer in a faucet.
- B) Clean out a sink or lavatory trap.

8) Make a list of five important local health regulations related to plumbing.

Requirement 1

Use the area below to draw the way a hot/cold water supply system works in your house or that of a neighbor. Use arrows to indicate directions of water flows, etc.



Briefly explain your drawing, focusing on how the hot/cold water supply system works: _____

Tell how you would make the hot/cold water system safe from freezing: _____

Scout Name: _____ Unit #: _____ Date: _____

Use the area below to draw the drainage system of the plumbing of the house. Be sure to include Drains and vents.



Explain the drainage system: _____

Explain the use of drains and vents in the drainage system: _____

Requirement 2

Show your counselor the proper use of five important plumber's tools. Give the name and a brief description of what the tool is used for.

Tool: _____ Use: _____

Tool: _____ Use: _____

Tool: _____ Use: _____

Tool: _____ Use: _____

Tool: _____ Use: _____

Requirement 3

Describe the use of each of the following:

Washer: _____

Cap Nut: _____

Force Cup: _____

Half-and-Half Solder: _____

Flux: _____

Elbow: _____

Tee: _____

Nipple: _____

Coupling: _____

Plug: _____

Union: _____

Trap: _____

Drainpipe: _____

Water Meter: _____

___ Be able to identify each of these items by their proper name.

Requirement 4

Tell what kinds of pipe are most often used in a plumbing system and tell also why they are used:

Pipe: _____ Use: _____

Pipe: _____ Use: _____

Pipe: _____ Use: _____

Pipe: _____ Use: _____

Pipe: _____ Use: _____

Requirement 5

For this requirement you are to cut, thread, and connect two pieces of galvanized pipe. After doing this, explain the steps you took: _____

___ Show your work to your counselor.

Requirement 6

For this requirement you need to use a gas torch to solder three copper tube connections. Including one tee, two straight pieces, and one coupling. After you have completed this, explain the steps you took: _____

Use this area to make a small sketch of your completed soldering job:

Requirement 7

Replace a washer in a faucet. Describe the process: _____

__ Have an adult supervise or check your work when you are finished. Have them initial here: _____

Clean out a sink or lavatory trap. Describe the process: _____

__ Have an adult supervise or check your work when you are finished. Have them initial here: _____

Requirement 8

Make a list of five important local health regulations related to plumbing:

Regulation: _____

Regulation: _____

Regulation: _____

Regulation: _____

Regulation: _____
