



# Merit Badge College 2022

## Plumbing



You need to print this form and bring it with you to Merit Badge College.

Highlighted areas are to be completed outside of class. Come to class prepared to discuss all items.

1. Do the following:

- ☐ a. Describe how a properly working plumbing system protects your family's health and safety.
- ☐ b. List five important local health regulations related to plumbing and tell how they protect health and safety.

Health Regulation	How they Protect Health and Safety

- ☐ c. Describe the safety precautions you must take when making home plumbing repairs

2. Do the following:

- ☐ a. Make a drawing and explain how a home hot-and-cold water supply system 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.

3. Show how to use five important plumber's tools.

4. Identify and describe the use of each of the following:

- |                                 |  |   |
|---------------------------------|--|---|
| <input type="checkbox"/> Washer | <input type="checkbox"/> Retaining Nut | <input type="checkbox"/> Plunger (rubber force cup) |
| <input type="checkbox"/> Solder | <input type="checkbox"/> Flux          | <input type="checkbox"/> Elbow                      |
| <input type="checkbox"/> Tee    | <input type="checkbox"/> Nipple        | <input type="checkbox"/> Coupling                   |
| <input type="checkbox"/> Plug   | <input type="checkbox"/> Plug          | <input type="checkbox"/> Union                      |
| <input type="checkbox"/> Trap   | <input type="checkbox"/> Drainpipe     | <input type="checkbox"/> Water Meter                |

5. Name the kinds of pipe that are used most often in a plumbing system. Explain why these pipes are used.

6. Cut, thread, and connect two pieces of metal pipe.

7. Under the supervision of a knowledgeable adult, solder three copper tube connections using a gas torch. Include one tee, two straight pieces, and one coupling.

8. Do the following:

- ☐ a. Replace a washer in a faucet.
- ☐ b. Clean out a sink or lavatory trap.

Scout Name

Address

Troop Number

Counselor Signature

Unit Leader Signature

Date Completed

**Counselor:** Initial next to the box located to the left of the requirement completed in class. Sign the space that states Counselor Signature.

**Scout:** Complete the spaces above for Scout Name, Address and Troop Number. Complete all highlighted areas outside of class.

**This form replaces the traditional "Blue Card".**