



Plumbing

Merit Badge Workbook

This workbook is not required but is designed to help you with this merit badge. No one can add or subtract from the Boy Scout Requirements #33215. Use page backs & add pages as needed. Please send comments to: craig@craiglincoln.com. Requirements revised: 2005, Workbook updated: January 2005.

Scout's Name: _____ Unit: _____

Counselor's Name: _____ Counselor's Ph #: _____

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.

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____

(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:

washer, _____

retaining nut, _____

plunger (rubber force cup), _____

solder, _____

flux, _____

elbow, _____

tee, _____

nipple, _____

coupling, _____

plug, _____

union, _____

trap, _____

drainpipe, _____

and 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 steel 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.