



Plumbing

ELIGIBILITY

Open to active SkillsUSA members enrolled in programs with residential plumbing as the occupational objective.

CLOTHING REQUIREMENTS

Official SkillsUSA work shirt and work pants, or comparable uniform with no school logos, work shoes or boots and safety glasses with side shields or goggles. (Prescription glasses can be used only if they are equipped with side shields. If not, they must be covered with goggles.)

Note: At the district level if a student is not able to wear the official SkillsUSA attire he/she may wear an outfit that would be acceptable in their specific field of study. Please keep in mind that official SkillsUSA attire will be required at the state and national level.

EQUIPMENT AND MATERIALS SUPPLIED BY HOST

1. All necessary supplies, Copper cleaning tools, Flux/Paste/95/5 solder, 2-work rags, Teflon tape, primer, cement, fittings and piping required for the projects
2. Acetylene Tank and tips will be provided
3. No threading of pipe needed, Pipe will be pre- threaded to required lengths
4. Please do not bring torches

EQUIPMENT AND MATERIALS SUPPLIED BY CONTESTANT

1. All students must have a one-page, typewritten resume.
2. Copper tubing cutter with reamer
3. 3. Tape measure
4. 4. #2 Pencil, pen, sharpie marker
5. 5. Channel locks
6. 6. 2 - Pipe wrenches (12", 14", are suitable)
7. 7. 3/4 " PVC pipe cutter needed
8. 8. Safety glasses and gloves

SCOPE OF THE CONTEST - (DEFINED BY THE NATIONAL COMPETITION REGULATIONS)

(District Competitions are meant to be a scaled down version of National Competition. It is important for the students to participate in a competition that will reflect a cross-section of the industry skills needed to prepare them for the state and national levels) The competition will evaluate each contestant's preparation for employment and recognize outstanding students for excellence and professionalism in the field of residential plumbing.

KNOWLEDGE PERFORMANCE

1. The contest will include a written knowledge exam assessing knowledge of the industry standards. 30 multiple choice questions taken in 15 minutes.



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SKILL PERFORMANCE

1. The contest includes three stations designed to test the ability to perform jobs or skills selected from the following list of competencies.

Contest Competencies:

1. **Copper piping** - This project will test the quality of the solder joints and also the accuracy of the contestant's measurements. The joints will be tested under water pressure for leaks.
2. **Assemble black iron piping** – This project will test the contestant's knowledge of fitting allowances and their ability to read the fitting charts. Joining of black iron piping by hand will be a major part of this competition. The joints will be tested under water pressure for leaks.
3. **PVC Piping** - This project will test the contestant's ability to join PVC piping and calculate offset and fitting allowances, and the ability to use primer and cement neatly.
4. **Theory test** -This will be a 30 question multiple choice test. The test includes basic plumbing knowledge and the ability to read rough-in sheets and charts.
5. **Time** to complete all tasks will be factored into the score.
6. **Total amount of time** expected for the competition is approximately 2.5 hrs.

Plumbing Competition Rating Sheet

Items Evaluate	Possible Points	Contestant Score
Written Test (15 minutes)	30	
Black Iron Piping (60 minutes)	100	
Copper Piping (45 minutes)	100	
PVC Piping (30 minutes)	100	
	SUBTOTAL = 320	
Clothing Penalty	Deduction -10 points	
No resume	Deduction -10 points	
Safety Penalty	Deduction -5 points	
	TOTAL	



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Note: No cell phones or other electronic devices may be used at any time during a competition; this includes using a calculator function on a cell phone for competitions in which calculators are permitted.

Note: Scorecards should only be used as guidance. Changes may occur.