



Task Title: Understanding Household Plumbing Pipes

OALCF Cover Sheet – Practitioner Copy

Learner Name: _____

Date Started: _____

Date Completed: _____

Successful Completion: Yes No

Goal Path: Employment Apprenticeship

Secondary School Post Secondary Independence

Task Description: The learner will read about pipes used in household plumbing and conduct internet searches to learn more.

Main Competency/Task Group/Level Indicator:

- Find and Use Information/Read continuous text/A1.2
- Use Digital Technology/D.2

Materials Required:

- Pen/pencil and paper
- Computer or digital device

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Learner Information

Plumbers need to understand the uses of various pipes when building or replacing existing plumbing fixtures. Read "Types of Household Plumbing Pipes".

Types of Household Plumbing Pipes

Pipes are typically used either for drainage or for water supply.

Water Supply	Drainage
<ul style="list-style-type: none">• Copper pipe• PVC• CPVC• PEX• Galvanized Pipe	<ul style="list-style-type: none">• ABS• PVC• Cast Iron• Galvanized Pipe• Copper Pipe DWV

ABS - A hard walled black plastic drain pipe used extensively in North America.

Cast Iron - A very common drain pipe in older homes but it is no longer used in residential plumbing.

Copper pipe - Used for decades as the most common water supply pipe. Copper pipe and tubing comes in a variety of sizes and types.

Copper Pipe DWV - A hard walled copper drain, waste and vent pipe (DWV) that was commonly used in older homes. It is still commonly used in commercial and industrial construction but is too pricey for residential.

CPVC - Used as a hot/cold water supply pipe in many countries around the world because of the price but it lacks long term durability.

Galvanized pipe (Drainage) - Common in many older homes and prone to maintenance. Easily discernible by the silver to whitish color and threaded fittings.

Galvanized pipe (Water Supply) - May still be found in many homes but is seldom used anymore because of water discoloration, cost and difficult repairs.

PEX - Cross-linked polyethylene tubing. This has become the standard in new home construction. PEX comes in a variety of colors and is used for plumbing and heating purposes.

PVC (Drainage) - A hard walled white plastic drain pipe used throughout the world.

PVC (Water Supply) - Used as a cold-water supply pipe in many countries around the world because of the price; lacks long term durability.

Work Sheet

Task 1: List two types of pipes that are used for both water supply and drainage.

Answer:

Task 2: Which type of pipe is not used in residential because of the cost?

Answer:

Task 3: The following pipes are commonly referred to using their acronyms. Conduct internet searches to find the complete name of each pipe and write them below.

Answer:

ABS

PVC

CPVC

PEX

Task 4: Conduct an internet search to find the purpose of DWV (drain, waste and vent) in plumbing. List two reasons DWV is used.

Answer:

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Task 5: Conduct an internet search to learn more about the durability of PVC. List two reasons it is considered durable.

Answer:

Answers

Task 1: List two types of pipes that are used for both water supply and drainage.

Answer: PVC and Galvanized Pipe

Task 2: Which type of pipe is not used in residential because of the cost?

Answer: Copper Pipe DWV

Task 3: The following pipes are commonly referred to using their acronyms. Conduct internet searches to find the complete name of each pipe and write them below.

Answer:

ABS - Acrylonitrile butadiene styrene

PVC - Polyvinyl chloride

CPVC - Chlorinated polyvinyl chloride

PEX - Cross-linked polyethylene

Task 4: Conduct an internet search to find the purpose of DWV (drain, waste and vent) in plumbing. List two reasons DWV is used.

Answers will vary but may include:

- DWV removes sewage and greywater from a building
- Designed to carry waste by gravity, preventing issues like slow drainage and the buildup of gases
- It regulates air pressure in waste system pipes
- It ensures proper flow occurs

Task 5: Conduct an internet search to learn more about the durability of PVC. List two reasons it is considered durable.

Answers will vary but may include:

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- It is easy to work with
- It can be installed quickly
- It does not conduct electricity
- It doesn't lose hot water heat as easily as copper
- It does not corrode when exposed to aggressive water
- It is resistant to damage from weather
- It is more fire resistant due to a high chlorine content
- It is highly resistant to many chemicals

Performance Descriptors

Levels	Performance Descriptors	Needs Work	Completes task with support from practitioner	Completes task independently
A1.2	scans text to locate information			
	locates multiple pieces of information in simple texts			
	makes low-level inferences			
	makes connections between sentences and between paragraphs in a single text			
	reads more complex texts to locate a single piece of information			
	follows the main events of descriptive, narrative and informational texts			
	obtains information from detailed reading			
	begins to identify source and evaluate information			
D.2	selects and follows appropriate steps to complete tasks			

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Levels	Performance Descriptors	Needs Work	Completes task with support from practitioner	Completes task independently
	locates and recognizes functions and commands			
	makes low-level inferences to interpret icons and text			
	begins to identify sources and evaluate information			
	performs simple searches using keywords (e.g. internet, software help menu)			

This task: Was successfully completed Needs to be tried again

Learner Comments:

Instructor (print):

Learner (print):
