

Task Title: Plumber Material Requirements

# OALCF Cover Sheet – Practitioner Copy

**Learner Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date Started: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date Completed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| --- | --- | --- |
| **Goal Path:** | Employment | Apprenticeship |
| Secondary School | Post Secondary | Independence |

**Successful Completion:**  Yes No

**Task Description:**

The learner will perform math calculation tasks related to a plumbing project.

**Main Competency/Task Group/Level Indicator:**

* Find and Use Information/Read continuous text/A1.2
* Understand and Use Numbers/Use measures/C3.1

**Materials Required:**

* Pen/pencil and paper
* Calculator is optional

Learner Information

Plumbers work on projects that require many different materials, such as pipes. They are required to calculate the total materials needed to complete a job.

# Work Sheet

**Task 1: A plumber is installing a 12-metre water line in a house. Calculate the number of 3-metre pipes needed for the job.**

Answer:

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**Task 2: A project requires connecting six pieces of 2-metre pipe. Calculate the number of couplings needed if each connection requires one coupling.**

Answer:

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**Task 3: A plumber is installing water shut-off valves for 4 sinks. Each sink needs a hot and cold shut-off. Calculate the total shut-off valves needed.**

Answer:

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**Task 4: A plumber needs to install water pipes for a bathroom. Use the following to calculate the total length of pipe required.**

* **Toilet: 1.5 metres**
* **Sink: 2 metres**
* **Shower: 3 metres**

Answer:

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**Task 5: A plumber is running pipe through a house. Calculate the number of 90-degree elbows needed if the pipe changes direction at five different corners.**

Answer:

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# Answers

**Task 1: A plumber is installing a 12-metre water line in a house. Calculate the number of 3-metre pipes needed for the job.**

Answer: 3 x 4 = 12 4 pipes are needed

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**Task 2: A project requires connecting six pieces of 2-metre pipe. Calculate the number of couplings needed if each connection requires one coupling.**

Answer: 5 couplings

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**Task 3: A plumber is installing water shut-off valves for 4 sinks. Each sink needs a hot and cold shut-off. Calculate the total shut-off valves needed.**

Answer: 4 x 2 = 8 8 shut-off valves are needed

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**Task 4: A plumber needs to install water pipes for a bathroom. Use the following to calculate the total length of pipe required.**

* **Toilet: 1.5 metres**
* **Sink: 2 metres**
* **Shower: 3 metres**

Answer: 1.5m + 2m + 3m = 6.5 m 6.5 metres of pipe are needed

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**Task 5: A plumber is running pipe through a house. Calculate the number of 90-degree elbows needed if the pipe changes direction at five different corners.**

Answer: 5 elbows – one per corner

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# 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 |  |  |  |
| C3.1 | Adds and subtracts whole number measurements |  |  |  |
|  | Identifies and performs required operation |  |  |  |
|  | Interprets and represents measures using whole numbers, decimals, and simple, common fractions (e.g. ½, ¼) |  |  |  |
|  | Follows apparent steps to reach solutions |  |  |  |

This task: Was successfully completed Needs to be tried again

Learner Comments:

Instructor (print): Learner (print):

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