



Task Title: Features of Miter Saws

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: Learn about the features of miter saws and how they are used in construction projects.

Main Competency/Task Group/Level Indicator:

- Find and Use Information/Interpret documents/A2.1
- Communicate Ideas and Information/Write continuous text/B2.1

Materials Required:

- Pen/pencil and paper and/or digital device

Task Title: FeaturesofMiterSaws_EA_A2.1_B2.1

Learner Information

Miter saws are commonly used tools in construction projects. It is important to understand when and how to use them. It is also helpful to know how miter saws differ from other similar tools so you will know when to use one.

Read the document, "Miter Saws".

Mitre Saws

Miter saws are designed to make angled cuts for moulding, trim work, rafters and other general carpentry applications. The saws also make straight crosscuts and, when equipped with the right blade, miter saw uses are versatile, making them an important part of a tool arsenal for professional carpenters as well as DIYers.

The first step of learning how to use a miter saw is to understand the difference between a miter cut and a bevel cut.

A miter is an angled cut made across the face, or width, of a board.

A bevel is an angled cut made through the thickness of a board.

Any miter saw can cut a miter and a bevel, depending on how the board is placed onto the saw.

Compound miter saws can complete both types of angles with a single cut. This type of miter saw has an adjustment mechanism to swing the blade from left to right. Additionally, the blade can be tilted so that it cuts at an angle instead of straight down.

Some types of miter saws feature a sliding arm that allows the blade to extend, which gives you the ability to cut boards that are wider than the miter saw blade. A stationary arm limits a cut to the diameter of the blade.

Miter saws can be corded or cordless, and each type has its advantages. Corded miter saws have more power, and they work continuously when plugged in. But they require an electrical outlet, and they're bigger and harder to store. Their cords can also be tripping hazards. Cordless miter saws, on the other hand, are lighter, more portable and battery operated. However, they can't be used indefinitely without charging, and their lack of power makes them unsuitable for thick materials.

Chop saws are often mistaken for miter saws, but they differ in two important ways. Chop saws usually only cut straight down, at a ninety-degree angle, while a miter saw uses its machinery to cut at various angles. Also, chop saws generally have a lot more power, so they're often used to cut metal objects instead of wood. When deciding between a chop saw vs. miter saw, consider the type of material you're cutting and whether you need angled cuts.

[Source: <https://www.homedepot.com/c/ah/how-to-use-a-miter-saw/9ba683603be9fa5395fab902fc94472>]

Work Sheet

Task 1: What is the difference between a miter cut and a bevel cut?

Answer:

Task 2: List three features of a compound mitre saw.

Answer:

Task 3: List one advantage and one disadvantage of a cordless miter saw.

Answer:

Task 4: List two ways a miter saw is different from a chop saw.

Answer:

Answers

Task 1: What is the difference between a miter cut and a bevel cut?

Answer: A miter is an angled cut made across the face, or width, of a board. A bevel is an angled cut made through the thickness of a board.

Task 2: List three features of a compound mitre saw.

Answer:

- Compound miter saws can complete both types of angles with a single cut
- Compound miter saws have an adjustment mechanism to swing the blade from left to right
- On compound miter saws, the blade can be tilted so that it cuts at an angle instead of straight down

Task 3: List one advantage and one disadvantage of a cordless miter saw.

Answer:

Advantages: Any one of: lighter, more portable, and battery operated.

Disadvantages: Either of: they can't be used indefinitely without charging, their lack of power makes them unsuitable for thick materials.

Task 4: List two ways a miter saw is different from a chop saw.

Answer:

Chop saws usually only cut straight down, at 90-degree angles vs. miter saws which can cut at various angles

Chop saws are generally more powerful so they can be used to cut metal objects vs. miter saws that typically only cut wood

Performance Descriptors

| Levels | Performance Descriptors | Needs Work | Completes task with support from practitioner | Completes task independently |
|--------|---|------------|---|------------------------------|
| A2.1 | scans to locate specific details | | | |
| | interprets brief text and common symbols | | | |
| | locates specific details in simple documents, such as labels and signs | | | |
| | identifies how lists are organized (e.g. sequential, chronological, alphabetical) | | | |
| B2.1 | writes simple texts to request, remind or inform | | | |
| | conveys simple ideas and factual information | | | |
| | uses sentence structure, upper and lower case and basic punctuation | | | |
| | uses highly familiar vocabulary | | | |

This task: Was successfully completed Needs to be tried again

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Learner Comments:

Instructor (print):

Learner (print):
