# Knowledge Assessment

**Event 1 of 3**

## Criteria

### Unit code, name and release number

MEM18001C - Use hand tools (1)

### Qualification/Course code, name and release number

MEM30205 - Certificate III in Engineering – Mechanical Trade (3)

## Student details

### Student number

### Student name

## Assessment Declaration

* This assessment is my original work and no part of it has been copied from any other source except where due acknowledgement is made.
* No part of this assessment has been written for me by any other person except where such collaboration has been authorised by the assessor concerned.
* I understand that plagiarism is the presentation of the work, idea or creation of another person as though it is your own. Plagiarism occurs when the origin of the material used is not appropriately cited. No part of this assessment is plagiarised.

### Student signature and Date

Version: *1.0*

Date created: *6 July 2018*

Date modified: *16/10/2019*

For queries, please contact:

IMRS SkillsPoint

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RTO Provider Number 90003 | CRICOS Provider Code: 00591E

This assessment can be found in the: [Learning Bank](https://share.tafensw.edu.au/share/access/searching.do?doc=%3Cxml%2F%3E&in=P7ac4831b-430a-4b8d-8b56-f7b32ed5b9cf&q=&type=standard&sort=rank&dr=AFTER)

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## Assessment instructions

Table 1 Assessment instructions

| Assessment details | Instructions |
| --- | --- |
| **Assessment overview** | The objective of this assessment is to assess your knowledge as required to be deemed satisfactory in meeting the necessary requirements as stated in the Unit Assessment Guide for MEM18001C Use hand tools and covers the elements   1. Use hand tools |
| **Assessment Event number** | 1 of 3 |
| **Instructions for this assessment** | This is a written assessment and it will be assessing you on your knowledge of the unit.  This assessment is in 4 parts:   1. Multiple choice questions 2. True or False questions 3. Short answer questions 4. Assessment feedback |
| **Submission instructions** | On completion of this assessment, you are required to upload it or hand it to your trainer for marking. Ensure you have written your name at the bottom of each page of this assessment.  It is important that you keep a copy of all electronic and hardcopy assessments submitted to TAFE and complete the assessment declaration when submitting the assessment. |
| **What do I need to do to achieve a satisfactory result?** | To achieve a satisfactory result for this assessment all questions must be answered correctly. |
| **What do I need to provide?** | Pens, pencil, rubber |
| **Due date/time allowed** | 1Hr |
| **Assessment feedback, review or appeals** | Appeals are addressed in accordance with [Assessment Guidelines for TAFE NSW](https://staff.tafensw.edu.au/documents/2017/11/assessment-guidelines-v02.pdf/). |

## Part 1: Multiple choice

Read the question and each answer carefully. Put an X in the table next to your chosen answer.

1. To help prevent pinning during filing we can:

Table 1: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Rub chalk into the face of the file |  |
| 1. Only use the file in a forward direction |  |
| 1. Rub file on edge of bench |  |
| 1. Lubricate the file with a fine grade machine oil |  |

1. A hacksaw blade with a tooth pitch of 1.8mm (14 teeth per inch) would be most suitable for cutting:

Table 2: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Large solid sections of soft metal |  |
| 1. Large solid sections of hard metal |  |
| 1. Thin tubing, sheets and light angle |  |
| 1. Sheet metal |  |

1. The recommended hacksaw blade pitch for cutting thin tubing, sheets and light angle is:

Table 3: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. 1.8mm (14 Teeth per inch) |  |
| 1. 1.4mm (18 Teeth per inch) |  |
| 1. 1.0mm (24 Teeth per inch) |  |
| 1. 0.8mm (32 Teeth per inch) |  |

1. The two (2) common types of dies used in industry which are pictured below are:



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Table 4: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Button and bottoming |  |
| 1. Button die and die nut |  |
| 1. Die nut, thread button |  |
| 1. Intermediate and bottoming |  |

1. The spanner which is least likely to slip and cause damage to hexagonal head of a bolt is a:

Table 5: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Ring spanner |  |
| 1. Open end spanner |  |
| 1. Podge spanner |  |
| 1. Shifting wrench |  |

1. The tool used to align bolt holes in steel plates which allow bolts to be fitted is a:

Table 6: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Ring spanner |  |
| 1. Open end spanner |  |
| 1. Podge spanner |  |
| 1. Shifting wrench |  |

1. The wrench which is used to tighten a nut or bolt to a specific tension is a:

Table 7: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Torque wrench |  |
| 1. Adjustable wrench |  |
| 1. Combination open end and ring spanner |  |
| 1. Socket spanner |  |

1. From the list below select the tool suitable for loosening tight screws by striking the tool with a hammer is a:

Table 8: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Posi-drive screw driver |  |
| 1. Phillips head screw driver |  |
| 1. Off set screw driver |  |
| 1. Through tang screw driver |  |

1. What is the main cause of hacksaw blades bending or breaking when cutting?

Table 9: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Using too high a tooth pitch blade for the material being cut |  |
| 1. Cutting at an angle |  |
| 1. Insufficient tension on blade |  |
| 1. Material is held too tight in the vice |  |

1. When sharpening a chisel using a bench grinder care must be taken not to overheat the cutting edge of the chisel as this will result in:

Table 10: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. The cutting angle will change |  |
| 1. A change in hardness to the cutting edge |  |
| 1. A mushroom effect to the cutting edge |  |
| 1. Have no effect at all |  |

1. To remove the pinning’s in the teeth of a file we use a:

Table 11: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. File card |  |
| 1. File cleaner |  |
| 1. De - pinning tool |  |
| 1. Blow out with compressed air |  |

1. The major defect as indicated by the arrow in the picture below is called a:



Table 12: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Hardened head |  |
| 1. Work head |  |
| 1. Rounded head |  |
| 1. Mushroomed head |  |

1. Recommendations for hand tool maintenance is best sourced from:

Table 13: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. The store person |  |
| 1. Other tradespersons |  |
| 1. Company management |  |
| 1. The manufacturer of the tool |  |

1. Substituting the correct tool for a job with another tool not designed for the purpose can:

Table 14: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Give inferior finish of job |  |
| 1. Increase the chance of an accident |  |
| 1. Save time where correct tool can’t be located |  |
| 1. Doesn’t matter if the job is completed successfully |  |

1. From the list below select the item of PPE **which is not required** to be worn to safely use a cold chisel:

Table 15: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Eye protection |  |
| 1. Hearing protection |  |
| 1. Gloves |  |
| 1. Leather jacket |  |

1. Which of the following information **would not** be indicated in a Standard Operating Procedure (SOP) for the use of a hand tool?

Table 16: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. The expiry date of the hand tool |  |
| 1. The PPE required for use |  |
| 1. The guidelines for the correct use of the tool |  |
| 1. Checking the condition of the tool prior to use |  |

## Part 2: True or false

Read the question and then write **True** or **False** in the space provided.

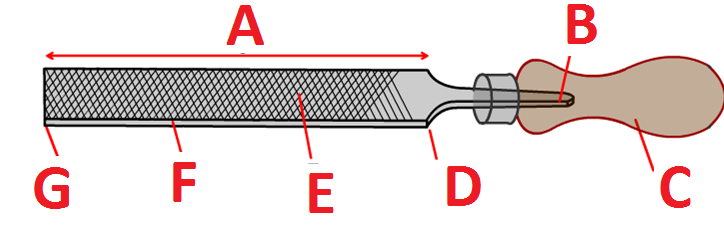
Table 1: True or false

| Question | Write *True* or *False* |
| --- | --- |
| 1. Pinning is where scratches are created on the surface of an object being filed: |  |
| 1. An unclean cut when using aviation snips can be caused where there is a nick or chip in the blades: |  |
| 1. Larger files can be used without a handle if we only use the file by pushing in a forward direction: |  |
| 1. When carrying out a task in a recognised workshop you don’t need to follow standard operating procedures |  |
| 1. When using a cutting tool such as a Stanley knife we should cut in a direction towards yourself to have greater grip on the job |  |
| 1. The Storeman is responsible for making sure that tools and fixtures are returned to their correct location at the completion of a task and off cuts are sorted into their correct recycling or waste bins |  |
| 1. Welding by a qualified tradesperson to repair a cracked or damaged tool, is acceptable practice |  |
| 1. A damaged tool that requires repair should be marked “out of service” and the supervisor notified |  |

## Part 3: Short answer

Read the question carefully. Your answer should be a minimum of one word but no longer than 50 words.

1. From the diagram of a file below, match the corresponding description to its respective letter e.g. Handle = **C**:

**

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Handle **C**  **(example)**

Shoulder

Point

Edge

Length

Tang

Face

1. What is the type of cut shown on the above file face and state an application of the file?
2. When fitting a new hammer handle what item secures the hammer head tightly onto the handle:
3. What is the reason we don’t use a file as a lever?
4. Using the images of tools in the diagram complete the table below by indicating the correct tool name to its respective letter and its application in general engineering.

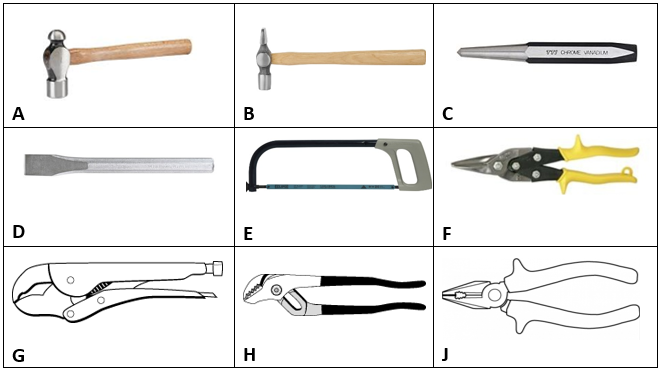
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Table 1 Short answer matching question

|  |  |  |
| --- | --- | --- |
| Image | Tool Name | Application |
| **A** |  |  |
| **B** |  |  |
| **C** |  |  |
| **D** |  |  |
| **E** |  |  |
| **F** |  |  |
| **G** |  |  |
| **H** |  |  |
| **J** |  |  |

1. Using the images of tools in the diagram complete the table below by indicating the correct tool name to its respective letter and its application in general engineering.

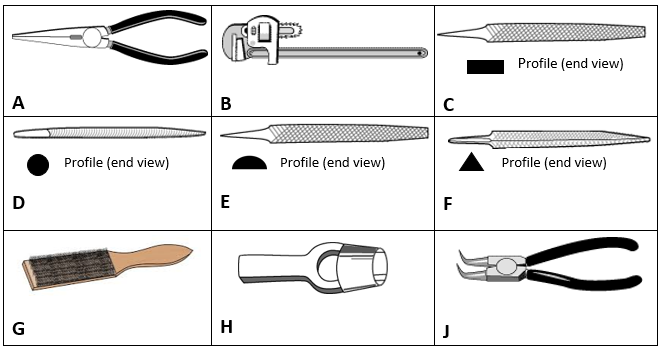
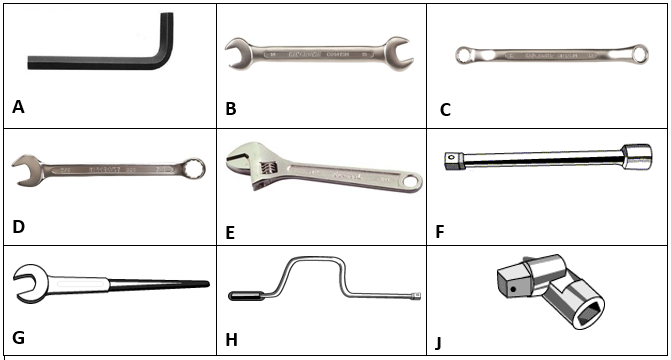
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Table 2 Short answer

|  |  |  |
| --- | --- | --- |
| Image | Tool Name | Application |
| **A** |  |  |
| **B** |  |  |
| **C** |  |  |
| **D** |  |  |
| **E** |  |  |
| **F** |  |  |
| **G** |  |  |
| **H** |  |  |
| **J** |  |  |

1. Using the images of tools in the diagram complete the table below by indicating the correct tool name to its respective letter and its application in general engineering.



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Table 3 Short answer

|  |  |  |
| --- | --- | --- |
| Image | Tool Name | Application |
| **A** |  |  |
| **B** |  |  |
| **C** |  |  |
| **D** |  |  |
| **E** |  |  |
| **F** |  |  |
| **G** |  |  |
| **H** |  |  |
| **J** |  |  |

1. Using the images of tools in the diagram complete the table below by indicating the correct tool name to its respective letter and its application in general engineering.

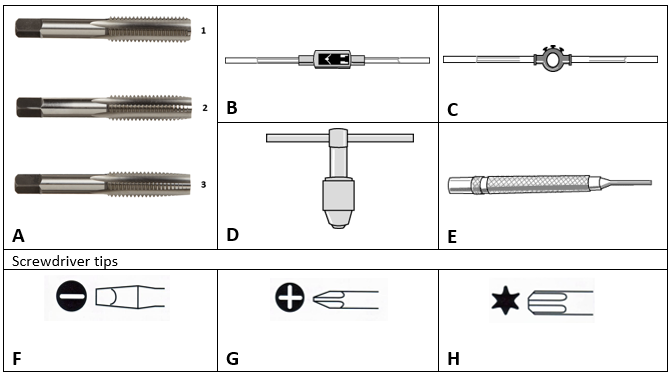
 ©TAFE NSW 2019

Table 4 Short answer

|  |  |  |
| --- | --- | --- |
| Image | Tool Name | Application |
| **A** | 1. *Tapered tap* 2. *Intermediate tap*   *tap* |  |
| **B** |  |  |
| **C** |  |  |
| **D** |  |  |
| **E** |  |  |
| **F** |  |  |
| **G** |  |  |
| **H** |  |  |

1. Following the example shown for the tin snips in the table below, match the fault/ defect to the most appropriate action /remedy.

Table 5 Short Answer/ matching

|  |  |  |
| --- | --- | --- |
| Hand Tool | Faults/Defects | Action /Remedy |
| **Tin snips**  (example) | 1. Blunt blades not producing clean cut 2. Handles damaged | 1. Dispose of tool 2. Sharpen and adjust blades if possible 3. Tape handle to prevent injury |
| **Hammer** | 1. Loose hammer head 2. Split hammer handle 3. Chipped hammer face | 1. Resecure with wedges 2. Dispose of tool 3. Tape handle to prevent injury 4. Replace hammer handle 5. Use with caution |
| **Centre punch** | 1. Mushroomed head 2. Blunt point 3. Bent body | 1. Dispose of tool 2. Resharpen to correct angle 3. Grind head of punch 4. Straighten punch in a press |
| **File** | 1. Split handle 2. Cracked file face | 1. Replace handle 2. Use with caution 3. Dispose of file |

1. Following the example shown for tin snips in the table below, check the correct storage requirements in the column with possible responses:

Table 6 Short Answer check box

|  |  |  |
| --- | --- | --- |
| Hand Tool | Choose from list for appropriate tool storage solutions | Mark X in the box for appropriate Storage |
| **Tin snips**  (example) | 1. Toolbox or shadow board 2. Engage safety lock to keep jaws closed 3. Check for damage and repair or dispose of if required 4. inform supervisor item has been stored 5. Wipe blades with oiled cloth to prevent corrosion |  |
| **File** | 1. Shadow board 2. Remove handle 3. Keep files separate not in a draw with other files 4. Clean pinning’s from file 5. Keep away from moisture |  |
| **Hacksaw** | 1. Toolbox or shadow board 2. Shadow board 3. Replace blunt or damaged blades 4. Loosen blade tension nut 5. Tighten blade tension nut |  |

1. Briefly explain how you would get tools up an elevated work platform or scaffolding which is accessed by a ladder:

1. When working on a scaffolding or aloft what should we do with tools when we aren’t using them and give a reason why:
2. A tool is found to be damaged and unsafe to use and is to be placed “out of service”. What information is required on the “out of service tag”?

## Part 4: Assessment Feedback

*NOTE: This section* ***must*** *have the assessor signature and student signature to complete the feedback.*

### Assessment outcome – Knowledge Assessment: Theory

**Event 1 of 3**

Satisfactory

Unsatisfactory

### Assessor Feedback

Was the assessment event successfully completed?

If no, was the resubmission/re-assessment successfully completed?

Was reasonable adjustment in place for this assessment event?  
*If yes, ensure it is detailed on the assessment document.*

Comments:

### Assessor name, signature and date:

### Student acknowledgement of assessment outcome

Would you like to make any comments about this assessment?

### Student name, signature and date

***NOTE: Make sure you have written your name at the bottom of each page of your submission before attaching the cover sheet and submitting to your assessor for marking.***