# Assessment Mapping (for streamlined units from new Training Packages)

*This document is used to demonstrate content validity of the assessment tool*

Table 1 Main details

| Details | Unique description |
| --- | --- |
| **Unit Code, name and release number** | MSL973013 - Perform basic tests (1) |
| **Skills Team** |  |
| **Region/Campus** |  |
| **SkillsPoint (owned by)** | Innovative Manufacturing, Robotics and Science |

*NOTES:*

* *Event columns can be added or deleted as required*
* *Rows for elements and performance criteria, etc. can be added or deleted as required*
* *Each component of the unit must be mapped to at least* ***one assessment criteria*** *or* ***question*** *in one or more assessment events*
* *Do NOT delete the section labelled Foundation Skills. If the Foundation skills ARE EXPLICIT in the performance criteria, they do not need to be listed. However, if the Foundation skills ARE NOT incorporated in the performance criteria they must be listed and mapped.*
* *Dimensions of Competency must be considered when selecting assessment types to ensure that the range of tasks you have chosen cover the following:*
  + *Task Skills*
  + *Task Management Skills*
  + *Contingency Planning Skills*
  + *Job Role Environment Skills*

## Unit component mapping to assessment event/s

Table 2 Unit component mapping to assessment event/s

| Element number | Element name | Performance criteria number | Performance criteria description | Learning resources | Knowledge Assessment 1 of 3 | Project Assessment 2 of 3 | Skills Assessment 3 of 3 |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | Interpret test requirements | 1.1 | Review test request to identify samples to be tested, test method and equipment involved | Topic 1 |  | 1a, b, h | Step 1, 2  Lab Record |
| 1.2 | Identify hazards and workplace controls associated with the sample, preparation methods, reagents and/or equipment | Topic 1 |  | 1d, r | Step 7, 9  Lab Record |
| 2 | Prepare sample | 2.1 | Record sample description, compare with specification, record and report discrepancies | Topic 2 |  |  | Step 1  Lab Record |
| 2.2 | Prepare sample in accordance with appropriate standard methods | Topic 2 |  | 1g | Step 8  Lab Record |
| 3 | Check equipment before use | 3.1 | Set up test equipment in accordance with test method | Topic 3 |  |  | Step 10  Lab Record |
| 3.2 | Perform pre-use and safety checks in accordance with workplace procedures and manufacturer instructions | Topic 3 |  |  | Step 10  Lab Record |
| 3.3 | Identify faulty or unsafe equipment and report to appropriate personnel | Topic 3 |  |  | Step 10 |
| 3.4 | Check calibration status of equipment and report any out-of-calibration items to appropriate personnel | Topic 3 |  |  | Step 12  Lab Record |
| 4 | Perform tests on samples | 4.1 | Identify, prepare and weigh or measure sample and standards to be tested | Topic 4 |  |  | Step 8 |
| 4.2 | Conduct tests in accordance with workplace procedures | Topic 4 |  |  | Step 13 |
| 4.3 | Record data in accordance with workplace procedures | Topic 4 |  | 1j | Step 14  Lab Record |
| 4.4 | Perform calculations on data as required | Topic 4 | Q5 |  | Step 16  Lab Record |
| 4.5 | Identify and report out of specification or atypical results promptly to appropriate personnel | Topic 4 | Q1 | 1l | Step 13  Lab Record |
| 4.6 | Shut down equipment in accordance with operating procedures | Topic 4 |  |  | Step 15  Lab Record |
| 5 | Maintain a safe work environment | 5.1 | Use established safe work practices and personal protective equipment (PPE) to ensure personal safety and that of other laboratory personnel | Topic 5 |  | 1c, r | Step 6, 8 |
| 5.2 | Minimise the generation of wastes and environmental impacts | Topic 5 |  | 10 | Step 9  Lab Record |
| 5.3 | Ensure safe disposal of laboratory and hazardous wastes | Topic 5 | Q31 | 1p | Step 9  Lab Record |
| 5.4 | Clean, care for and store equipment and reagents as required | Topic 5 | Q36 | 1n | Step 20, 21 |

## Foundation skills NOT explicit in the performance criteria

Table 3 Foundation skills NOT explicit in the performance criteria

| Foundation skills | Description | Learning resources | Knowledge Assessment 1 of 3 | Project Assessment 2 of 3 | Skills Assessment 3 of 3 |
| --- | --- | --- | --- | --- | --- |
| Numeracy skills to | FS1. Numeracy skills to calculate simple quantities using appropriate equations, units, uncertainties and precision | Topic 2, 3 & 4 | Q5, 6, 29, 33 |  |  |

## Performance evidence

Table 4 Performance evidence

| Performance evidence | Description | Learning resources | Knowledge Assessment 1 of 3 | Project Assessment 2 of 3 | Skills Assessment 3 of 3 |
| --- | --- | --- | --- | --- | --- |
|  | There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and: |  |  |  |  |
| PE1 | Prepared samples using different processes | Topic 2 |  |  | Step 8 |
| PE2 | Performed at least 3 basic tests or measurements using standard methods and procedures. | Topic 4 |  | 1k | Steps 1-21 |

## Knowledge evidence

Table 5 Knowledge evidence

| Knowledge evidence | Description | Learning resources | Knowledge Assessment 1 of 3 | Project Assessment 2 of 3 | Skills Assessment 3 of 3 |
| --- | --- | --- | --- | --- | --- |
|  | There must be evidence the candidate has knowledge of: |  |  |  |  |
| KE1 | Concepts of metrology, including: | Topic 1 |  |  |  |
| KE1.1 | * all measurements are estimates | Topic 1 | Q26 |  |  |
| KE1.2 | * measurements belong to a population of measurements of the measured parameters | Topic 1 | Q23 |  |  |
| KE1.3 | * precision, accuracy and significant figures | Topic 1 | Q6, 9, 15 ,27 |  |  |
| KE1.4 | * sources of error, uncertainty and repeatability | Topic 1 | Q11, 12, 16, 19, 20, 33 |  |  |
| KE1.5 | * traceability | Topic 1 | Q8, 22 | 1f |  |
| KE2 | International system of units (SI) | Topic 1 | Q7, 30 | 1q |  |
| KE3 | Purpose of tests performed as part of job role and principles of the standard methods/specifications used | Topic 4 (all) |  | 1i |  |
| KE4 | Sample preparation processes relevant to job role | Topic 2 | Q2, 3, 24, 34 | 1e, f, g | Step 8  Lab Record |
| KE5 | Typical basic tests and methods relevant to job role | Topic 4 | Q28 |  | Step 1 - 21 |
| KE6 | Measurements used for typical tests | Topic 4 | Q13, 28, 30 |  |  |
| KE7 | Function of key components of the test equipment, pre-use equipment and safety checks | Topic 4 | Q 18 | 1d, h, i |  |
| KE8 | Sources of uncertainty in measurement and methods for control | Topic 1, 4 | Q28, 33 |  |  |
| KE9 | Workplace and/or legal traceability requirements | Topic 1 | Q14, 22 | 1f |  |
| KE10 | Interpretation and recording of test result, including simple calculations | Topic 4 | Q5, 25 | 1 k | Lab Record |
| KE11 | Procedures for recognising and reporting of unexpected or unusual results | Topic 4 |  | 1m |  |
| KE12 | Legal, ethical and work health and safety (WHS) requirements specific to the work task. | Topic 1 | Q4, 10, 17, 21, 31, 35 | 1r | Lab Record |

## Assessment conditions

Table 6 Assessment conditions

| Assessment conditions | Description |
| --- | --- |
|  | Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:   * use of suitable facilities, equipment and resources, including: * a standard laboratory equipped with basic test equipment, common measuring instruments, materials, standard methods, workplace procedures, SDS and equipment manuals.   Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors. |