



Australian Government

Assessment Requirements for MSS024020

Recognise common geological landforms and samples

Release: 1

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Modification History

Release 1. Updated unit code. Changes to performance criteria. Range of conditions removed. Assessment requirements amended. Equivalent outcome.

Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and:

- recognised and accurately described the geological landforms and associated geological processes for at least 2 different sites
- identified and accurately described the common rocks, minerals and soil types associated with at least 2 different sites.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- an overview of major fields of geology
- structure of the earth's core, crust and major components
- geomorphology and landforms, including agents of erosion and transportation, stability of rocks and minerals in different environments and depositional processes
- regolith, including physical and chemical weathering, climatic effects, stability of minerals, weathering processes, soil formation, common soil types and composition
- rock cycle
- fundamentals of:
 - igneous rocks, including origin of magma, movement of magma, volcanic, plutonic, types of volcanoes and simple tectonic setting
 - sedimentary rocks, including clastic, chemical, organic types, grain size and composition, sorting, roundness, lithification, sedimentary structures and environments of deposition
 - metamorphic rocks, including regional, contact, dynamic metamorphic zones, rock textures and fabrics
- structural geology concepts including: folds, faults, tilts and uplifts
- overview of geological time, including eras, periods, relative time, stratigraphic methods for establishing relative ages of strata, and radiometric dating
- fundamentals of palaeontology, including preservation of fossils and their role in dating strata
- links between local geology, climate, topography and living components of ecosystems
- equipment
- geological sampling and in-field test methods routinely used in job role, including:

- pre-use checks and safe operating procedures for sampling and test equipment
- sampling procedures
- purpose, principles and measurement steps of test
- calculation steps to give results
- expected values for sample type
- hazards; health, safety and environment requirements for work role.

Assessment Conditions

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 facilities, equipment and resources, including:
 - access to sites and vehicle transport
 - suitable survey, sampling and testing equipment
 - documentation including: maps and aerial photos; classification charts and tables for rocks, minerals and soils; user manuals, workplace safety procedures, test or survey methods, workplace procedures governing geological sampling and in-field testing

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

The MSS Sustainability Companion Volume implementation Guides are available from VETNet: -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>