



Australian Government

Department of Education, Employment and Workplace Relations

CUVOPA201A Identify and assess opal

Release: 1

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Modification History

Version	Comments
CUVOPA201A	This version first released with <i>CUV11 Visual Arts, Craft and Design Training Package version 1.0</i>

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to identify opal from various sources, describe the type of opal and apply the principles of valuation to different types of opal, based on sound understanding of how opal is formed, where it is found and the characteristics of the gemstones.

Application of the Unit

This unit requires the application of knowledge and skills in a range of environments from cutting and polishing to retailing, wholesaling, selling on the internet or mining.

Licensing/Regulatory Information

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Element	Performance Criteria
<p><i>Elements describe the essential outcomes of a unit of competency.</i></p>	<p><i>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.</i></p>

Elements and Performance Criteria

<p>1. Develop knowledge of opal geology</p>	<p>1.1 Identify the geological conditions suitable for the <i>formation of opal</i> and apply the theories of opal formation</p> <p>1.2 Determine <i>sources of opal worldwide</i> and <i>locations of opal fields</i></p>
<p>2. Apply the principles of grading and quality assessment to opal</p>	<p>2.1 Identify the principles used for valuing opals in terms of <i>base and background colours, predominant colours and patterns, and other factors that influence an opal's value</i></p> <p>2.2 Apply <i>principles of valuing</i> to determine the potential value of opals</p>
<p>3. Distinguish natural opal from man-made varieties</p>	<p>3.1 Determine the <i>gemmological characteristics</i> of opal based on knowledge of varieties of opal found worldwide</p> <p>3.2 Select <i>gemmological instruments</i> to authenticate natural opal</p> <p>3.3 Use the selected instruments to authenticate opal</p> <p>3.4 Identify <i>substances used to simulate opal and synthetic opal-like substances</i> and compare their characteristics to natural opal</p>
<p>4. Identify and describe the different types of opal</p>	<p>4.1 Identify <i>opals of various types</i> and describe them using correct terminology</p> <p>4.2 Develop a general awareness of types of <i>opal treatments</i> and determine which are acceptable in the industry</p>

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

- communication skills to describe and document opal identification information
- literacy skills to interpret information about opals
- planning and organising skills to organise basic work practices
- numeracy skills to apply valuation principles
- technical skills to use gemmological instruments
- technology skills to find information on opals.

Required knowledge

- sources of information on the opal industry
- valuation systems for opal
- functions of various opal industry sectors, including mining dealing and manufacturing jewellery
- accepted terminology for describing opal
- safety issues associated with the use of gemmological instruments.

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>Evidence of the ability to:</p> <ul style="list-style-type: none"> • identify and describe the characteristics of the different types of opal using correct terminology and equipment • apply principles of valuation and determine the authenticity of opal materials.
Context of and specific resources for assessment	<p>Assessment must ensure access to:</p> <ul style="list-style-type: none"> • opals from various sources.
Method of assessment	<p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> • observation of processes and procedures • oral and/or written questioning on underpinning knowledge and skills • evaluation of the final product • review of portfolios of evidence • review of third-party workplace reports of on-the-job performance by candidate. <p>Assessment methods should closely reflect workplace demands (e.g. literacy) and the needs of particular groups (e.g. people with disabilities, and people who may have literacy or numeracy difficulties, such as speakers of languages other than English, remote communities and those with interrupted schooling).</p>
Guidance information for assessment	<p>Holistic assessment with other units relevant to the industry sector workplace and job role is recommended.</p>

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<p><i>Formation of opal</i> may include:</p>	<ul style="list-style-type: none"> • opal combining with other minerals • opal formed in: <ul style="list-style-type: none"> • sedimentary deposit • volcanic deposit (igneous) • erratic boulders • replacement cavities (nobbies, glauberite) • seams • volcanic and erosion sediments • opal replacing: <ul style="list-style-type: none"> • fossils • wood.
<p><i>Sources of opal worldwide</i> may include:</p>	<ul style="list-style-type: none"> • Australia • Brazil • Hawaii • Indonesia • Mexico • Slovakia • USA.
<p><i>Locations of opal fields</i> may include:</p>	<ul style="list-style-type: none"> • New South Wales – Lightning Ridge and White Cliffs • Queensland – various places including Winton, Quilpie, Jundah and Yowah • South Australia – Coober Pedy, Mintabie and Andamooka.
<p><i>Base and background colours</i> may include:</p>	<ul style="list-style-type: none"> • black • boulder – ironstone • dark • light.
<p><i>Predominant colours and patterns</i> may include:</p>	<ul style="list-style-type: none"> • colours, such as: <ul style="list-style-type: none"> • blue • green • orange • red • violet • yellow

	<ul style="list-style-type: none"> • patterns, such as: <ul style="list-style-type: none"> • broad • Chinese writing • flagstone • harlequin • peacock tail • pin fire • rolling flash • sheen • straw.
<p><i>Other factors that influence an opal's value</i> may include:</p>	<ul style="list-style-type: none"> • availability of supply • economic climate • mining restrictions • origin • political situation • rarity • weight • whether the sale is wholesale or retail.
<p><i>Principles of valuing</i> may include:</p>	<ul style="list-style-type: none"> • body colour • brilliance • inclusion and imperfections • pattern • play of colour • predominant colour • quality of cut (shape/proportions) • shape, size and weight • thickness of colour bar • type.
<p><i>Gemmological characteristics</i> may include:</p>	<ul style="list-style-type: none"> • chemical composition • colour • fracture • hardness • phosphorescence • refractive index • specific gravity.
<p><i>Gemmological instruments</i> may include:</p>	<ul style="list-style-type: none"> • microscope • refractometer • S.G. scales • standard 10X loupe • ultraviolet lamps.

<p><i>Natural opal</i> is classified as:</p>	<ul style="list-style-type: none"> • common opal and potch • precious opal.
<p><i>Substances used to simulate opal and synthetic opal-like substances</i> may include:</p>	<ul style="list-style-type: none"> • simulants – Gilson opal • synthetics – for example plastics and slocum stone.
<p><i>Opals of various types</i> may include:</p>	<ul style="list-style-type: none"> • composite natural opal – doublets, triplets, mosaic and chip opals • natural opal type 1 – opal in one piece in its natural state apart from cutting and polishing • natural opal type 2 – opal naturally attached to the host rock – boulder opal • natural opal type 3 – opal intimately diffused as infilling in pores or between the grains of the host rock – matrix opal • varieties of opal: (N1 to N9 represents gradation from black to white in approximately 10% intervals) <ul style="list-style-type: none"> • black – opal which shows a play of colour within or on a black or very dark body tone (N1, N2, N3, N4) • dark – opal which shows a play of colour within or on a dark body tone (N5, N6) • light – opal which shows a play of colour within or on a light body tone (N7, N8, N9).
<p><i>Opal treatments:</i></p>	<ul style="list-style-type: none"> • may include treatments applied to improve appearance, structure or durability • any treatment other than cutting and polishing must be disclosed.

Unit Sector(s)

Opal cutting and polishing