



National Unit specification: general information

Unit title: Jewellery: Stone Setting: an Introduction (SCQF level 6)

Unit code: H09X 12

Superclass: JH

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Summary

This Unit introduces the learner to the techniques required to set cabochon and faceted round gemstones into items of jewellery. Learners will learn how to construct basic settings, convert them into items of jewellery and then set the stones into the completed jewellery items.

Outcomes

- 1 Identify simple gemstone cuts and physical properties.
- 2 Make a basic rub-over setting suitable for a cabochon cut gemstone.
- 3 Make a basic claw setting suitable for a round faceted gemstone.
- 4 Use setting techniques to set cabochon and faceted gemstones.

Recommended entry

Entry is at the discretion of the centre.

Credit points and level

1 credit at SCQF level 6 (6 SCQF credit points at SCQF level 6)

**SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

General information (cont)

Unit title: Jewellery: Stone Setting: an Introduction (SCQF level 6)

Core Skills

Achievement of this Unit gives automatic certification of the following Core Skills component:

- ◆ Critical Thinking at SCQF level 5

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this Unit specification.

National Unit specification: statement of standards

Unit title: Jewellery: Stone Setting: an Introduction (SCQF level 6)

Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

Outcome 1

Identify simple gemstone cuts and physical properties.

Performance Criteria

- (a) Identify cabochon and faceted cuts as applied to gemstones.
- (b) Describe issues relating to hardness and durability of gemstones.
- (c) Describe risks to gemstones with regards to breakage during setting techniques.

Outcome 2

Make a basic rub-over setting suitable for a cabochon cut gemstone.

Performance Criteria

- (a) Prepare materials suitable for the cabochon cut stone selected.
- (b) Construct the setting to the required tolerance.
- (c) Convert the setting into a simple item of jewellery.

Outcome 3

Make a basic claw setting suitable for a round faceted gemstone.

Performance Criteria

- (a) Prepare materials suitable for the faceted stone selected.
- (b) Construct the setting to the required tolerance.
- (c) Convert the setting into a simple item of jewellery.

Outcome 4

Use setting techniques to set cabochon and faceted gemstones.

Performance Criteria

- (a) Prepare setting support wax or suitable clamp.
- (b) Use gravers and burs to prepare the setting for the gemstone.
- (c) Set the gemstone without causing any damage to the stone.

National Unit specification: statement of standards (cont)

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Evidence Requirements for this Unit

Evidence is required to demonstrate that candidates have achieved all Outcomes and Performance Criteria.

Outcome 1

Written/oral and performance evidence gathered under closed-book conditions. Candidates must correctly identify a range of five gemstone cuts and describe the physical properties and risks associated with the setting process.

Outcomes 2, 3 and 4

Performance and product evidence gathered under supervised workshop conditions in the form of completed projects assessed prior to the stone setting procedure. Candidates should produce a single sample of a rub-over setting and a single sample of a claw setting which would be suitable for subsequent stone setting. The setting should be correctly proportioned in relation to the gemstone supplied and be finished to a semi-polished state.

Performance and product evidence gathered under supervised workshop conditions demonstrating an ability to correctly set gemstones securely to a commercially acceptable standard. Candidates should use the settings which were manufactured for Outcomes 2 and 3 to achieve Outcome 4.

National Unit specification: support notes

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This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

Guidance on the content and context for this Unit

This Unit is intended to provide the learner with experience in the manufacture, by hand, of simple gemstone settings. After completion the settings will then be converted in to simple items of jewellery before the item is 'set' with the gemstone providing no visible damage to that gemstone.

It is suggested that the Unit should start with learners examining and identifying a range of gemstone cuts and suitable methods of setting each individual cut. The range of cuts provided should include the following:

- ◆ Cabochon cut
- ◆ Round Brilliant cut
- ◆ Pear Shaped Brilliant cut
- ◆ Marquise Shaped Brilliant cut
- ◆ Princess cut

The learner should then identify and describe issues relating to Mohs' Scale of Hardness and how the issues of hardness and durability must be taken into account when working with gemstones and setting techniques.

Learners should then be provided with a simple cabochon cut gemstone and appropriate instruction on how to construct a simple rub-over setting for this stone. It is suggested that inexpensive and durable materials such as black onyx be supplied for this purpose. On completion this setting should be converted into a simple item of jewellery to be designed by the Learner.

This process should be repeated with the selection of a single round brilliant cut gemstone and the manufacture of a simple claw setting. Again an inexpensive but durable material should be selected for this project such as synthetic sapphire or cubic zirconia. This project may be in the form of a simple crown/rex setting, a peg setting or a basket setting. On completion this setting should be converted into a simple item of jewellery to be designed by the Learner.

To complete the Unit the learner should be provided with suitable instruction and demonstration to permit them to successfully set each of the gemstones into their item of jewellery. This should be achieved without causing any abrasion or damage to the surfaces of the gemstone. Each item of jewellery should finally be fully polished to a commercial standard.

The assessment for Outcome 1 of this Unit could be integrated with Jewellery: Gemstones (SCQF level 5).

National Unit specification: support notes (cont)

Unit title: Jewellery: Stone Setting: an Introduction (SCQF level 6)

This Unit aligns to the following National Occupational Standards for Jewellery from Creative and Cultural Skills:

- J2.11 Identify and secure stones in settings
- J3.6 Form jewellery components
- J3.14 Polish and finish jewellery or silverwork to a commercial standard
- J3.20 Set gemstones by hand
- J4.17 Set gemstones using advanced setting techniques
- J4.19 Carry out repairs and restoration to jewellery or silverware.

Guidance on learning and teaching approaches for this Unit

This Unit should be delivered in such a manner as to provide as many practical demonstrations of the required setting techniques as is practicable in the workshop environment. The lecturer should obtain suitable gemstones for the learners to work with to allow for consistency of approach.

It is envisaged that the teaching of this Unit should be primarily practical with an emphasis on the candidates learning by practising the techniques required.

Demonstrations by tutors and one-to-one instruction and guidance would be an important part of the delivery and candidates could be encouraged to explore the techniques as part of their own personal development as designer-makers.

Guidance on approaches to assessment for this Unit

Outcome 1

Written/oral and performance evidence gathered under closed-book conditions. Candidates must correctly identify a range of five gemstone cuts and describe the physical properties and risks associated with the setting process.

Outcomes 2, 3 and 4

Product evidence in the form of the finally completed projects manufactured and finished to a commercial standard. Candidates should use the settings which were manufactured for Outcomes 2 and 3 to achieve Outcome 4.

Opportunities for the use of e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or social software. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

National Unit specification: support notes (cont)

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Opportunities for developing Core Skills

This Unit introduces the learner to the techniques required to set cabochon and faceted round gemstones into items of jewellery. Learners will learn how to construct basic settings, convert them into items of jewellery and then set the stones into the completed jewellery items.

Candidates will:

- ◆ Identify various gemstone cuts.
- ◆ Describe durability and hardness issues in relation to risk factors associated with the setting procedure.
- ◆ Work in groups and share specialist tools and workshop facilities.
- ◆ Measure given gemstones and calculation dimensions in relation to given gemstone shapes.
- ◆ Research the range of gemstone cuts available.

As candidates are doing this Unit they will be developing aspects of the Core Skills in Communication; Numeracy; ICT; Problem Solving and Working with Others.

This Unit has the Problem Solving component of Critical Thinking embedded in it, so when the candidate achieves this Unit their Core Skills profile will be updated to show they have achieved Critical Thinking at SCQF level 5.

National Unit specification: support notes (cont)

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Disabled candidates and/or those with additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website www.sqa.org.uk/assessmentarrangements

History of changes to Unit

Version	Description of change	Date
02	Core Skills Component Critical Thinking at SCQF level 5 embedded.	19/01/2012

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