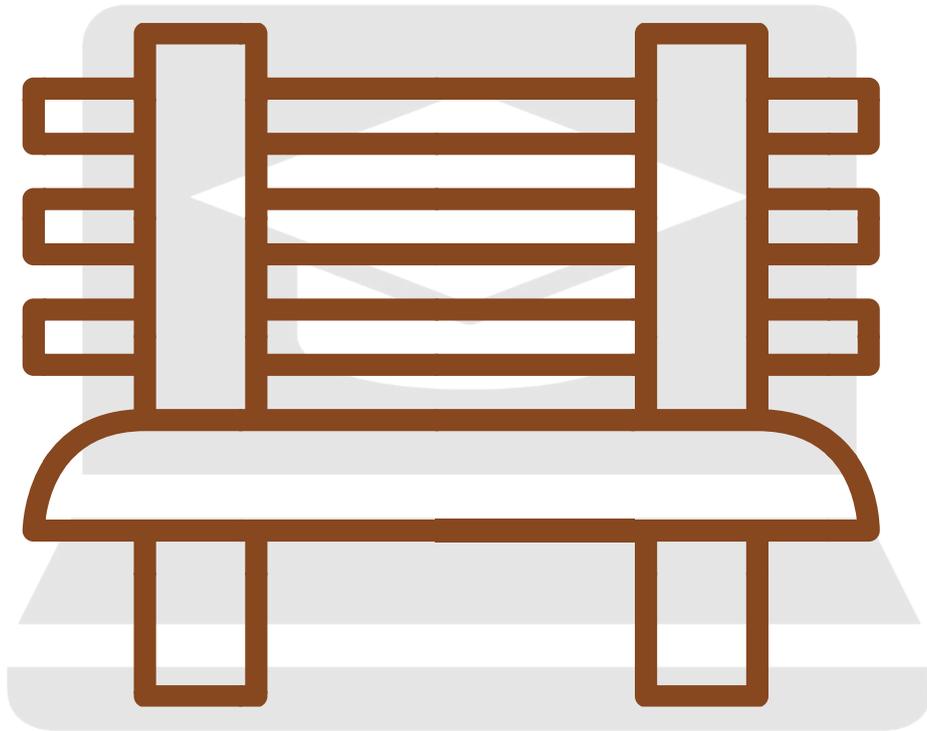


Garden furniture

Teacher/Tutor resource

BCATS

BUILDING, CONSTRUCTION
AND ALLIED TRADE SKILLS



Unit Standard 12932 (v5), Level 2

Construct timber garden furniture
as BCATS projects. ⑧ CREDITS

BCITO
buildingpeople

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Teaching and assessment tips

Purpose

This unit standard credits a learner who is able to construct timber garden furniture, to an acceptable standard, from plans and specifications.

The examples provided in the student resource are examples only. Providing the timber garden furniture meets the unit standard's minimum criteria, you may choose to use a different design and/or support your students to modify a different design. There are different processes, machinery, and tools that could achieve the same or similar outcome to the examples provided and they are to take your guidance on these.

Students need to:

- complete a cutting list for each timber garden furniture project
- mark out, cut and machine the required materials to an acceptable standard
- assemble the required components (parts) to an acceptable level of accuracy
- finish the two timber garden furniture projects
- complete everything safely
- keep their work area, tools, and equipment clean and tidy.

Unit Interpretation

Students need to construct two outdoor furniture projects, one of which must be a Cape Cod chair, picnic table, bench with garden tool storage, or an item of similar complexity.

The previous version of this unit standard required the second project to be an item of basic construction equipment. This specification was removed in response to requests for greater flexibility. Students may now select from a much wider range of options which could include, but are by no means limited to, a free standing or wall mounted planter box, a raised garden, a stepladder-style plant ladder, or a basic potting bench with saw stool legs.

A template for developing a cutting list is available in the resource file for student use. The cutting list, together with any of the learner's calculations, must be attached to the Assessor Observation sheet. Photographic or other evidence to show that the two timber garden furniture projects have been completed must be attached to the Assessor Observation Sheet.

Assessment

Information to support assessment decisions should, wherever possible, be collected naturally as the BCATS project progresses.

Assessment of this unit standard consists of:

- completion of a cutting list for each project and
- completion of two timber garden furniture projects and
- completion of the Assessor Observation Sheet.

Alignment with other unit standards

Developing programmes that integrate teaching and learning helps to provide students with meaningful and manageable learning opportunities. The following unit standards are not an exhaustive list of which you could include in your programme and nor should one feel obligated to offer all as linked units. Other unit standards you include will depend on your overall programme of study and what best meets your learners' needs.

Making two timber garden furniture projects can contribute to shared, complementary, or partial assessment of other standards, such as 24350, 24351, and 12927.

Level 1

Work required to complete this unit could contribute to assessment of US 25920 (*Use joints for a BCATS project*) and US 25919 (*Use hardware and fastenings for a BCATS project*). For the joints unit, a minimum of two types of joints need be used in at least one of the projects. Similarly, incorporating four different items of hardware and fastenings into the design of at least one of the projects will enable the award of US 25919.

Level 2

24358 *Plan and monitor the construction of a BCATS project and quality check the product*

As students are required to work off a plan and specifications, and develop a cutting list they are in a position to plan and monitor the stages of construction and quality checks required for this US24358.

24354 *Demonstrate knowledge of health and safety legislation and apply safe working practices in a BCATS environment*

Alongside the required theory component of US 24354, the construction of a retaining wall provides students with the opportunity to demonstrate safe practices.

- 24350** *Identify, select, maintain and use portable power tools for BCATS projects*
- 24351** *Demonstrate knowledge of and use specified fixed machinery in the construction of BCATS projects*
- 12927** *Demonstrate knowledge of, select, maintain and use hand tools used for BCATS projects*

The timber garden furniture can be one of two practical projects required for each of the unit standards noted above. While students may not necessarily complete the theory aspects of the standards as part of producing the two timber garden furniture projects, they should be encouraged to document evidence of the tools and machinery they selected and used.

Examples of oral assessment questions

1. What are some tools you might need to construct timber garden furniture?

Could include: rule or tape, jigsaw, tenon saw, power mitre saw, router, electric drill, sash cramps, screwdriver, sliding bevel, combination square, builder's square, hammer, chisel.

2. What precautions should you take to prevent electric shock when working with portable power tools?

Use an appropriate electrical safety device.

Do not use electric tools in wet conditions.

Use only leads and tools that have been inspected and tagged.

3. What precautions should you take when working with treated timber?

Wear gloves when handling.

Use a dust mask when machining.

4. Why do you countersink a screw and how is it done?

You do it to set the screw flush with or below the surface of the work so it makes a flat surface.

It is done by enlarging the top of the screw hole so that the conical head of the screw can be set flush or below the surface of the work

5. How can you protect the surface of your work when using a sash clamp?

Use scrap timber between the clamp and the work.

Assessment Schedule

US 12932 (v5) - Construct timber garden furniture as BCATS projects (Level 2, Credit 8)

This unit standard requires the completion of two projects, one of which must be a Cape Cod chair, picnic table, bench with garden tool storage, or an item of similar complexity.

Outcome 1	Prepare cutting lists for timber garden furniture projects	Assessment evidence and judgement
PC 1.1	Project components are identified from working drawings and job specifications.	Evidence gathered using assessor observation sheet and cutting list showing: <ul style="list-style-type: none"> all components for both projects are identified correctly.
PC 1.2	Cutting list is in accordance with working drawings and job specifications.	Evidence gathered using cutting list: <ul style="list-style-type: none"> cutting list for each project is correct.
Outcome 2	Mark out, cut, and machine components for timber garden furniture projects	Assessment evidence and judgement
PC 2.1	Project components are marked out and cut to size in accordance with working drawings and job specifications.	Evidence gathered using assessor observation sheet and photograph(s) showing: <ul style="list-style-type: none"> components for both projects are marked and cut clearly and accurately.
PC 2.2	Components are machined in accordance with working drawings and job specifications.	Evidence gathered using assessor observation sheet and photograph(s) showing: <ul style="list-style-type: none"> components for both projects are machined in preparation for assembly.
Outcome 3	Assemble and finish timber garden furniture projects.	Assessment evidence and judgement
PC 3.1	Project components are assembled in accordance with working drawings and job specifications.	Evidence gathered using assessor observation sheet and photograph(s) showing: <ul style="list-style-type: none"> all components for both projects are assembled correctly both projects are sturdy and stable.
PC 3.2	Projects are finished in accordance with working drawings and job specifications.	Evidence gathered using assessor observation sheet and photograph(s) showing: <ul style="list-style-type: none"> both projects are "finished" i.e. surface and/or edge treatment planed, sanded etc
Outcome 4	Complete work operations.	Assessment evidence and judgement
PC 4.1	All operations are safely completed in accordance with workplace practice.	Evidence gathered using assessor observation sheet showing: <ul style="list-style-type: none"> appropriate PPE selected and used tools and materials used correctly and safely personal safety and safety of others observed.
PC 4.2	Workplace, tools, plant and equipment are cleaned, and tools, plant and equipment stored in accordance with workplace practice.	Evidence gathered using assessor observation sheet showing: <ul style="list-style-type: none"> work area cleaned waste disposed of tools, plant and equipment cleaned and stored correctly.

