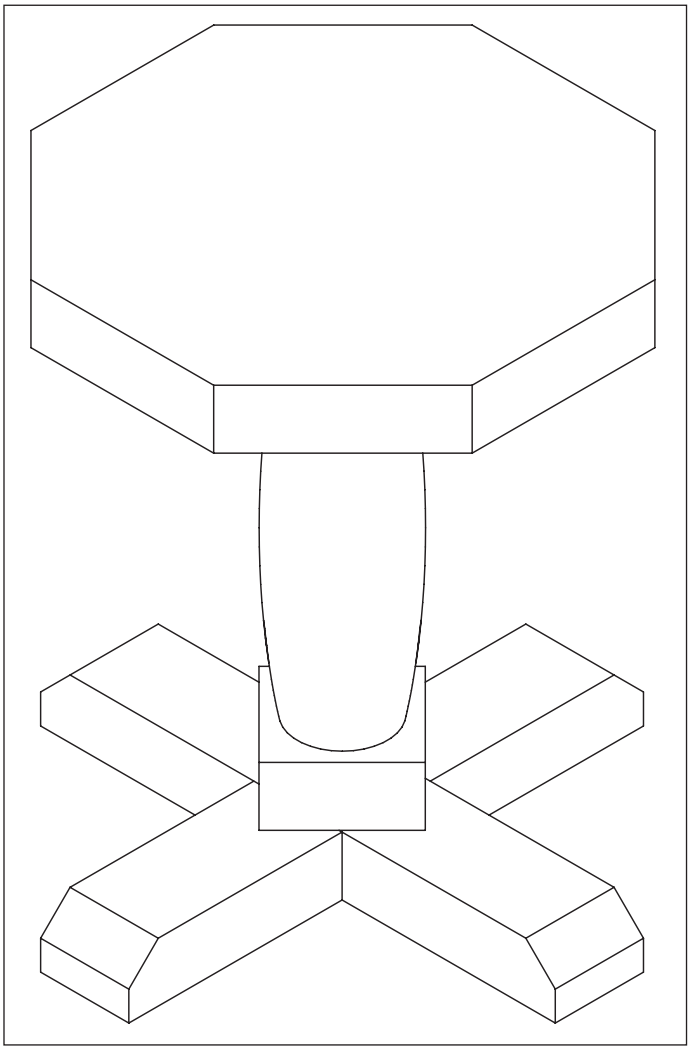
OPITEC

Hobbyfix

108.238

Flowerpot stand



Please Note

The OPITEC range of projects is not intended as play toys for young children.They are teaching aids for young people learning the skills of Craft, Design and Technolo- gy.These projects should only be undertaken and tested with the guidance of a fully qualified adult. The finished projects are not suitable to give to children under 3 years old. Some parts can be swallowed. Dan- ger of suffocation!

1. Product Information:

Article: Practical design in a project pack format

Use: Design Technology, Key stage 4

2. Material Information:

Material: Pine (Coniferous), softwood
Beech (Deciduous), hardwood
Wood should be relatively dry before working

Working: The wood will need to be sawn, drilled, shaped and sanded.
Mark out by measurement or make a pattern.

Joining: Use PVA woodworking glue.

Finishing: Wax (Liquid or solid)
Wood varnish (Base coat and top coat)
Staining (Colour water soluable)
Linseed oil

3. Tools:

Saws: Use a fine toothed saw for dowels and strip wood.

Note! Use a bench hook when sawing.

Wood rasp/ file: Choose the correct grade according to the work.

Note! Rasps/files only cut on the forward stroke !

Sanding: Use a block and sandpaper on flat surfaces and loose sheet on curves.

Drilling: Use a hand drill or Electric pillar drill

Note! Adhere to the safety rules (Tie all long hair back, remove jewellery and rings, wear safety glasses and a protective apron.) Hold the work in a machine vice!

Clamps: Use G Clamps to hold the work whilst the glue is drying (Do not over tighten them or they will leave marks)

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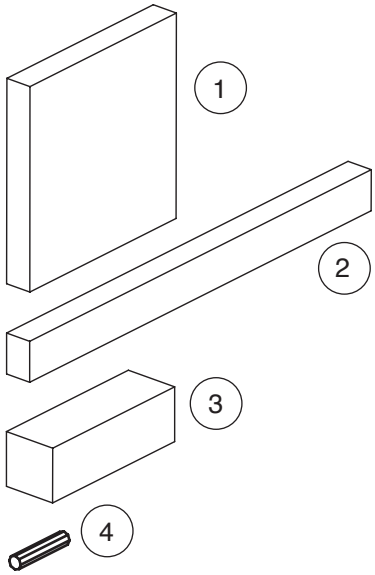
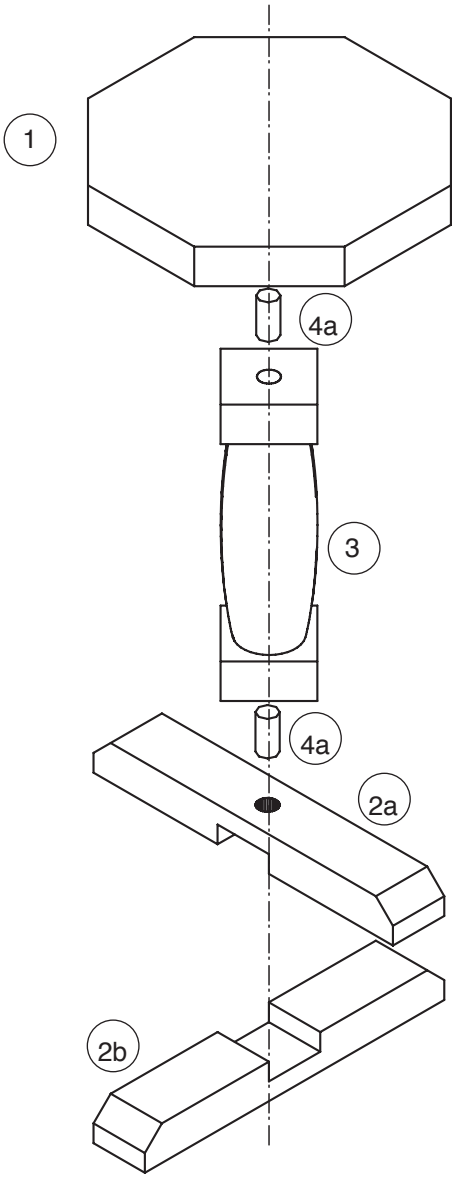
4. Parts list:

Part	Material	Quantity	Size	Diagram
Top	Pine board	1	20 x 150 x 150 mm	
Foot	Pine section	1	20 x 30 x 350 mm	
Column	Pine section	1	40 x 40 x 125 mm	
Joiner	Dowel	1	Ø 10 x 50 mm	



5. Exploded diagram



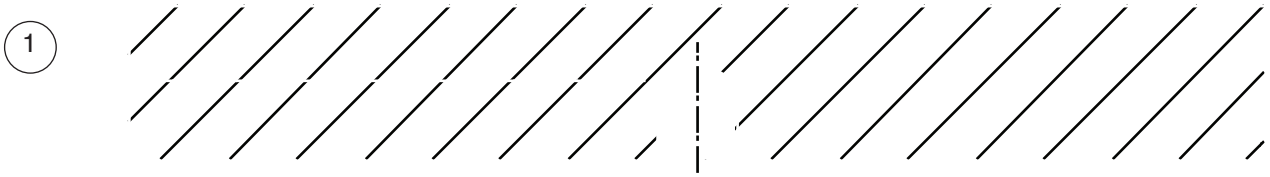
6. Planning overview

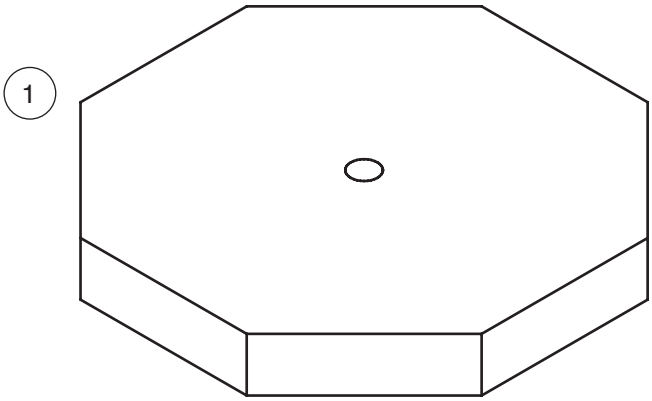
6.1 Designing and making the top

6.1.1 Mark out and drill the top (1) in the middle . Drill a 10mm diameter hole, 10mm deep

Note: Do not drill all the way through

6.1.2 Mark out the octagon shape (Pattern on page 7) or design your own and saw the top (1) to shape

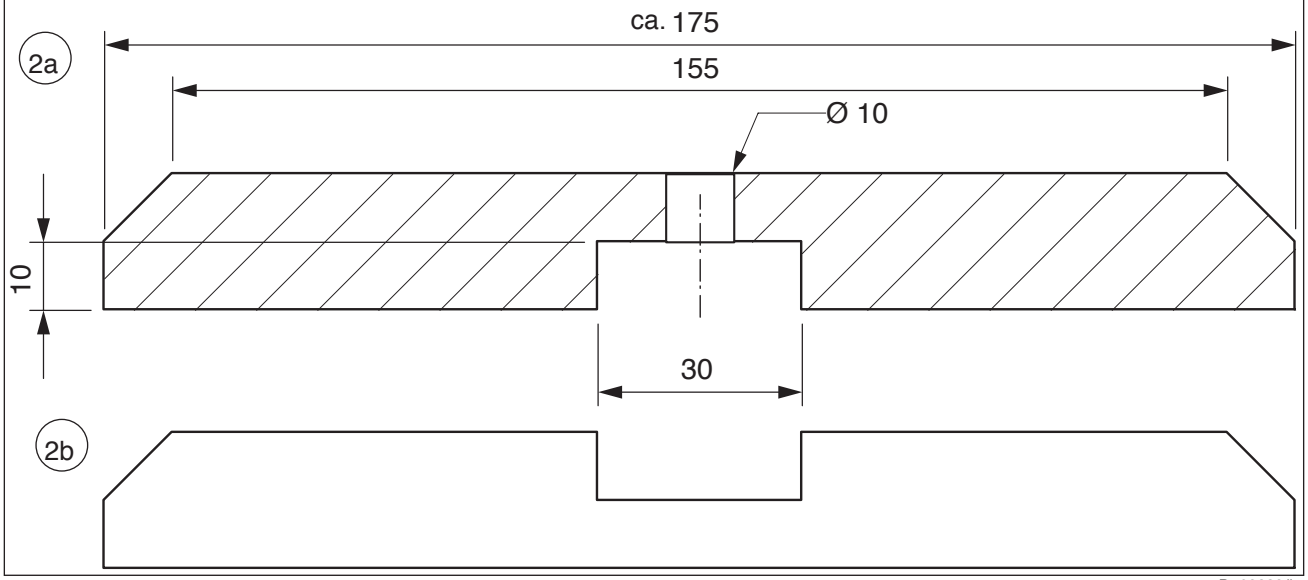




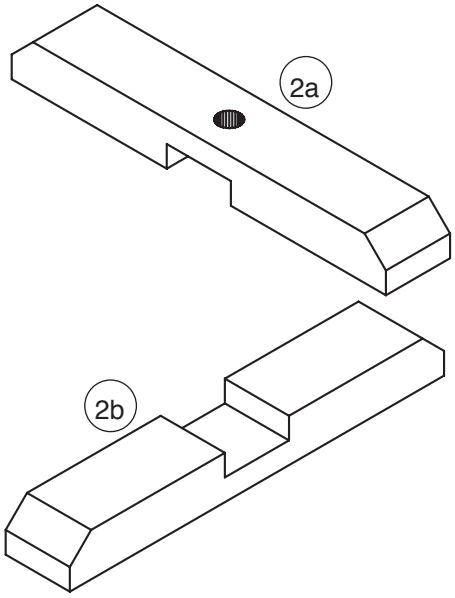
6.2 Designing and making the foot

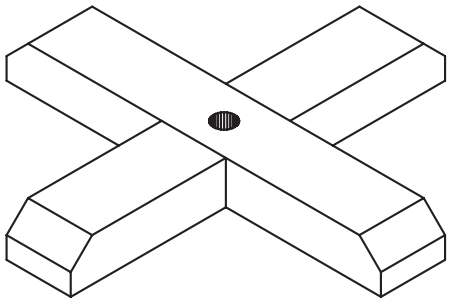
6.2.1 Saw the pine section (2) 20x30 x350mm through the middle

6.2.2 Drill one of the pieces (2a) 20 x 30 x 350mm through the middle, 10 mm dia. The cross halving joint is made by sawing a slot out of the middle 30mm wide x 10mm deep (Saw the sides and then use a rasp)
Saw a similar slot through the middle second the second pine strip
Chamfer the ends of the stand as shown



6.2.3 Assemble the feet as shown, file to fit as necessary.

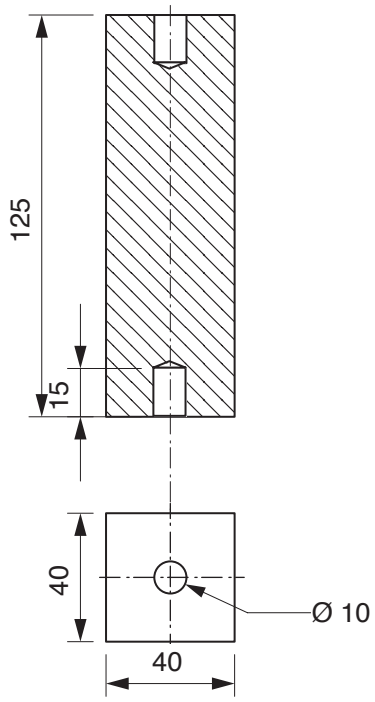


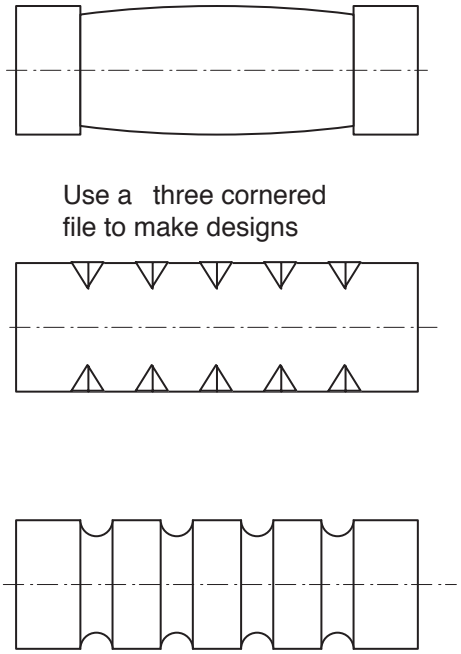


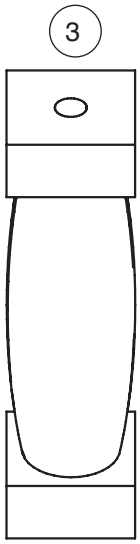
6.3 Designing and making the column

6.3.1 Drill the pine section (3) 40 x 40 x 124mm top and bottom in the middle with a 10mm hole x 15mm deep (See diagram)

6.3.2 Shape the column as you wish.



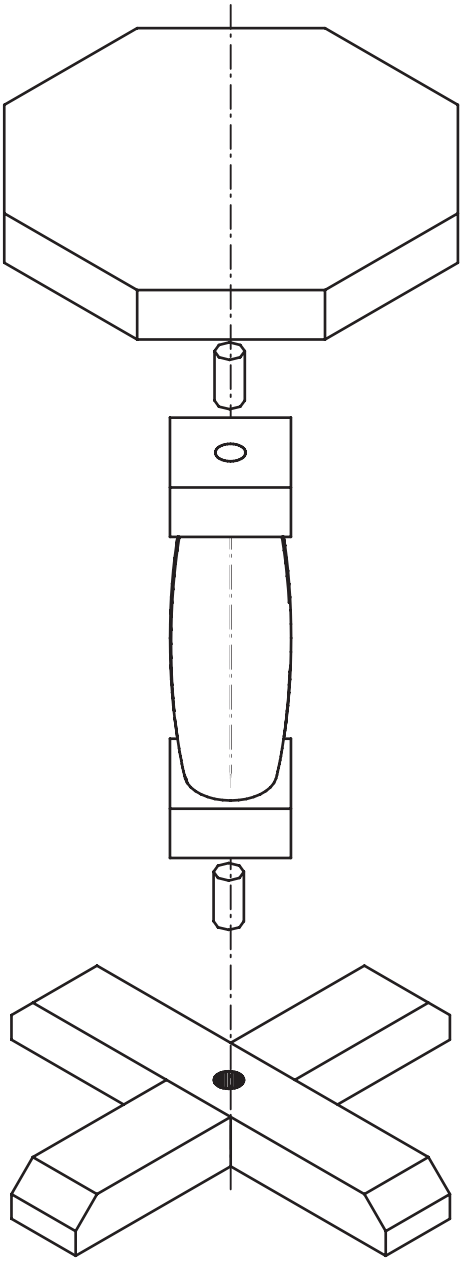


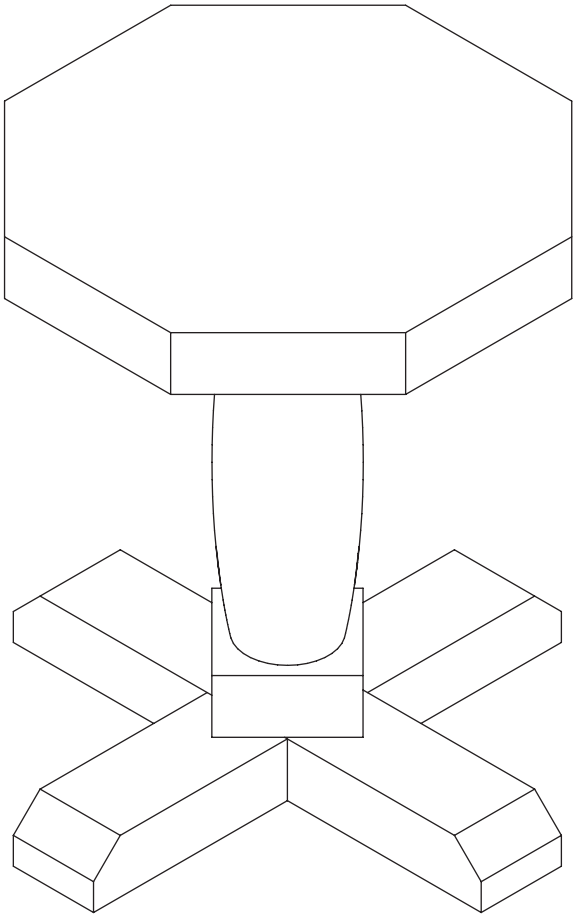


6.4 Final assembly and decoration

6.4.1 Saw the dowels (4) 10mm x 50mm in half (approx 10dia x 25m) and chamfer the ends with sandpaper.

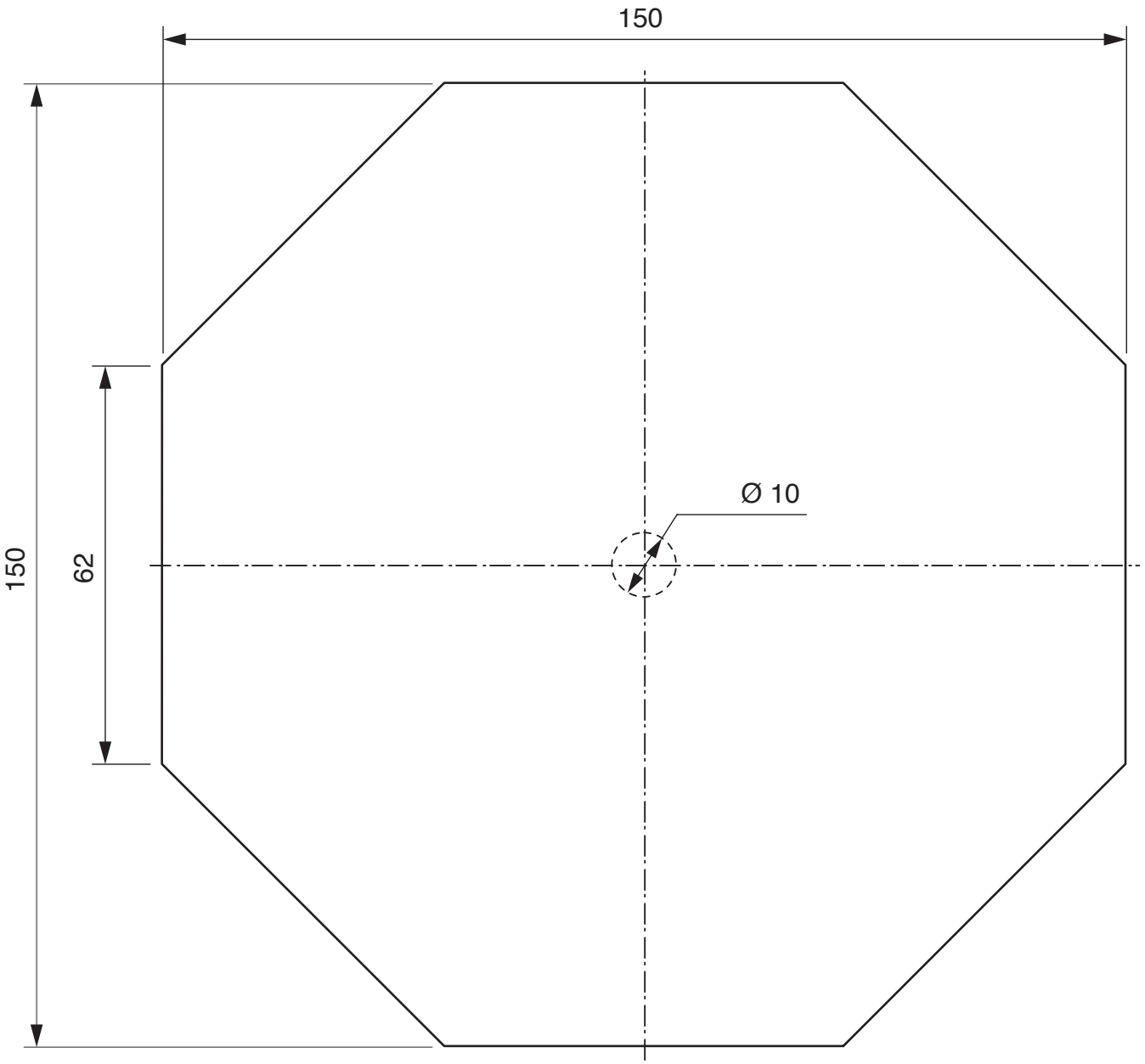
6.4.2 Assemble and glue the parts of the stand together





6.4.3 Decorate the finished stand to your own taste, finish with clear varnish

Octagonal top pattern



Scale 1 : 1