



Animal Phone Stand

INTERMEDIATE

 APPROXIMATE TIME: 3 TO 4 1-HOUR CLASSES

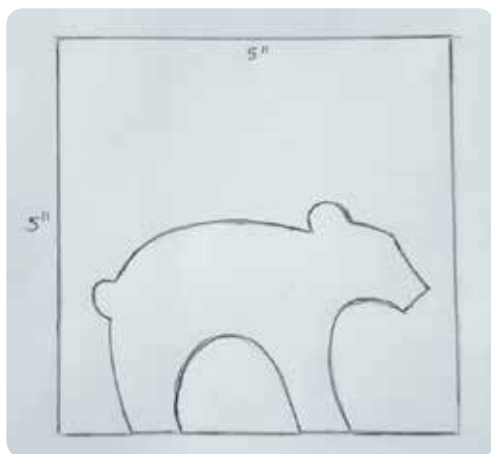
 TOOLS & MATERIALS

MATERIAL LIST

- 2 – 1" x 6" x 5 1/2" - Douglas fir
- Water based stain or vegetable oil – other finishes such as felt pen/pencil crayon would also allow for student design and personalization
- Wood glue
- 2 – #8 x 1 1/4" wood screws

TOOL LIST

- Safety glasses
- Straight edge/ruler
- Compass
- Coping saw, bandsaw or scroll saw
- Router table with 1/2" half round router bit
- Cordless drill - with #8 Robertson driver bit, 1/8" drill bit and 3/8" countersink
- Clamps
- Sandpaper 80 – 220 grit
- Sanding blocks



PROCEDURE

- 1 Using a blank piece of paper, draw a 5 1/2" square.
- 2 Within your square, draw your chosen animal – This should be a simple outline as noted in the image to the left.
- 3 To make the base, use a table-mounted router with fence and a 1/2" core box (half-round) router bit. Be sure to wear your safety glasses. Set the fence 1/2" from the edge of the bit and cut a 3/8" deep groove on the edge of one of the 5 1/2" square pieces. **This should be done with teacher supervision**
- 4 Find the center of the base. To do this use a straight edge and draw diagonal lines between corners, forming an "X". Where the two lines intersect is your center location. Using a compass, draw a circle with a 2 1/2" radius.
- 5 Cut out the round shape base using a bandsaw or coping saw. Sand your piece to remove any rough edges.
- 6 To make the vertical animal stand — Cut out a photocopy of your design and use a glue-stick to attach the paper to the second 5 1/2" square piece of wood. Make sure the "feet" or pieces that will rest on the base are flush at the edge of the square. This will ensure they remain straight.
- 7 Using a bandsaw or coping saw, cut out your animal shape. Sand your piece everywhere except the bottom of the feet.
- 8 Place the animal on the base so that the animal is perpendicular to the phone rest trough. Locate the forward edge of the front feet within 1/2" of the far edge of the base circle. Make some light pencil marks on all four sides so you can see where to drill your holes and place the animal when you are ready to glue.
- 9 Drill a 1/8" hole through the base where the animal feet will be located. (center of foot)
- 10 From the underside of the base, use a 3/8" countersink drill bit and drill a countersink hole so it leaves a dimple in the wood, to ensure your screw is flush with the bottom.
- 11 Spread glue on the base of the animal and set onto the base.
- 12 Using the #8 Robertson driver bit, screw in 1 1/4" screws to secure your animal firmly to the base.
- 13 Wipe away any excess glue with a damp cloth.
- 14 Apply wood stain or paint to your finished piece.

EXTENSION CHALLENGES

- 1 Experiment with a no-fastener design, where the support fits into the base using different joinery techniques and is removable for flat storage.
- 2 Design a more complex 3-D support (for example — two 2-D figures interacting, or by turning a shape on a lathe etc.
- 3 Woodburn details onto your animal.