Wow Water Tower

Supplies

- two 2-inch 48”x96” polystyrene foam board sheets (or reuse those used in the Roar VBS Savanna Stone Hut)
- Hot Knife*
- pushpin
- string
- marker or pencil
- 10” or wider concrete form tube (or reuse the one from the Roar VBS Savanna Stone Hut)
- Great Stuff expanding foam insulation
- plastic gloves (wear when working with Great Stuff)
- work gloves
- extension cord (optional)
- 20”x30” cardboard sheet (or recycle a flat box from a bicycle, large TV, or assemble-it-yourself furniture)
- tape measure or yardstick
- straightedge
- utility knife and cutting mat
- metallic silver spray paint
- Gleam ‘N Curtain*
- hot glue gun and glue sticks
- cardboard box (a printer paper box or similar size will work)
- wood screws (thirty 1½” screws and thirty 2½” screws)
- drill and drill bits
- black duct tape or gaffer’s tape
- T-pins (about 50)
- Weathered Wood Plastic Backdrop*
- 60" plastic wading pool
- black Sharpie
- sturdy scissors
- dropcloth
- black spray paint
- rusty brown paint (2-ounce container)
- foam paintbrush
- four 8-foot 2”x3” pieces of lumber (cut each one at 60 inches to get four 60” pieces and four 36” pieces; see diagram on page 16 for how to cut all the lumber)
- two 6-foot 2”x3” pieces of lumber (cut each of these in half to get four 36” pieces)
- eight 6-foot 1”x3” pieces of lumber
- chop saw, circular saw, or hand saw
- black paint
- paint tray
- paint roller

Note: This structure will be 11 feet tall, so make sure you have enough ceiling clearance. If you are upcycling lumber from Roar VBS, 2-inch x 4-inch pieces of lumber may be substituted for the 2-inch x 3-inch pieces.

Tip: Most stores will cut the wood for you to the sizes you need.

Water Tower Spool Structure

Peel off the silver wrap from the foam board sheets.

Measure the foam board to create two 4-foot squares.

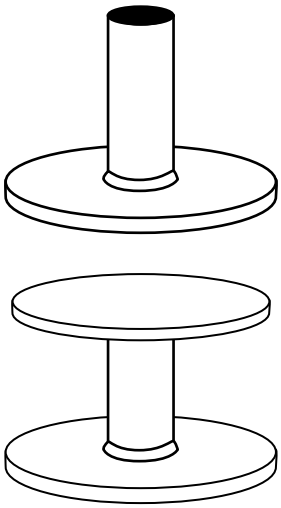
Use the Hot Knife to cut the foam board in half.

Make two 4-foot circles (see Tip at the lower right corner).

Cut out the circles using the Hot Knife.

Cut the concrete form tube down to 44 inches. (If you still have the Savanna Stone Hut from Roar VBS, take off one foam circle, cut the concrete form tube down to 44 inches, and reattach the foam circle with Great Stuff.)

- Center the 44-inch concrete form tube on one of the foam circles, and use Great Stuff to secure it to the foam. Allow at least two hours to dry; overnight is best.
- Next, put the second foam circle on the ground. Flip the prepared circle/tube unit onto the center of the second foam circle. Use Great Stuff to secure the foam circle to the tube unit. Allow at least two hours to dry; overnight is best.



Apply Great Stuff where indicated. Allow at least 2 hours to dry, then flip the entire structure onto the second circle, centering the tube and applying more Great Stuff where indicated.

Create the Spout

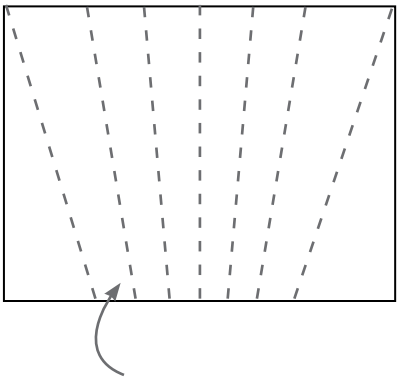
If necessary, cut the cardboard to 20 inches x 30 inches.

Cut off the corners of the cardboard, and use a utility knife to score the cardboard in the pattern shown on the diagram below.

Bend the cardboard on the score lines, starting at the center and working your way out.

Spray paint the scored side of the cardboard with metallic silver. (You can spray paint before scoring, if desired.)

Roll the scored cardboard to create the spout, and apply hot glue along the edge to hold it together.



Tip: To make a large circle, find the center of each square of foam board. Push a pushpin into the center of the square, then tie a 2-foot length of string to the pushpin and tie the other end of the string to a marker or pencil. Pull the string taut, and draw a circle with a 4-foot radius on each square.

On the non-spout end, cut in approximately 3 inches to create "tabs." You'll need three tabs on each side.

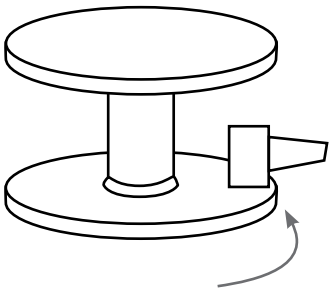
Fold the Gleam 'N Curtain in half, and pull it through the spout to resemble water (see photo 1 at right).

Photo 1

Place the Spout

Attach the spout to the cardboard box by drilling the screws through the tabs at the non-spout end.

- Use Great Stuff to attach the box to the foam circle part of the spool structure, then reinforce it with duct tape or gaffer's tape.



Use Great Stuff to attach the box/water spout to the foam circle as shown above.

Cover the Water Tower Spool

Photo 2

Use T-pins to attach the Weathered Wood Plastic Backdrop to the spool structure, pinning about every 6 inches around the top circle. Position the backdrop so the seam is at the point where the spout extends. Adjust the Weathered Wood Plastic Backdrop as necessary, making sure it will cover to the edge of the bottom foam circle (see photo 2).

Secure the edge with black tape.

Next, T-pin the Weathered Wood Plastic Backdrop around the bottom edge of the spool structure, and use black tape to secure the edge.

Top of the Water Tower

Photo 3

Cut off the rim of the pool with scissors.

Measure across the center of the pool to find the center. Mark the center with a Sharpie.

Cut a slit from the edge of the pool to the center mark (see photo 3).

Set the pool upside down on the prepared spool structure, and measure how much overlap you'll need so it'll rest properly on the spool structure.

Overlap the plastic by 12 to 14 inches to create a cone-like shape, then drill three screws along the edge of the overlapped plastic to secure the cone shape. Cover the ends of the screws with duct tape to prevent injury while placing the pool on the spool structure.

Working outside, spray paint the pool black (the outside of the cone-like shape you created), then spray paint lightly over the surface to highlight with the silver spray paint, allowing the black to peek though.

Use the foam paintbrush to lightly dab on some of the rusty brown paint on the pool at random to create some "rusty" markings. Allow to dry.

Center the pool on top of the prepared spool structure that's now covered with the Weathered Wood Plastic Backdrop.

*Available at group.com or your VBS supplier

Build the Wooden Base

Cut the wood as indicated in supplies.

Paint the wood black, and allow it to dry.

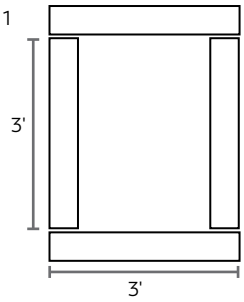
You'll be building a four-sided box. To make the top and bottom of the box, lay four 36-inch pieces of lumber on the floor as shown in Fig. 1 and attach with 2½" screws to form a square. You'll make two squares.

Working with one square, drill a 60-inch piece of lumber to the interior of the square as shown in the diagram below. Do this for all four corners, making sure to attach each of the 60-inch pieces so they're all oriented the same direction as shown in Fig. 2b (with the sides all oriented the same direction). Attach the remaining square to the opposite end of the 60-inch lumber pieces in the same manner.

Place the 72-inch x 1-inch x 3-inch pieces of lumber in an "X" on one of the sides and use the drill to attach. (See Fig. 3.) Do this for all four sides. The lumber has just enough flexibility to overlap in the middle, lie flat, and be attached on the ends.

Water Tower Base

Fig. 1



Use four 36" x 2"x3" pieces of wood for each square. You'll build two.

Fig. 2a

60" x 2" x 3" uprights

Fig. 2b

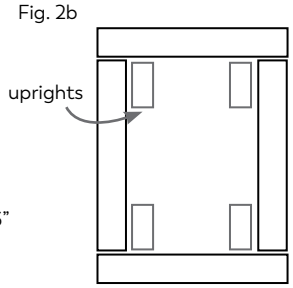
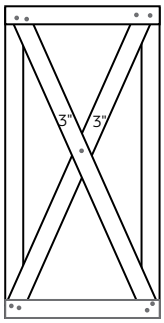


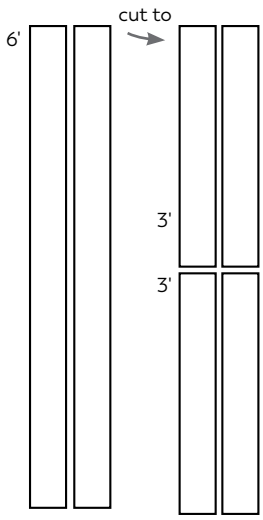
Fig. 3



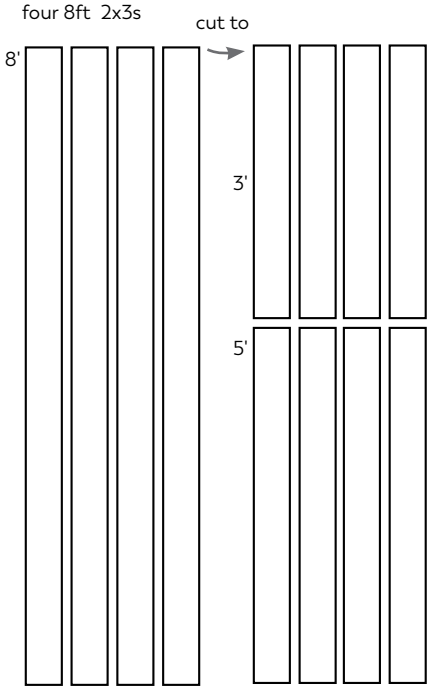
Attach two of the 72" x 1" x 3" pieces of wood on each side as shown.

Water Tower Lumber Cuts

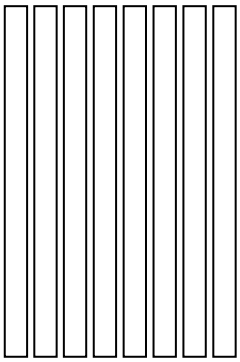
two 6ft 2x3s



four 8ft 2x3s



eight 6ft 1x3s
Measure and cut to fit main frame.



Tip: Because the Great Stuff will need time to dry, you won't do this step during FunShops. Don't skip this step, though—you'll want to make sure the tower is secure before kids are around it.

Assemble the Wow Water Tower

Stand the wooden base upright.

- When you're ready to apply the Great Stuff, lay the 4-foot x 4-foot foam square on the floor and then center the wooden base on it. Apply the Great Stuff around the inside edge of the base and allow it to dry (overnight is best). Flip the base over so the foam is on top.

Place the Water Tower Spool on top of the foam square.