## **Tower Drawing**

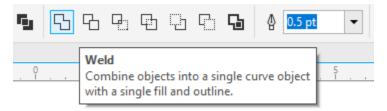
## Learning how to combine shapes and lines

1) Go to *Layout > Page Background*. In the Options menu choose "Solid" and "Ghost Green" for a background color. This changes your workspace background color.

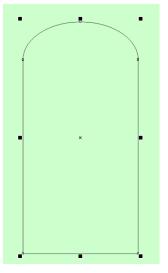
Vorkspace Document	Background
General Page Size Layout Label Background ▷ Guidelines	No Background Solid Bitmap Browse   Source X Image: Solid Image: Solid Image: Solid   Linked Image: Solid Image: Solid Image: Solid Image: Solid   Embedded Image: Solid Image: Solid Image: Solid Image: Solid
Grid Rulers Save Export To HTML ▷ Global	Bitmap Size

- 2) Create a **rectangle** shape. Make it fill most of the page.
- 3) Create an **ellipse** shape at the top of the rectangle. **Re-size** the ellipse so it matches the width of the rectangle, and position it towards the top as shown.

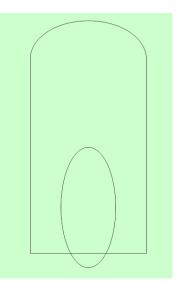
- 4) Click the **Object Pick** button and drag a box around both the ellipse and rectangle shapes. This will select both objects at the same time.
- 5) When you select two or more objects at the time same, you will get a new selection menu at the top of your workspace that looks like this.



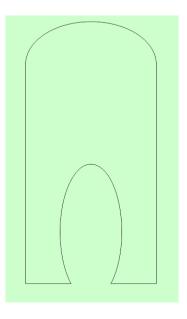
6) Choose the Weld tool. This will fuse the two objects together.



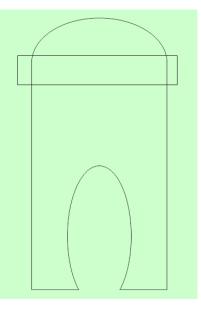
7) Draw a **new ellipse** that resembles the example below, and place it as shown



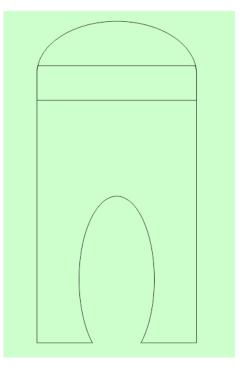
- 8) Next, **center** the two objects. First, select the ellipse. Then hold the **SHIFT** key and click the fused shape. This will also select both objects. Simply press the **C** button to center the two objects together. This will work with pretty much all objects.
- 9) Both objects should be selected. Look at the top of your menu and choose **Trim**. Hover your mouse over the buttons and a pop-up will identify the correct one.
- 10) The new ellipse shape you drew will "trim" away part of the object behind it. Then click <u>off to the side</u> to deselect everything, click back on the <u>original ellipse</u> used to trim, and press the **Delete** key to get rid of it.



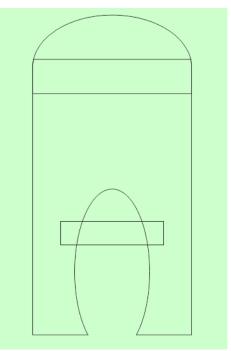
11) Next, draw a rectangle to the approximate size and placement of the example below



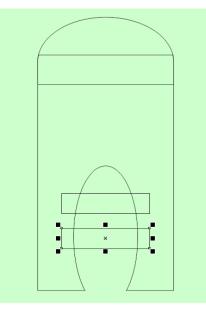
- 12) Select all objects by either dragging a box or using the shift key. From the menu options at the top, find the **Intersect** tool and click it.
- 13) This will create a new shape that matches where the two objects intersect each other. Click on the original rectangle shape used for the intersect, and **delete** it.



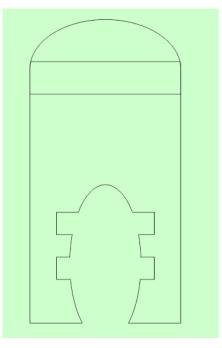
14) Draw a new rectangle and position it as shown below



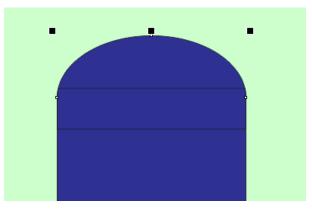
- 15) Try using your keyboard shortcuts to copy and paste the rectangle. Hold **Ctrl+C** and then **Ctrl+V** and the rectangle will be pasted directly on top of the original.
- 16) After you paste your object, use the **Arrow** keys on your keyboard to move your new rectangle straight down. Position it as shown.



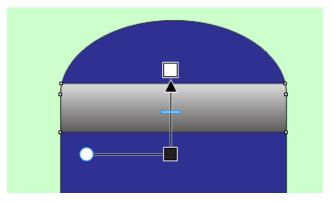
- 17) Click <u>off to the side</u> to deselect all objects. Now hold **Shift** and click in this order: New rectangle 1, new rectangle 2, and the original fused tower shape. Then press **C**.
- 18) Now, with the same objects still selected, look at the top menu and choose the **Simplify** option. Delete both of the new rectangles to get a similar result to below.



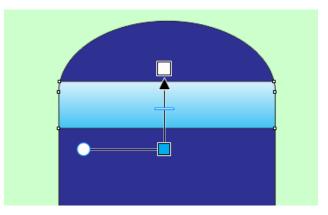
19) Click on the top of your tower to select it. Choose **Blue** from the color picker, and click to fill the tower a solid blue.



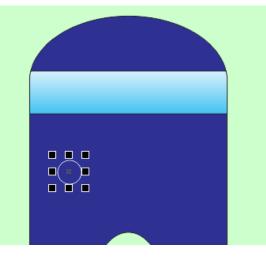
- 20) Next, select the "window' section of the tower. You will create a new fill using the **Interactive Fill** tool. Go and find it from the toolbars, and activate it.
- 21) Click, hold, and drag your mouse from just below the window directly up and across it.



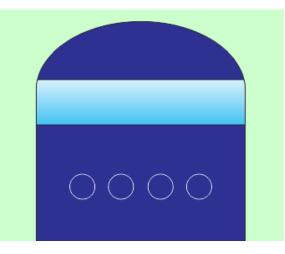
22) Now change the colors you are blending. You will see two "boxes" that show what the two colors are you are making a gradient with (black and white in the above example). Find the color Cyan from the color picker. <u>Click and drag</u> this color over into the **Black** box to change the gradient blend.



23) Next activate the ellipse tool. Click and hold the Ctrl key while making the new ellipse. This will force it to be a <u>perfect circle</u>. Then <u>right click</u> the outline to White so you can see it better. Place it as shown.



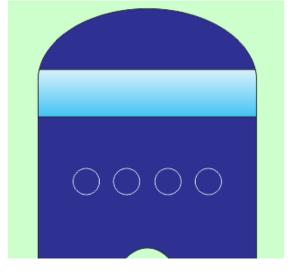
24) Hit **Ctrl+C** and **Ctrl+V** to copy and paste the circle. Use the **Right Arrow** key to nudge it to the right. Then <u>repeat</u> the process until you have four evenly spaced circles as shown below.



25) Now, drag a box around <u>only the four circles</u>. You **MUST** start your box from outside the drawing so that nothing else gets selected, only the circles.

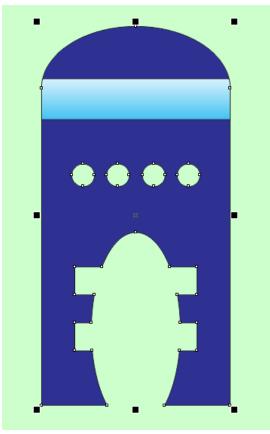


26) Now hit **Ctrl+G** to **Group** the circles.

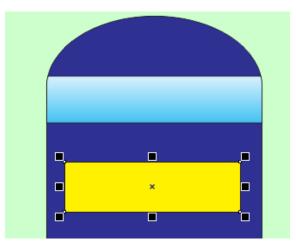


27) While the circle group is selected, hold **Shift** and select the blue tower background and hit **C** on your keyboard to align the circles so they're centered in the space.

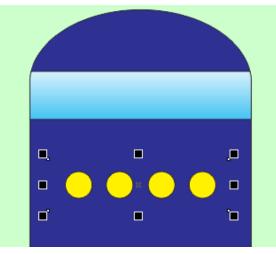
28) With both the circle group and the blue tower background selected, look up at your menu at the top you've been working with, and find **Back Minus Front**. Click it. This carves holes matching your circle shapes into the tower.



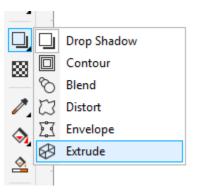
29) Make a rectangle across the circular holes and fill it yellow.



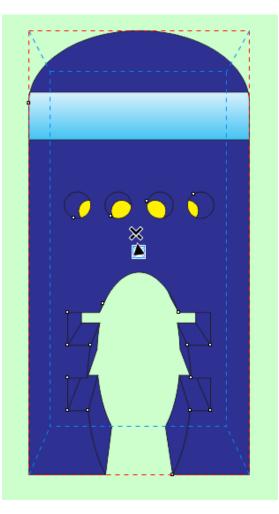
30) Hit **Shift + PgDn** on your keyboard to move the yellow rectangle all the way to the bottom of your stacked objects.



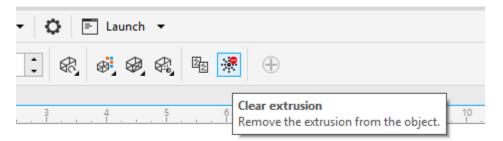
31) Now go to your toolbar menu and find the Extrude option. It is hidden under a flyout menu



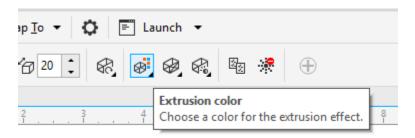
32) Now click in the <u>middle section</u> of your blue tower, and "pull" gently with your mouse to create an extruded effect. You can move the effect up or down as needed. The only requirement is that you should be able to see at least some **Yellow** shining through from each of the small "windows"



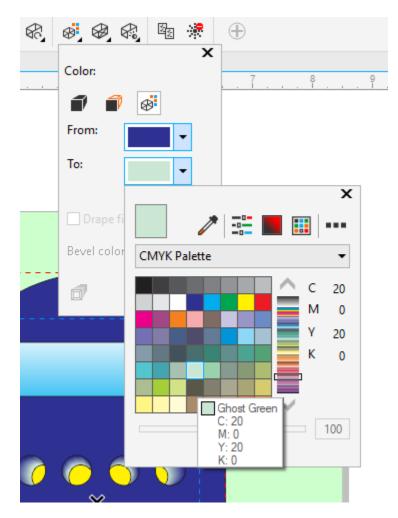
33) If you mess it all up, you can **Clear** the effect using this button at the top and start over again.



34) Next find the Extrusion Color button at the top



35) In the options, use **Color Shading**. Then find **Ghost Green** again.



- 36) Click off to the side, and view your completed basic 3-D effect "Tower"
- 37) If you have successfully completed **every** step, and the elements are arranged in an **appropriate** manner, save the work first to your own student folder, then again to the **Inbox** using your <u>last name</u> and the tag <u>tower</u> to identify your work