Chapter 1: Introduction

Adobe Photoshop

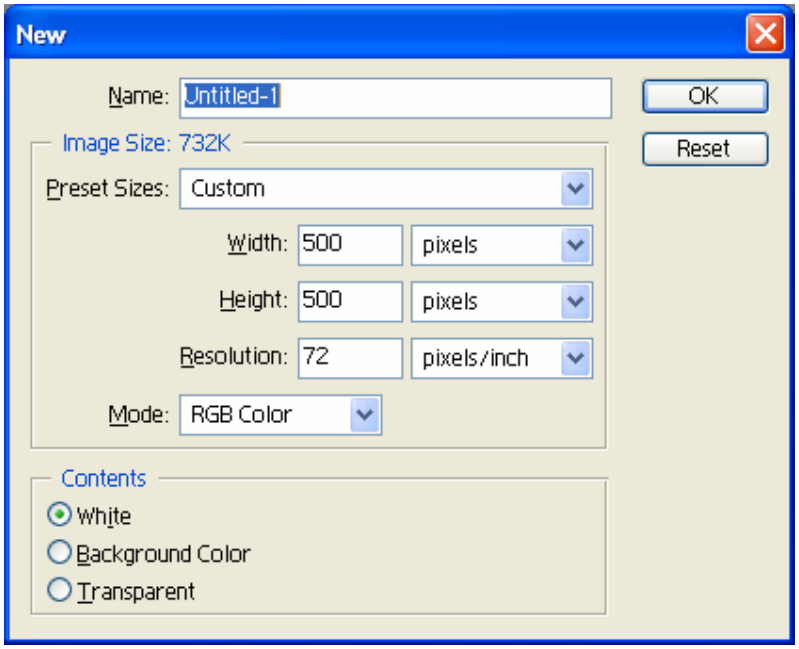
Drawing Essentials

Tools covered for Drawing:

- Marquees
- Lassos
- Paths & Pen
- Custom Shapes

Drawing

File > New



You are free to decide dimensions for yourself. For me, I like to work with space so 500w x 500h pixels is a decent square size. Resolution wise, I will always work with 72 pixels/inch because Photoshop is a relatively heavy program that 'eats' up quite a decent amount of memory (RAM). If I work in a much higher resolution, my computer will go very slow. After all, resolution can be changed later after job completion using **Image > Image Size …**

Hope you still remember the introduction previously. That introduction is not there for entertainment sake and neither should it be ignored. It should help you build that basic foundation that you need to go further on, so if you did not read my introduction properly, do finish it before proceeding.

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I will include a tutorial that I have written previously here. I find it easier to impart what I know through activity tutorial which you all can learn and have fun at the same time. This tutorial will cover Guides, Marquees, Lassos and Gradients. It will prove the point that a little bit of thinking is all that it takes to create wondrous Photoshop works.

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The Test Tube Tutorial – 100% Photoshop

In this tutorial, you will learn how to draw using marquees and polygonal lassos and how to use the gradients palette – create your own gradients.

Some snippets on reflections and lights here since test tubes are glass too. For a straight glass tube, reflections and lightings are relatively easy since it is straight as well. However, if it is a sphere or a wine glass, this will definitely not be the case. The way light reflects depends very much on light source and the shape of your object.

Learn How To Make A Realistic Test Tube!

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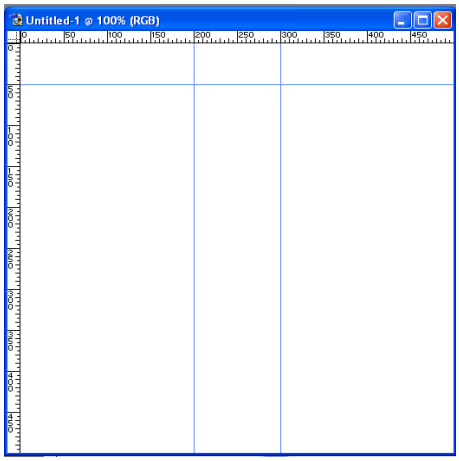
Step 1:

Create A New Document:
File>New

I chose 500 Pixels X 500 Pixels for sufficient workspace, but the dimensions is very much up to individual.
However, you will need to be in RGB mode with white background.



If you are meticulous and you want precision in your drawing, or if you are not so confident of being able to draw a good marquee for your test tube, do **drag guides** to assist you. My advice is, use the guides.

I fixed my vertical guides at 200 pixels and 300 pixels to determine the width of the test tube. The horizontal guide at 50 pixels is the brim of the test tube.

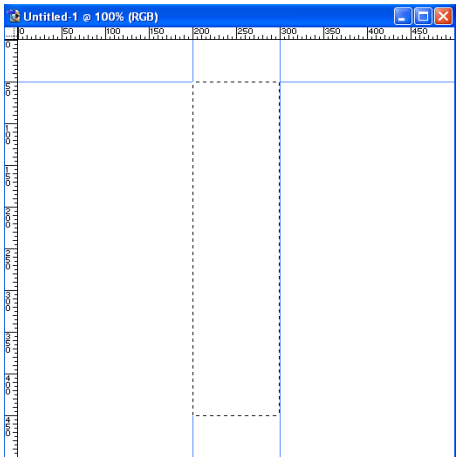
Step 2:

From the tools palette, choose the rectangle marquee tool.

You may drag the marquee from the corners of the guides for ease of drawing.

Do leave space as a test tube needs a round bottom, you will draw the round bottom next.

Do not deselect the marquee.



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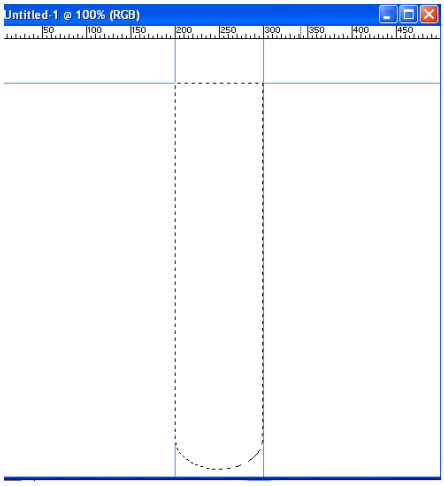
Step 3:

Here's the step where we start on the round bottom.



Make sure that your rectangle marquee is still in place. If you have accidentally deselected the marquee, repeat step 2 or press Ctrl-Z to undo, alternatively, select the state before deselect in the History Palette.

Hold down the **shift key,** go to the tools palette, and select the elliptical marquee. Starting before the rectangle marquee end, drag the elliptical marquee down. You should get the shape of the test tube.

Do evaluate the curvature of the bottom of the test tube. If you think that the curve is not enough, redraw. Just press **Ctrl-Z** to undo the elliptical marquee.

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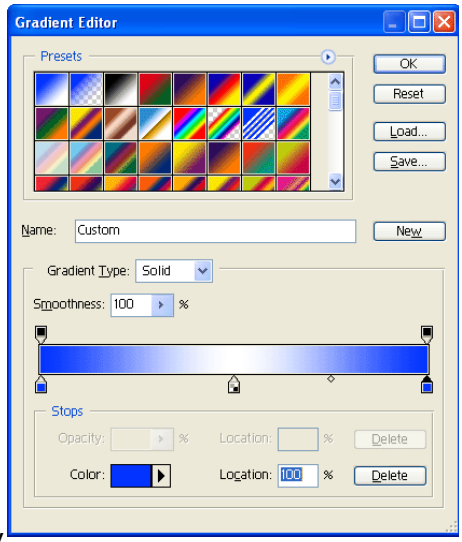
Step 4:

Now for the colour.

Select the gradient tool from the tools palette. You should see the gradient toolbar, else, **Go Window, click on tools, then you'll see it.**

Click on the gradient directly, to open up the gradient editor to edit gradients. Using this gradient palette, you can create your own preset gradients for your future use.



Create a similar gradient, the colours at the two end will be the colour for your test tube, choose a relatively bright colour. In the centre, at Location 50%, it will be white.

Click Ok, then drag the gradient horizontally across your tube marquee. Make sure that the gradient line is straight. (Hint: Press Shift)

In the layers palette, lower the master opacity to 30% and fill opacity to 50% for the tube to be transparent.

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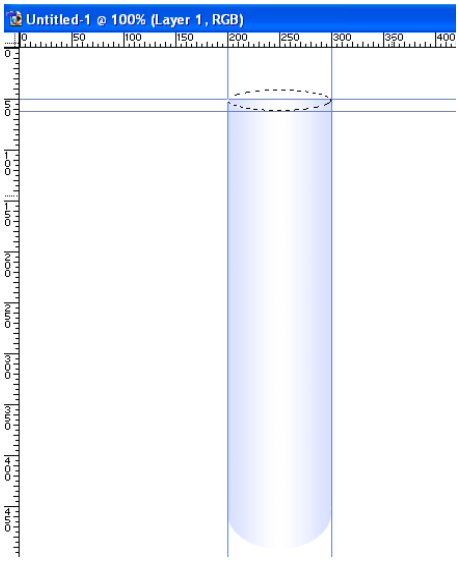
This is how your tube will look like:

Don't you think that the brim is too straight which makes it seems unrealistic? We will correct it now.



Step 5:

Using the elliptical marquee, drag it at the brim, approximately an oval shape for the curvature.

Ensure that you are on the tube layer, press delete.

Do not deselect the elliptical marquee yet.

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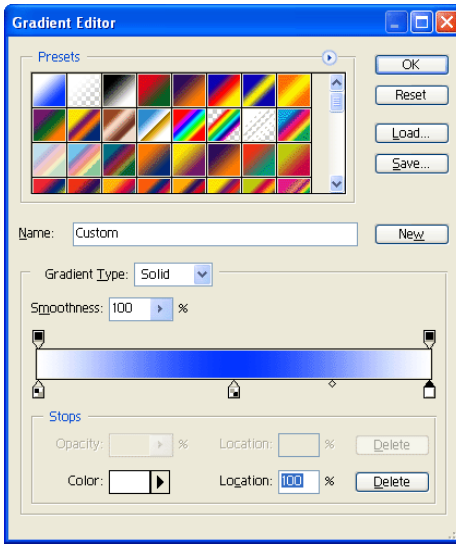
Step 6 :

Create a new layer, below the tube layer.

Open up the gradient editor again.

Now change your tube colour to Location 50%, and white at both edges.



Drag across the elliptical mask. Press shift as you drag.

Lower the master opacity to 30%, keep the fill opacity 100%.

This is what you will have, by this step.

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Step 7:

Now we will try to give the tube a more 3D feel.

Ctrl-Click on the tube layer to load selection. Make sure that the two colours in the tools palette are your tube colour and white.

Select the gradient tool again. In the Gradient Toolbar, select tube colour to transparency.

Create a new layer, above the tube layer.

Drag the gradient horizontally about a fifth of the width of the tube.

Keep the tube selection on.

Duplicate this new coloured layer.
Edit > Transform > Flip Horizontally

Keep the tube selection on. Now reverse the colours in your tools palette, meaning you switch the order of your tube colour and white colour.

Select the gradient tool again, (in fact, you need not do so if you had not selected any other tool in between the steps in this section.) The selection will be white to transparency now.

Create a new layer. Drag the gradient to about one-sixth of the width, smaller than the tube colour highlight.

Duplicate this white layer and flip it horizontal.

Press Ctrl-E 3 times to merge all the coloured layers above the tube layer, but **DO NOT merge with the tube layer.**

This is what you ought to get.

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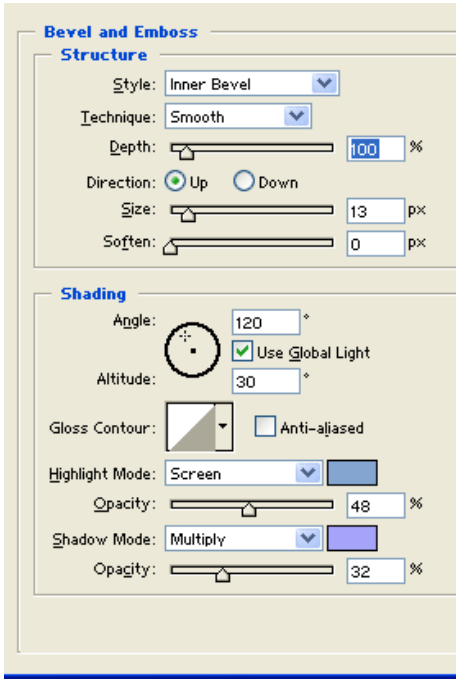
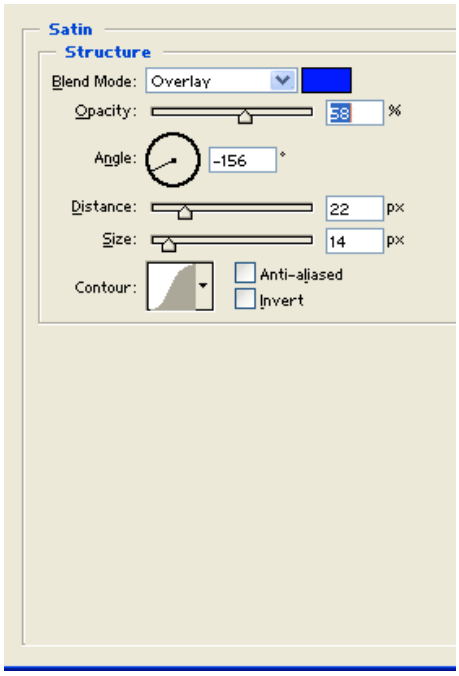
Step 8 (Optional):

I made this step optional as it is very much up to individual to go through this step or skip it. This step will bump up the highlights of the tube. Yet the tube will be perfectly fine without the additional highlights too.

Right-Click on the merged layer, select blending options, choose bevel and emboss and apply the following settings. For the colours in highlight and shadow mode, choose a colour near to your tube colour.



Then select satin and apply the following settings. Colour for blend mode will follow your tube colour.



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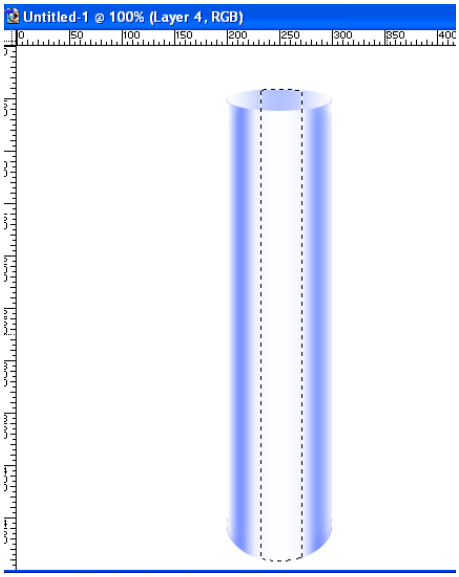
Step 9:

We can bump up the highlights further.

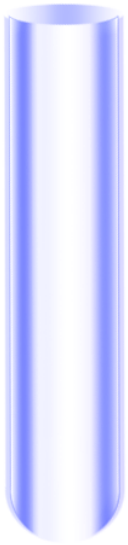
Ctrl-Click the tube layer again.



Using a rectangle marquee on the tool palette, pressing **alt key** remove away the sides of the marquee, this is to restrict the highlight within this region.

Drag the white to transparency marquee to approximately half of the marquee.

This is what you will get. It does not look that visible yet, but when we add in the tube cork, it gives the tube its transparency and glassy look.



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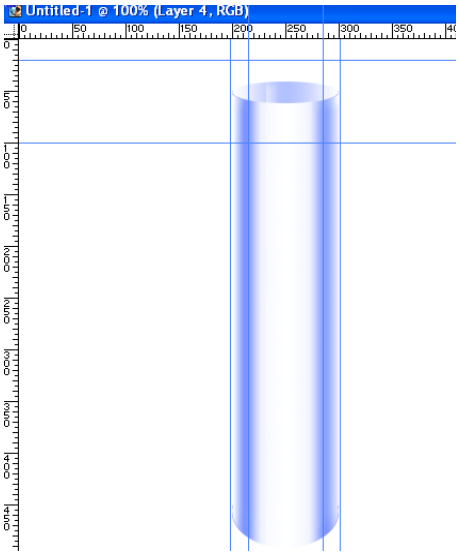
Now we will proceed to making the tube cork. In fact, you may stop here and skip to step 14 if you think that the cork is redundant.

Step 10:

Drag new guides. Go **View > Clear guides** if the guides remained. This new guides drawn will determine the trapezium nature of the cork, with the outer guides as the top width, inner guides as determine the bottom width, top and bottom horizontal guide will determine the height of the cork.



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Step 11:

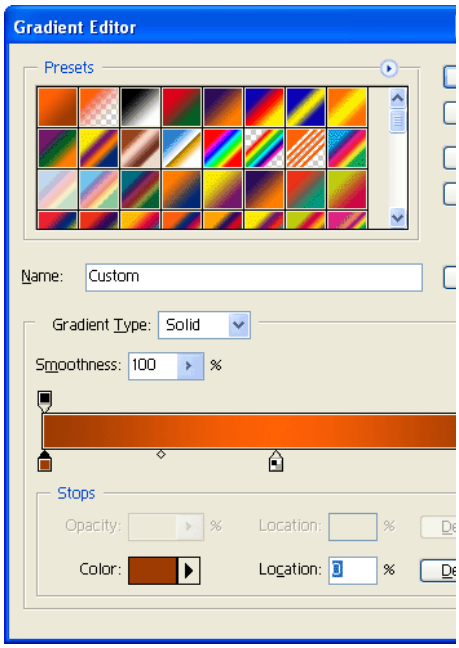
Select the polygonal lasso tool from the tools palette. Make the marquee selection for your cork.

Open up the gradient editor again. This time with colours #ff6005(orange-brown) and #9D3B02(brown). You may specify this with the picker by double-clicking on the colour selection.

The location of the gradients will be similar to that of the glass tube.

Create a new layer, just above the background layer.

Drag the gradient horizontally centre across.



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Step 12:

This is how your cork should look like.
Now let us make it more 3D.

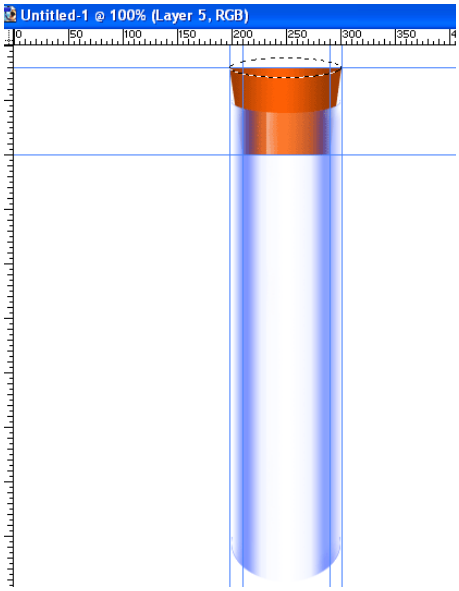
The steps is actually similar to that of the glass tube.

Using a elliptical marquee, make a oval selection, on the cork layer, press delete.

Keep the marquee selection active and beneath this cork layer, create a new layer.

Open up the gradient editor, orange brown to the two edges, location 0% and 100%, and brown in the centre location 50%.

Apply the gradient.



This is how your test tube and tube cork should look like.

The bottom of the cork looks too straight, doesn't it?

We will correct it next.

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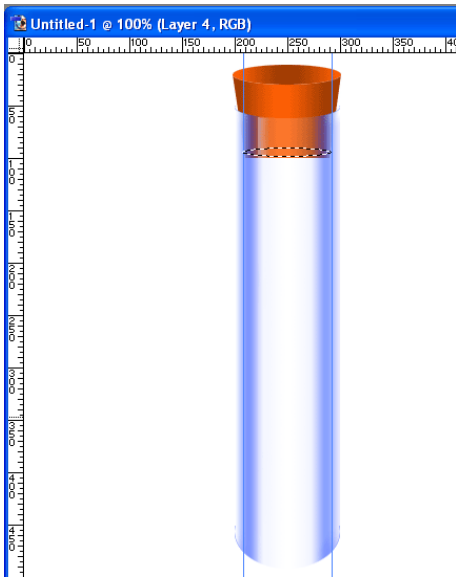
Step 13:

You may drag guides to help in precision.

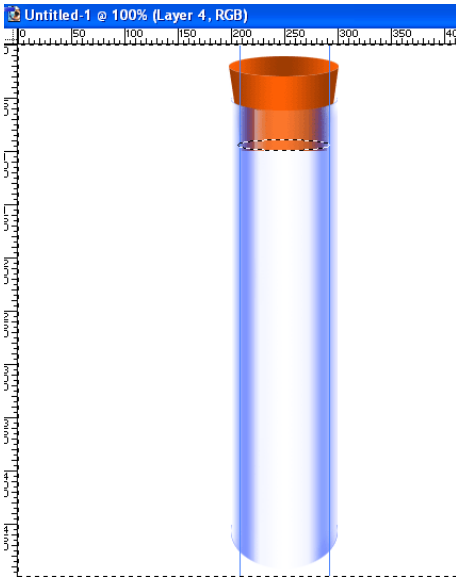
Make an elliptical marquee at the bottom of the cork. The curvature of the marquee will determine the curvature of your cork bottom.



Select > Inverse

Now, from the tools palette, select the eraser tool.

You may press **Ctrl-+** to magnify your image, navigate to where the cork edges are. Erase away the edges along the elliptical marquee.
(Hint: Use a small hard eraser of approximately size 10-15)



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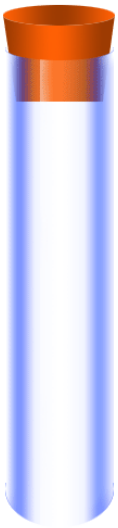
That's it. You're done. That is, if you do not want to proceed to creating the liquid in the bottle.



You may want to add colour to the bottom of the test tube, as it looks quite transparent or missing.

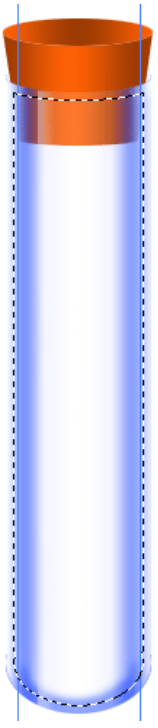
Ctrl-Click on the tube layer.

Using an airbrush of brush size 21pixels, on a new layer, above the tube layer, colour the bottom with your tube colour.

Keep the selection on.

Select > Modify > Contract > 5 Pixels

(This is relative to my graphic, it may be otherwise, depending on the size of your graphic and the test tube size.)



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Step 14:

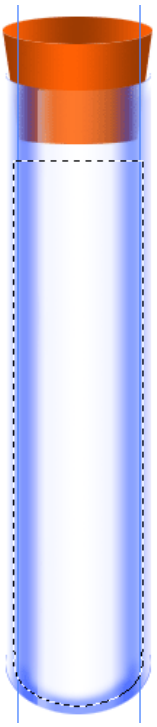
Using a rectangle marquee and holding down the **alt key**, clear away part of the marquee.

Select the gradient tool. This time, use a gradient from the set **simple,** load the set if you do not have it. I chose the greenish-blue to white gradient. Up to individual and the colour should match the tube colour too.

Create a new layer, just above the background layer.

Turn on reverse, and drag the gradient top down.

Turn master opacity to 50%, liquid are translucent.



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Step 15:

Liquid have curved meniscus, curve the liquid the same way as we curved the glass, the curvature must be the same as the glass.

Ctrl-Click on the layer we create in step 6, move the selection down to touching the liquid surface and slightly lower into the liquid.

Press Delete.

Well, we are finally done.

You may add whatever you want to the test tube. Objects, words or anything. They should be beneath the liquid layer.

Oh, if you are going to tilt the test tube. Link all your layers together, (on the layers palette, on the left, there is a visibility icon and a link icon, link all the layers by clicking on all of them, **DO NOT LINK THE BACKGROUND LAYER**) and you can tilt them together using **Ctrl-T** , just rotate. Do remember to alter your liquid, the surface should be at an angle too. To do that, **Ctrl-T, right click, select distort.**

Ok, I do hope that the tutorial is detailed and clear enough for anyone to follow.

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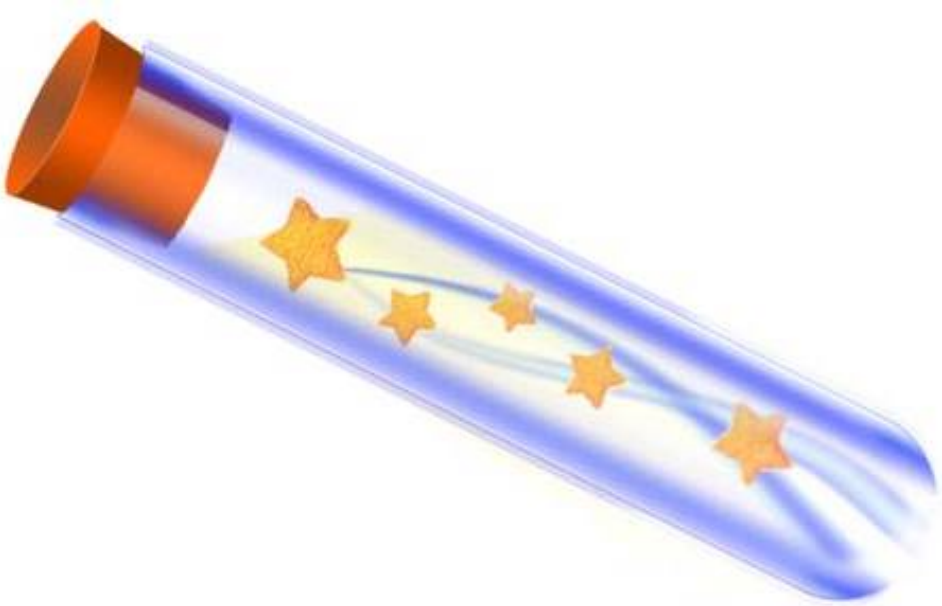
Some Examples of Test Tubes:



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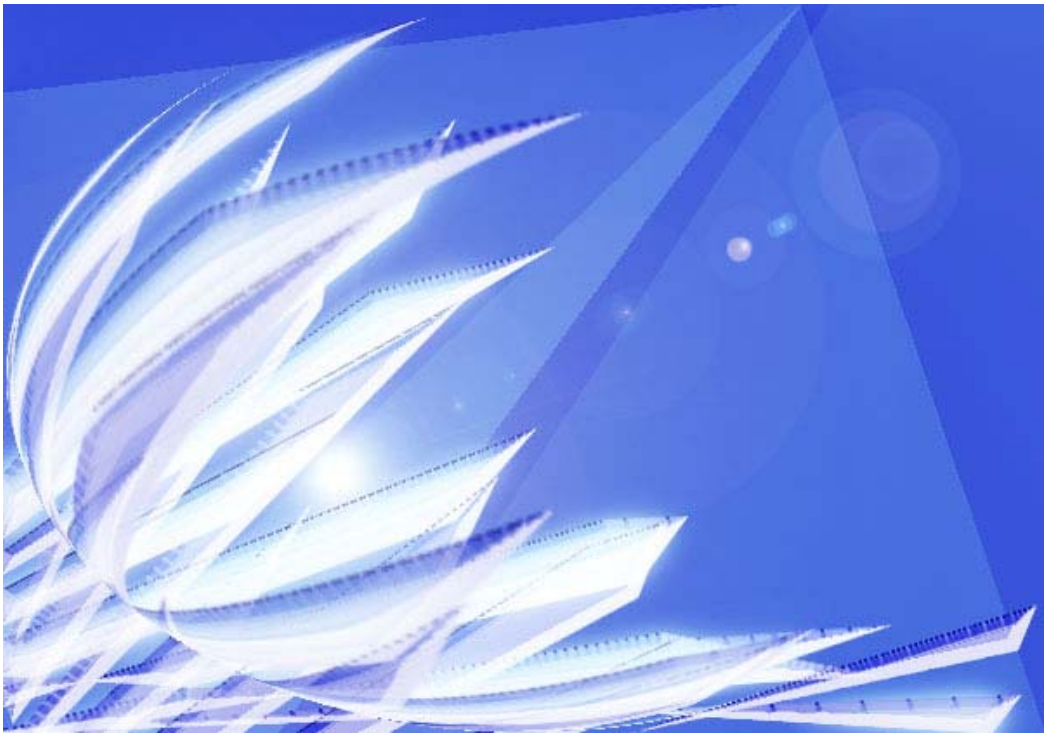
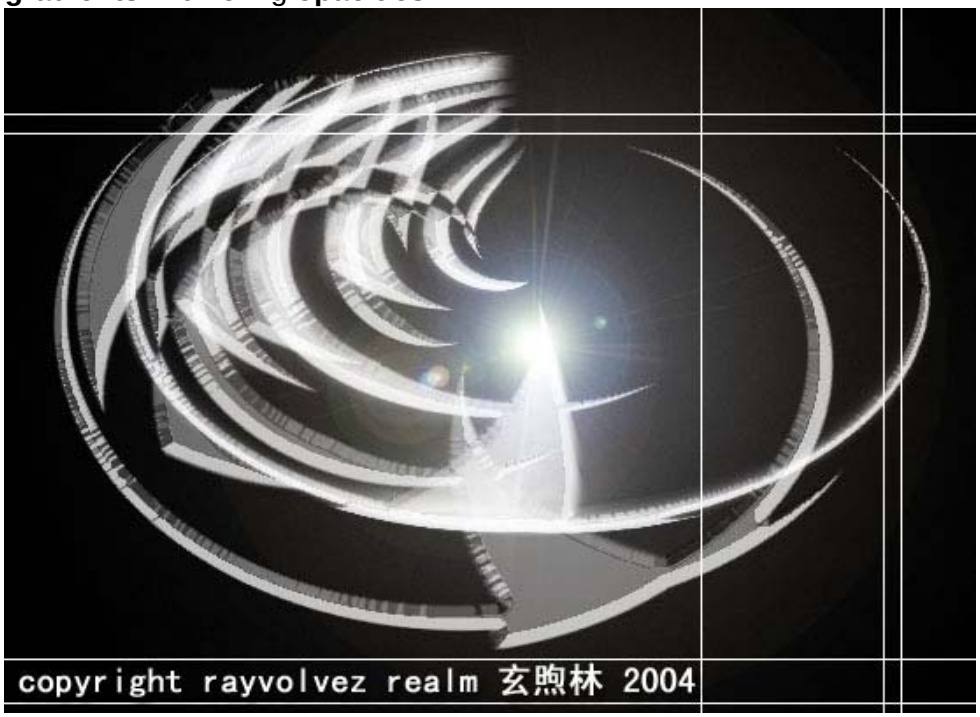
There's so much more to marquees and polygonal lassos drawings. Play around and here's a sample I've done last year.



These are 100% Photoshop creations done with polygonal lasso and the **Spherise Filter** *(Top Image)* & **Polar Coordinates Filter** *(Image Below)*. **Lens Flare** is also used. The background on top is made by using **angled gradients** in differing **opacities**.



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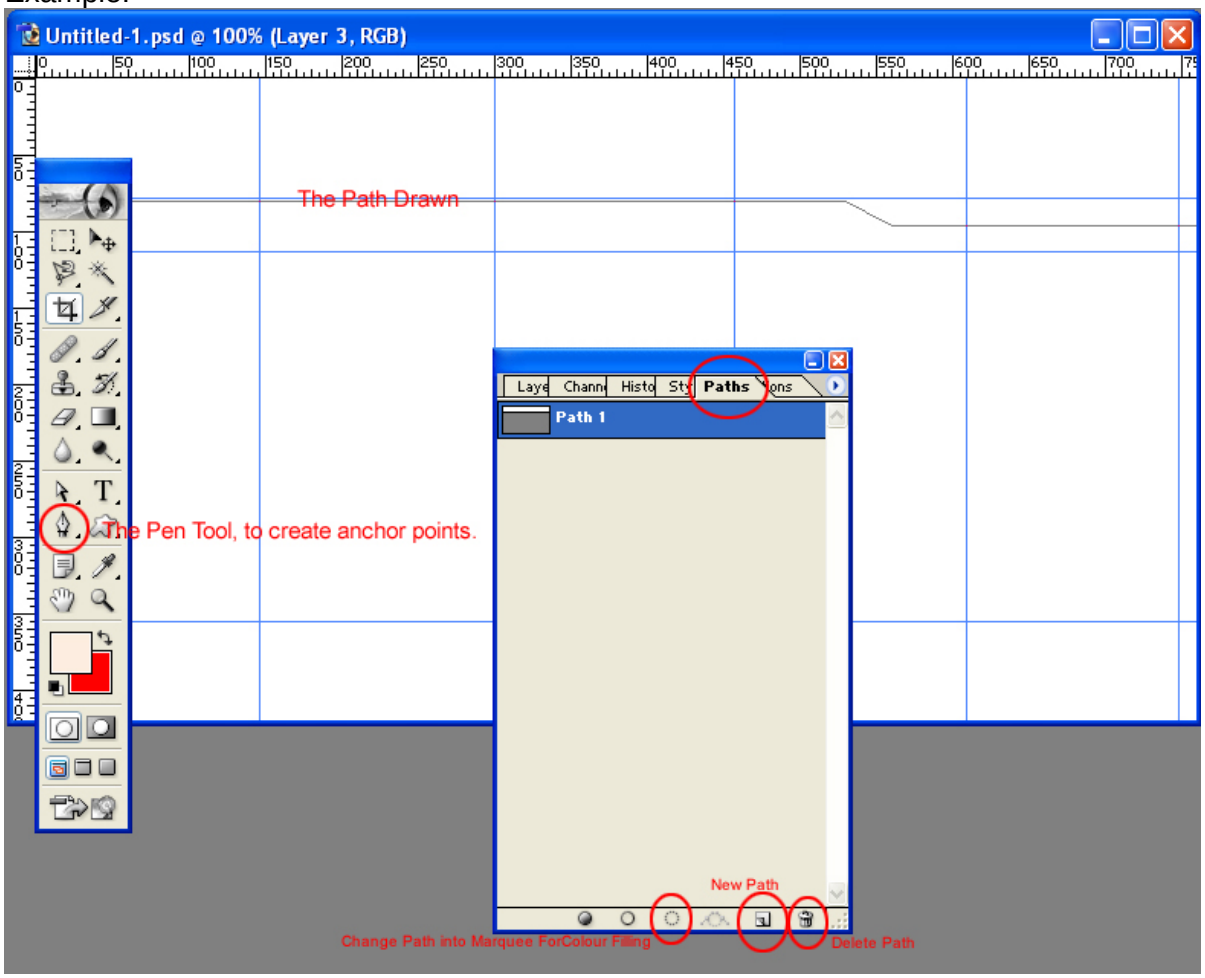
Paths

This is another often-used tool to create custom shapes and interface.

Example:



Guides are used to help in drawing of paths.

The black line in the image is the path drawn with the pen tool.

How to use the Pen Tool

- Click on the canvas you're working on to start an anchor point after you have created a new path layer.
- Hold down while drawing a point to draw curvatures, drag it to get the angle and degree of curvature.
- Your Path must eventually return to the start anchoring point to close path before the path is valid.
- Click on the first circled icon on the bottom of the path palette, which is the dotted circle, to turn your path into a selection/marquee for colour filling.

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- Want to add more points or delete points? On the toolbox, hold down the pen tool icon and you will get other pen tools like Add, Delete, Freeform, Convert.
- Using the Selection tool (The white cursor in the toolbox), click on the path to move any points.

The path tool is extremely useful in creating website interfaces. Here are some examples. The below are designs entirely drawn with path tools. The design is completed mainly with **layer styles** and **filters**.

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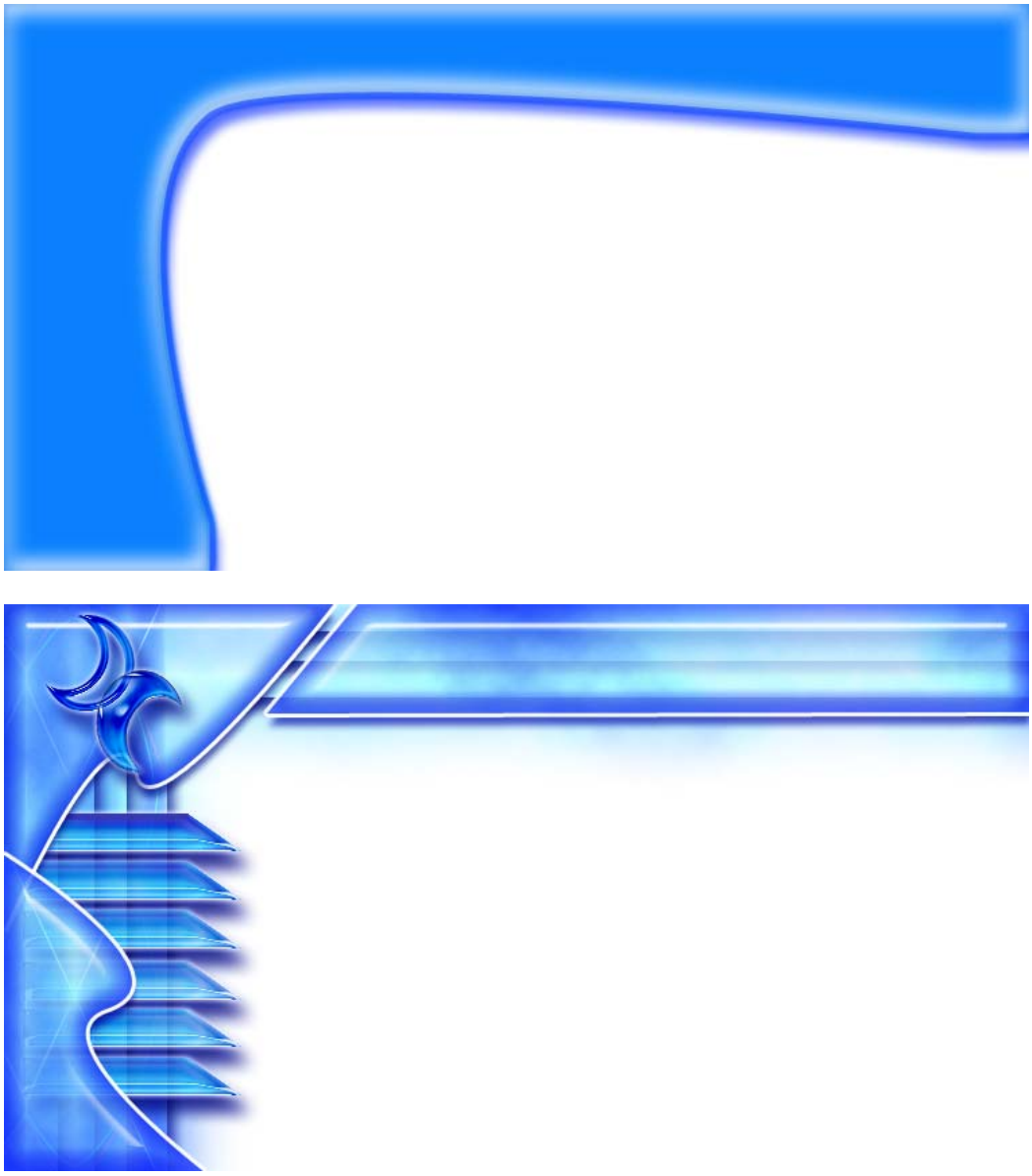

With reference to this last web interface, the crescents shapes on the top left hand corner are custom shapes. Do explore custom shapes on your own.

Custom shapes have a wide variety of shapes that you can use easily without having to do any modifications.

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