**LESSON: WINE GLASS**

**STEPS:**

1. Select “blueprint” - select “back” and load spline.jpg from file.
2. Select camera front view
3. Use green arrow to place vertical green line down the center of the glass.
4. Select tools – spline – create new spline
5. Outline shape of wine glass going up the inside right and then all the way down around base and back to center.
6. Press arrow and hold shift key to select beginning and ending dot and then go to tools – select value – deselect Y and Z
7. Go back to camera view
8. Add “Lathe” – then drag spline onto lathe to create glass. Rename lathe to glass.
9. Delete blueprint
10. If you wish to change shape of glass go into point mode and move points from spline.
11. Go into camera left view, click on camera in object browser and create new spline again. Select first point on far right and bring down to from reverse L as background bringing last point to horizontal left of glass.
12. Go back into camera view – Select extrude from lathe selection and drag spline onto extrude. Rename extrude to background.
13. In properties of extrude set Y and Z to 0 and X direction to 6.5
14. Move wine glass using red arrow to position on background
15. Click on glass and edit copy and paste. Use blue arrow to push behind first glass and rotate on its side by rotating blue semicircle or rotation -90 degrees in last rotation box.
16. Select camera front view.
17. Hide the first glass by clicking on “M” and uncheck visible in editor.
18. Use red arrow to drag glass to floor and tilt using blue semicircle so both ends rest on floor.
19. Go back into camera view and click on other glass “M” and recheck visible in editor.
20. Use arrows to position second glass close to the first one the way you want it.
21. Copy and paste first glass again and then rename wine and collapse mesh.
22. Hide both other glasses temporarily.
23. Rotate to look down top of glass and use polygon selection tool and highlight center ring by clicking and holding shift key.
24. Click Selection – expand selection (or command + shift + X) until desired level of liquid.
25. Click Selection – invert selection and delete
26. Click Tools – polygon – flip normal
27. Click Tools – polygon – fill hole, then click on any top edge
28. Using point mode go into tools – polygon – optimize and click ok.
29. Go into polygon mode and selection rotation tool and click green box once then white dot and drag left slight to scale of 0.99
30. Make both wine glasses visible in editor by clicking on “M” and rechecking box.
31. Add material “glass” and drag and drop onto both glasses
32. Add material “water” from glass selection and drag and drop into glass then change transparency color to dark red wine
33. Add material default – change color to green or choose your own background color and drag onto background.
34. Click on specular white color and reduce to nothing (ie. Black)
35. Click on camera – change output of resolution width to 800 an height to 600 – select render to view progress so far.
36. Add “HDRI” and load panoramic picture – decrease power to 0.6 to create relections
37. Add “light” – change properties light type to area
38. Adjust light by dragging with red and green arrows to place above and to the right. Use blue semicircle to direct toward objects.
39. Change properties of light color from white to dull yellow.
40. Increase intensity of light to approximately 4.81
41. Increase size of Light to width 1.01 and height 1.08
42. Change Light shadow samples to 12
43. Click on Glass 1 from object browser and select render tags to uncheck visible in radiosity and receive radiosity. Repeat for second glass.
44. Click on camera and add radiosity tag – reduce intensity to 0.8 as it tends to bleach scenes out.
45. Add “plane” under camera object – add material special solid color and drag onto plane.
46. Drag plane to front of glasses at a distance that is center and rotate to 90 degrees by changing second box of rotation.
47. Increase plane height by dragging blue box
48. Reposition to left of objects using arrows and then point towards object using blue and red semicircles.
49. Copy and paste and place another one on far right side again directing towards object maintaining a 90 degree rotation.
50. Add render tags to both planes and deselect cast shadows.
51. Click on camera and change output resolution to width 1000 and height 800. Select render to view progress.
52. Increase light intensity if you wish to 5.07 to add more directional light.
53. Click on Camera and add “caustics” tag – change strength to 800.
54. Click on light and change caustics to 50000 photons. Select render and save as .tiff
55. Open image in photoshop
56. Copy layer
57. Select Filter – Blur – Gaussian blur onto copy layer and change radius pixels to 4.1.
58. Scroll to layers and select “screen”
59. Change opacity to 10% to soften image
60. Hide copy layer by deselecting eyeball
61. Select color range on layer – change fuzziness to 17
62. Press Apple “C” and Apple “V” to create new layer and move to top of layers
63. Change new layer to screen mode – change opacity to 30-40%, add Gaussian blur again and change radius pixels to 2.8
64. Add “curve” by selecting 4th icon from left bottom
65. Change color default if you wish.
66. Click on graph line and drag points to see how light changes

