

Name: _____

Period: _____

Detailing Geometry Worksheet

The answers to this worksheet can be found in the *LightWave 3D Seven Reference Guide* Chapter 26.

Vocabulary: Define the following tools and commands.

1. Pivot Point Tool
2. Flatten Layers
3. Flip Polygons
4. Aligning Polygons
5. Set Value
6. Weld
7. Weld Average
8. Unweld

Review Questions:

9. What do *Layer Settings* do?
10. Why would you use the *Spin Quads* command?
11. What are the two ways to make an object double sided?

Building and Setting a Breakfast Table

You know all the basics of modeling. Now it's time to put them to practical use. This assignment will apply what you've learned in previous units into one project. Also, you'll get practice building objects from tutorials. You're going to build each item on a normal breakfast table setting – including the table. You'll be graded on each component of the table setting, so it's important to do each in order. Have fun with this assignment, don't get frustrated, and just do your best!

You'll use the modeling tutorials found on the Newtek website (www.newtek.com). The tutorials are interactive, so feel free to pause them as you are working. Each item in the place setting can be built once, and then copied for the other settings.

1. _____ **Idea Sketch (100 points):** Make a sketch of your plan for a set table. You should have a table (with legs) and four place settings. Each setting will have the following:
 - Plate
 - Bowl
 - Spoon
 - Fork
 - Coffee Cup
 - Extra Credit: One Teapot (in the center of the table)
2. _____ **Table (100 points):** Build the table using the *Lathe Tool* to model the legs. The actual table surface should have a wood texture. Your table may be round or square.
3. _____ **Plate (100 points):** Use the Newtek LightWave tutorials to build your plate. You do not have to include the scalloped edge.
4. _____ **Bowl (100 points):** Build from the Newtek tutorials.
5. _____ **Spoon (100 points):** Build from the Newtek tutorials. Try to put a texture to resemble shiny metal (if you're able to).
6. _____ **Fork (100 points):** Build from the Newtek tutorials. Try to put a texture to resemble shiny metal (if you're able to).
7. _____ **Coffee Cup (100 points):** Build from the Newtek tutorials.
8. _____ **Set Table (100 points):** Set the table for four by copying the place settings and placing them on the table.
9. _____ **Teapot (Extra Credit):** Use the Newtek tutorial to build this if you have time.

