Izaak Weaver-Herrera

Independent Study Project

Java Period 4

 For the purposes of my Independent Study project, a 3D Printed Tennis Racket on Google Sketchup was printed using a Makerbot Two-Tone printer. To print the tennis racquet, there were two separate paths. One included creating a complex racquet in Sketchup and then printing out that, while the other path consisted of printing out the individual parts of a racquet, and then gluing them together. My project follows the second course. Without prior Sketchup experience, learning on the fly enabled me to complete this project. By using the polygon tool to draw and create an octagonal cylinder, the handle of the racquet was created. Then, using the line tool to draw segments into a square, trapezoids were made to resemble the lengths of a racquet that connect the head and handle. In order to create a head, a circle was drawn, the scale tool was used to drag one bottom edge down to create an ellipse, and then the Push-Pull tool(used in the handle and connecting trapezoids to make them longer) to make the head the desired width. Finally, the Draw Line Tool was used to draw lines on the inside surface of the circle in the manner of a racquet’s strings.