## Date:

## Wednesday Challenge Form

Group Members: Nicolas, Arthur, Aaron, Edgar

**Problem Statement:** The goal of today's challenge is to draw cutlines for a 5' X 5' piece of wood. The width of each piece of would-be cut wood must be equal, and each piece must have a width of 10". The length cannot be more then 46", and it cannot be less than 32".

Approach: First, we brainstormed some ideas on what we were going to do. We started off by making the boards 40" by 10". Our sketch had 6 boards side by side on the bottom of the sheet, and then two boards on top laid across. It left a 20" by 20" square of waste, which ended up being 200 square inches of waste. Then, we came up with another idea that used boards that were 46" by 10". After fitting it all into the 5' by 5' sheet, it left 380 square inches of waste. This was 20 square inches less than our original design, so we went with that one.

**Solution:** Mr. Neat preferred the groups to use SketchUp for this Wednesday Challenge and Evan and co. won because they thought about the thickness of the blade.

Lessons Learned: If I were to do this assignment again, I'd consider the thickness of the blade.