**Grade 8 Challenge:** Design and Build a Wine Table similar to the one shown

**Research:** Sizes you will need to know

Height of table from sitting in a lawn chair height

Diameter of a wine Bottle

Diameter of widest part of a wine glass

Diameter of stem of wine glass

Determine the Diameters of the top and write them on the layout shown.

Part C

Part D

Part B

Part A

**Bill of Materials:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Part**  | **# of Pieces** | **Part Name** | **Lngth** | **Wdth** | **Thk** |
| A | 1 | Top |  |  |  |
| B | 1 | Stake (Leg) |  |  |  |
| C | 2 | Cleats (Support the Stake) |  |  |  |
| D | 1 | Pin (to fold top into position) |  |  |  |

Process:

Top

1. Laminate pieces to make the top (min dia for Planer is 30 cm long)
2. Layout all holes in the top
3. Drill holes using fly cutter, holes saw or forestner bit.
4. Cut out circular top and slits to fit wine glass stems
5. Router all edges
6. Sand starting with 80 grit working up to 150 grit sandpaper.

Part B

Stake

1. Cut the stake to size
2. Drill pin hole
3. Router all edges
4. Sand starting with 80 grit working up to 150 grit sandpaper.

Cleats and Pin

1. Cut cleats to size
2. Fasten cleats to top
3. Drill pin hole
4. Insert pin, fasten in place.