**Calculating Board Feet and Cost of Guitar**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Directions:**

1. Complete the worksheet “Board Feet Calculations of Lumber” on the following page. Pay attention to units and convert to inches when numbers are given in feet.
2. Check your answers with an answer key from the teacher.
3. Use your original guitar blank drawing or your guitar blank to calculate the cost of your guitar. You may need to retrieve your guitar blank from the lab.
4. Calculate the total cost of your neck and fretboard. If you forget what type of wood you chose, go look at your guitar.

**Guitar Body**

Complete the following table. You will need to measure your guitar body blank or your original drawing of your guitar to fill in the numbers. The thickness of all pieces is 2” and the length is 24”. Refer to the worksheet to calculate Board Feet. Refer to the prices posted beside the door for the lab.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Type of Wood | Number of Pieces | Thickness (2”) | Width (inches) | Length  (Inches) | In3 | Board Feet  In3/144 | Total Cost (BDFT X Cost per BDFT) |
| ***Poplar*** | ***1*** | ***2”*** | ***16”*** | ***24”*** | ***768*** | ***5.33 BDFT*** | ***$10.67*** |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

**Total Cost: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Guitar Neck and Fretboard**

Calculate the cost of the guitar neck and Fretboard. The length, width, and thickness were already filled in for you.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Type of Wood | Piece Name | Thickness (2”) | Width (inches) | Length  (Inches) | In3 | Board Feet  In3/144 | Total Cost (BDFT X Cost per BDFT) |
|  | **Neck** | **1”** | **5”** | **30”** |  |  |  |
|  | **Fretboard** | **½”** | **3”** | **20”** |  |  |  |

**Total Cost: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Cost of Guitar Body Blank: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Cost of Neck & Fretboard: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Total cost of wood for Guitar: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Total Board Feet of wood used for the guitar: (Add up the Board feet column from both tables to figure this out) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**