**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Group: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Build a Metric Model House!**

**Step 1:** Determine the actual dimensions of the house by converting each measurement to centimeters.

**Step 2:** Determine a *reasonable* scale that you will use to build the model of the house. It should fit on a table top and can be as small as you’d like. (Hint: to see if your scale works, take your largest measurement and find its model size. Is it too big or too small? If so, try a different scale.)

**Step 3:** Using your scale, find the new measurements of your model house.

**Step 4:** Using any materials in the class, build your house!

**A**

Step 1: Converting

**D**

**C**

**B**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Side** | **Actual Length**  **Option A Option B Option C** | | | **Conversion to cm** |
| **A** | **.09 hm** | **50 dm** | **10,000 mm** |  |
| **B** | **.0065 km** | **140,000 mm** | **125 dm** |  |
| **C** | **160 dm** | **.01 km** | **0.16 hm** |  |
| **D** | **11,000 mm** | **.22 hm** | **.03 km** |  |

***Use the back of this sheet to figure out your scale and your model house measurements.***