Who Can Build the Tallest Tower? **Name:**

For this activity you will be fine-tuning your model building skills. Your team's task will be to *build the tallest structure you can with these limited materials and tools*

MATERIALS

- ⅛" diameter wood dowel (**20 sticks**)
- cardstock paper (**4 pieces**)
- cardboard (**2 square foot**),
- hot glue (**half stick**)
- tape (**a three feet**)

TOOLS

- Scissor
- Utility Knife (after tutorial)
- Hot Glue Gun
- Measuring Tape / Ruler

First, with your team, draw a blueprint of your design (see backside). Your team must all agree on the same design. Include:

- Front view and top view.
- A scale. (1 unit on the blueprint represents how many inches in real life?)
- Labels detailing how your different materials are used.

Important limitation: Your structure must be **three dimensional**. For example, you can't just glue a bunch of sticks together and put them at the top of your tower.

Based on your blueprint, list the quantity of each type of material you need. Remember you cannot exceed the quantities listed above.

	Wood Dowels	**Cardstock Paper**	**Cardboard**	**Hot Glue**	**Tape**
Amount Needed (use blueprint)					
Amount Remaining					

Now answer question #1 below.

Next, share your blueprint and material list with me. Remember all team members must have a complete blueprint with an agreed upon design. Then we will give you the materials for building the structure. Remember that you can only use the provided materials.

When you're building the structure, you can make changes in your design — but you must make note of these changes on your blueprint.

1) How tall do you **predict** your structure will be?

2) What **changes** did you make in your structure when building it? And why?

- Remember that you must update your blueprint with these changes.

BLUE PRINTS (Front View and Top View)

FRONT VIEW

SCALE: 1 unit = inches

TOP VIEW

SCALE: 1 unit = inches