



Towers Design Notebook

Most tower designers will start with the question of what kind of wood to use. That decision has already been made for you though, you will be using balsa wood. The next decision you need to make is what shape you want your base to be.

What are some possible options of tower base shapes?

Which shape would you like use and why?

What are the four different types of joints and what are their strengths/weaknesses?

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What are five other helpful hints you found in the resources that you want to remember as you work through this project?

1.

2.

3.

4.

5.

Look at pictures and videos of towers online. Take note of different brace structures (Z shape, X shape, V shape, etc.). Try to find a relationship between the design of the tower and how the tower performed in tests. Draw three designs that you think would be successful and explain why. (You only need to draw the design for one side of the tower, unless you plan to use different designs on different sides)

Now it's time to get together with your team and discuss what you have come up with so far. Be sure to listen to other's ideas with an open mind and compromise to come up with a design. Draw your team design below, including dimensions.

Fill out the following at the conclusion of either build day 2 or build day 3.

What have you learned about your tower so far?

Have you made any changes to your design? If so, why?

What is one thing you feel your team could do to make your tower better at this point in time?

Fill out the following at the conclusion of the competition day.

How do you feel about your tower's performance? Explain.

What were the qualities you noticed in towers that performed well?

If you were going to build another tower, what would you do differently?