

Name: _____ Partner: _____ Grade: _____/300 points

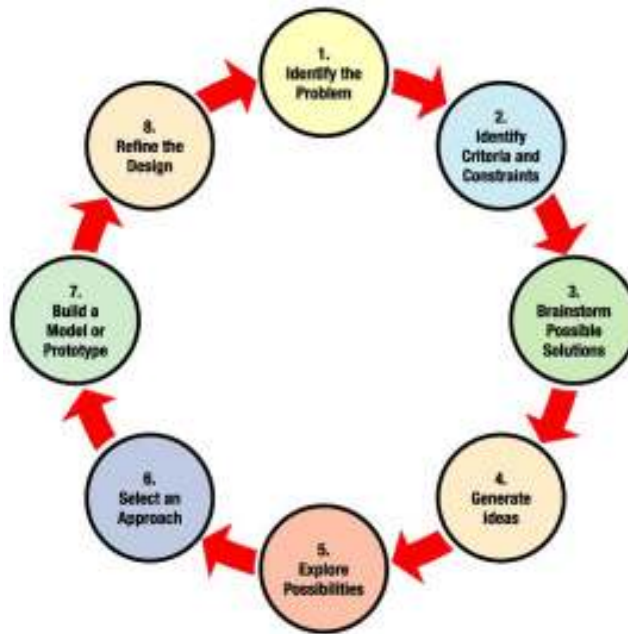
Penny Tower Engineering Design Brief

100 points for designing tower, 100 points for making the tower, 100 points for completing review questions. 100 extra credit points can be earned for making a tower taller than 6 feet tall.

Challenge: To create the tallest possible free-standing paper tower that holds a penny at the top. The measurement will be wherever the penny is resting. You may tape the tower to a base. It must hold the penny for 3 seconds.

Restrains: You will be given 5 sheets of regular computer paper and 12 inches of masking tape and one penny. The only tools available for your use are a pair of scissor, a ruler and a writing utensil.

Instructions: 1. (100 points) Brainstorm and draw thumbnail sketches of possible ideas on the back of this sheet. Then list IN DETAIL (50+ words) how you plan to build the tower. Include labels of the measurements of each part. 2. (100 points for creating a working tower that is 30" or higher. 29"= 97A and so on.)



Review questions: (20 points each. Write in complete sentences!)

1. Look at your original design. How tall did you predict your tower would be? How tall was your finished tower?
2. Does your tower look like your original design? If not, what did you change? Explain.
3. Which tower won the contest? Why did their tower do better than yours? What was different?
4. Hypothetically, if you made a “perfect” tower. What is the maximum height it could be? Explain.
5. If you were to do this challenge again, what would you do differently? Be specific.