

Name _____

Date _____

APPLE TOWER

Challenge: What is the tallest tower you can build to hold and support a real apple? Bonus: Can your tower **ALSO** be interesting from all sides?



Brainstorm: What shapes will create the strongest base for your tower? What art or design techniques might work best to make your tower interesting to look at from all sides?



Create: Draw and label your design. Create it. Test it.



Test & Reflect:

Does your design work consistently?

Yes. ☐ No. ☐

No. ☒

If your chain keeps breaking when tested, can you identify an area of weakness?

Yes. ☒

Yay! Your chain holds strong! Can you add a challenge by adding length to your chain or testing your current design with more weight?



Improve: What changes can you make to your design to improve it? This might be an engineering change to your tower design to make the tower stronger or taller. This could also be a design change to make your tower more interesting to look at. Describe or draw these changes below.



Re-Test:

Does your design work consistently now?

Yes. ☐ No. ☐



Reflect: What worked well in your design?



Reflect: Was there anything that still did not work well in your design, even after improvements were made? What might you try differently the next time?

