



DESIGN CHALLENGE

Bridge Builder

Build the strongest bridge with a unique design to support the most amount of weight in pennies. Bridge must span a distance of 10 inches (25 cm), and it cannot be taped to the support structure.

What You'll Need

- 20 plastic straws
- 1 small sheet of paper/foil
- Tape
- Scissors
- Ruler
- Pennies

Quote



Explain the quote listed in your own words, and then describe how it applies to the design challenge.

"Design is not how it looks like and feels like. Design is how it works."

– Steve Jobs



Reflection Questions:

What did you learn in this challenge?

How would you teach what you learned to someone else?



Redesign Challenge:

Redesign your bridge to use the least amount of straws and still support the same amount of weight.



Overall Design Reflection Questions:

- What were some interesting discoveries you made while working on the Design Challenges?
 - About the problems? About yourself?
- What were some of the difficulties of the Design Challenges?
 - What made them difficult?
- What were some learning moments?
 - What made them so?
- How can you use what you have learned in the future?

If you are finding these challenges fun and learning about what you enjoy doing, check out, our Find Your Passion activity, TGR EDU: Explore tgreduexplore.org/curriculum