# STEM SQUAD DESIGNING BRIDGES 



Bridge Terms

- Dead weight: how much the bridge weighs
- Load: the weight of the vehicles and people that cross a bridge
- Compression: a force that shortens structural members, pushing them together
- Tension: a force that lengthens structural members, pulling them apart


## Materials

- 50 mini marshmallows
- 100 toothpicks
- Pasta
- Paper road
- Pennies
- Popsicle stick

Requirements

- Bridge can only be made of marshmallows, toothpicks, and pasta
- Bridge must hold paper road
- Bridge must span 6 inch gap (length of the popsicle stick)


## Goal

- Hold at least 50 pennies

Scoring Categories

- Tallest bridge
- Uses least amount of materials to hold 50 pennies
- Holds the most amount to pennies before collapsing
- Most original bridge design
- Most attractive bridge design

