

# Engineering

## Tower Building



### CHALLENGE

Hello STEM students! We need your help to design and build the tallest freestanding structure. Straws and masking tape will be used to create your tower. Teams will use practice sessions to learn designs that will help build strong structures. At competition, teams will be provided straws and masking tape to build their structures within 30 minutes. Best of luck, engineers!

### Criteria for Tower Building

- Must be created by students **only** during STEM sessions and competition
- Students should work in a team of 3 to 4 participants, each an active member of the team
- Must use regular drinking straws provided by the district
- Must use masking tape provided by the district
- Scissors can be used to cut straws to create different sizes within the structure
- Base of the structure can be taped to butcher paper provided at competition
- Teams will be given 30 minutes to build the tallest tower at competition
- Towers must stand independently for the duration of the judging
- A winning team from each school will be named for building the tallest tower. The tallest tower overall will be named "District Champion".

### Accepted Materials

- Regular drinking straws
- Masking tape
- Scissors

### Constraints for Challenge

- Build a freestanding tower within 30 minutes at competition
- Use only 70 regular drinking straws and masking tape provided