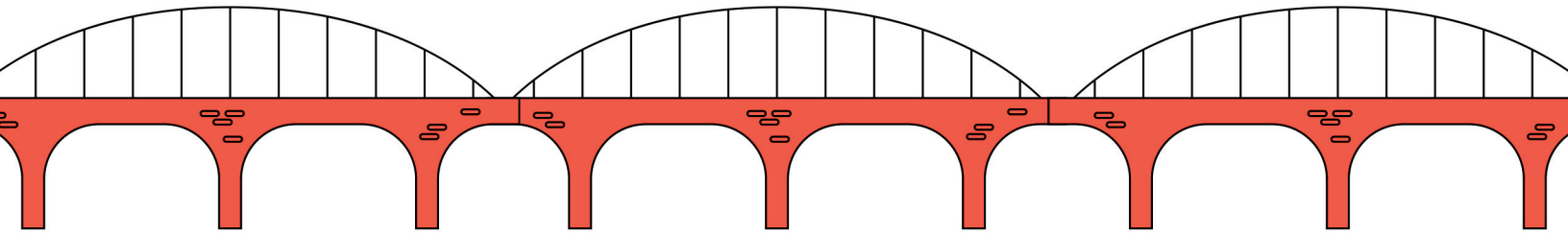


## EVENT #1 - BRIDGE BUILDING

Goal: Build a bridge that can hold the most weight.



### Materials List

- Craft sticks and Masking Tape (1st - 3rd graders)
- Spaghetti noodles, Masking Tape, Hot Glue (4th - 6th graders)
- Spring scale
- Bucket
- Sand or other material to add weight gradually

### Lesson Highlights

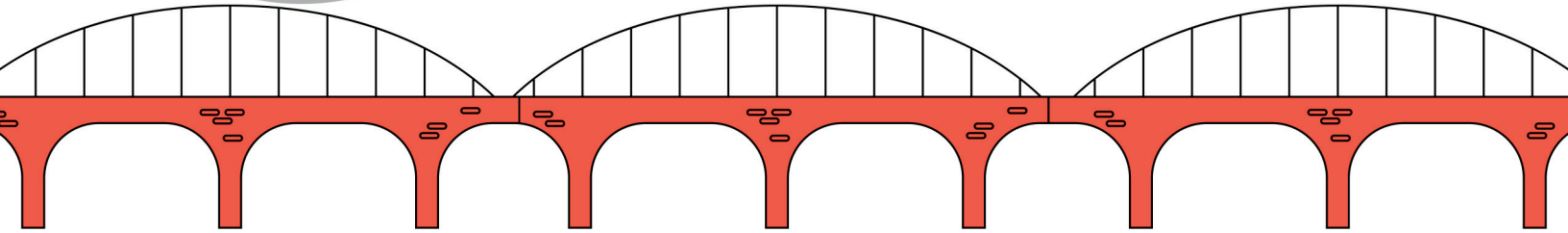
- Show examples of types of bridges. (Truss, Suspension, Cable Stayed, Arch, etc.) Compare and contrast their features
- Define and show the forces of compression and tension. Compare and contrast squares v. triangles in tension and compression.
- Students can now use this information to design and build their bridges. Place two desks or tables 18" apart to make a span for testing.
- Test each bridge using the spring scale and weight.

**Measure Success:** In the final event, the winning bridge will be the one that holds the most weight before breaking.

**Each student who completes the workshop should receive a sign-up flyer!**



# ***You Did It!***



You've qualified for the BRIDGE BUILDING COMPETITION at the  
LANCASTER STEM SHOWDOWN!

Follow the link below to sign up for the competition on DATE and  
TIME at PLACE.

Space may be limited, so be sure to sign up now!

## **EVENT #1 - BRIDGE BUILDING**

