

# Teacher's Guide

Forces In Motion - Engineering - STEM

## THE STICK PLATFORM

STEM LEARNING

This fun STEM team building activity will get your glass thinking about forces as they build the strongest platform they can off the ground using only sticks and string. Once students have planned, built, tested, and evaluated their platforms they can have a fun competition to see which platform hold the heaviest weight.

This activity is great if you are looking at forces in motion, engineering, or simply as a fun team building activity. It is easy to set up as you only need access to our resources, string, and sticks.

### Teaching Structure:

- Planning sheet – Students will discuss ideas and complete the planning sheet.
- Build the platform – Give students 20 – 30 minutes to build their platform.
- Test the platform – Give students 5 minutes to test their platform.
- Evaluation sheet – Students will fill in the evaluation sheet, thinking about what went well and what they could do to improve their designs. Give each team 5 minutes to improve their designs.
- Competition! See which tower can hold the most weight. You could use stones, weights, or anything else you can find.

### Resources needed:

- Resource pack
- Sticks (any size)
- String
- Scissors

It is useful to go through some basic knots with your class before doing this activity.