

# Columns

## **Materials**

Rounded beams from NXT kits (bigger than 1x9)

Connectors

Rounded "L" beams from NXT kits

## **Problem**

The rounded beams (columns) provide a lot of vertical support but need to be supported to stand up on their own. Students must use LEGO pieces to provide more stability for the columns. As a demonstration, have a student volunteer and put their feet together and then gently push them so that they stumble. Then have the student put their feet further apart and push again so that they remain upright.

## **Procedure**

Provide students with the columns and have them brainstorm and design first in groups, keeping in mind the newer NXT pieces which they might not have seen before. Have students build for about 30 minutes and when done, give them 5 minutes to plan a presentation. The presentation should include: What their design is, One thing that went wrong, and One thing that they would do differently or do to make it better.