

THE FLOOR IS LAVA

Save the day with this structural engineering challenge.

MATERIALS:

- 3 plastic cups
- 5 craft sticks
- 1 index card
- Counting bears or other math manipulatives ([example](#))

METHOD:

1. Divide into teams of two to three students.
2. Each team has 10 minutes to design and build a structure to keep as many counting bears as possible off the table using plastic cups and craft sticks.
 - a. Rules: Bears must be above the table and outside the cups.
3. After 10 minutes, each team counts the number of bears they rescued. Share your design with the class with a quick report out.
4. Repeat steps 2 and 3, adding one index card to the available materials.

TAKE IT BACK TO CLASS:

- Add materials as students adjust their prototypes. Examples: plate, tape, more craft sticks.
- Are there any common design characteristics among teams? What suggestions do students have for other teams to make their design successful?

SOURCE:

[“Epic Kindergarten STEM Challenge - The Floor is Lava” from Forward With Fun](#)

NOTES

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.