

TARWATER ELEMENTARY SCHOOL STEM LAB

Activity ID: N-4

Activity Name: Tower Up

MATERIALS:

Materials Provided in Bin:

Item:	Quantity:	Notes:
Lesson Plan	1	
Gumdrops	1	

Materials In STEM Lab or Classroom (Common Items):

Item:	Quantity:	Notes:
Box of Paper Clips		
Ruler or Meter Stick		
Paper for sketching designs		

Materials Teacher/Parents Need to Provide:

Item:	Quantity:	Notes:
Raw Spaghetti		

WHAT ARE WE DOING?

Tell students that they are architects and engineers who must use the materials at hand to design and build a tall tower that can support the weight of a box of paper clips, unassisted (students cannot help hold it up). (opt) Include earthquake resilience (table shaking) as a requirement.

VIDEO / LINKS

(add if any)

SAFETY NOTES:

Be careful not to poke yourself or other with clips or spaghetti

SCIENCE TERMS:

None Provided

STEPS:

Have students get into small groups

- Have them take some time to discuss what they need to consider before building their structure.
- Teams will have 10 minutes to plan, sketching the design they are going to build.

- Team will have 20 minutes to actually build the structure
- Team will have 10 minutes to test their structure

QUESTIONS TO ASK STUDENTS:

- Invite students to talk about ideas they thought of and the process they followed while designing and building their tower.
- How different was their design from when they started to when they finished.

CLEAN-UP:

- Place classroom supplies in their place
- Save materials that can be reused.
- Put in the trash materials that you need to throw away

IF RUNNING OUT OF A SUPPLY IN THE BIN, PLEASE
CONTACT LAURIE JONES IN THE OFFICE (X4307)
JONES.LAURIE@CUSD80.COM