STEM TO GO
Activity: LIFE BOAT

A Quick Note from Natalie

As summer comes to an end, I hope you are feeling invigorated for the new school year! Despite the amount of preparation, organization, and planning you have done – it is not lost on me that this time of year is overwhelming.

My hope is for you to use this low-prep STEM activity at some point in the first few weeks of the school year as a way to not only give yourself a break from planning, but to also engage your students in a fun STEM activity. This activity is a great way for students to ease back in to teamwork, as well as a nice introduction to the design process and problem-solving.

Onward in STEM!
Natalie

MATERIALS AND PREP

MATERIALS
1. Mini foam balls (_try these_)
2. Toothpicks
3. Tub with water
4. _Optional – crayons, or another item to use as a weight_

PREP
1. Place 20 foam balls and 40 toothpicks in a bag for each student group
2. Fill a small tub with water for testing the life boats.
3. _Optional – crayons, or another item to use as a weight_

ACTIVITY DESCRIPTION

Challenge: Can you use foam balls and tooth picks to create a raft that can float in water?

Extension: How many crayons can your raft hold before taking on water or sinking?

Divide your students into collaborative teams and task them with this challenge. Encourage creative and "out of the box" thinking while they develop solutions. Consider using this Engineering Design Process Graphic and Guide as a resource.

Remember – always do what's best for you and your students! Change the number of foam balls and toothpicks your students get. Set a 10 minute timer for students to complete the challenge. Have students draw a plan before they get materials. Set dimensions for the raft that the students must consider.

Do you have any questions about how to use this STEM TO GO activity? Please don't hesitate to reach out. ncrotte@esclakeeriewest.org