

MATERIALS LIST:

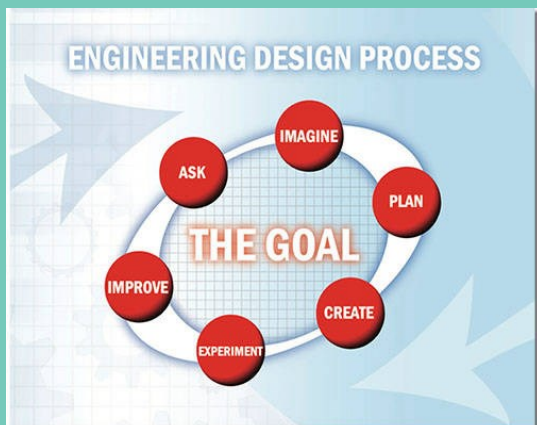
- A piece of aluminum foil (recommended approximately 6" x 6" square pieces, one per boat)
- A bin or large bowl
- Water
- Pennies (or washers)
- Paper for recording data
- Pen or pencil
- A towel



ENGINEER TO A BETTER BOAT

Engineers apply science and math to solve problems and change our world.

How do engineers solve problems? It all starts with a question. From there, they imagine and test out different solutions, learning more and more with every test.



Float Your Boat

PROCEDURE:

Have science fun as a family! Complete activities with parental supervision.

1. Fill the bin or large bowl with water. The water should be 2-3 inches deep.
2. Shape the pieces of aluminum foil into boats of different shapes and sizes.
3. Place one of the boats into the pan. See what boat floats best by adding pennies to the boat until it sinks!
4. Count and record how many pennies the boat could hold before sinking.
5. Do you have foil at home? Try to make some other boats! Do some shapes work better than others? What kind of boats hold the most coins? The least?
6. Be sure to take a picture or video to share in the Facebook comments on the Buffalo Museum of Science or Tiff Nature Preserve pages!



TRY THIS!

- ⇒ Using what you learned from the other boats, could you improve on your design? Create another boat using the ideas you learned in your test boats! Try to beat your record!
- ⇒ Is all water the same? Create two identical boats and get another bowl or basin. To one bowl, add about 1 cup of salt. Then, add pennies. Do you get the same results?