Float Your Boat! – Scientific Method Project



**PROBLEM: Which boat do you think will hold the most pennies without sinking?**

**CHALLENGE: Can your group of 3 or 4 people design the best boat?**

**MATERIALS:**

* 1 piece of tinfoil • 2 toothpicks
* 4 marshmallows • 1 piece of tape
* 2 felts • Candy wrappers

**PROCEDURE:**

1. Find your group (they all have something in common that contained a tasty treat)
2. Brainstorm (5 mins) in your group some ideas as to what will make your boat hold the most pennies and still float…design, shape, size, colour? What matters?
3. Draw a rough sketch of your boat (5 mins) – be prepared to explain to the class why your boat will win the challenge.
4. Build your boat (20 mins) – it doesn’t have to match your drawing – you are still trying to win the contest so make any changes now!
5. Bring your boat to the duck pond for testing!

**Float Your Boat – Class Data**

Copy the data table on the board in to the space provided below.

|  |  |
| --- | --- |
| Team Name | # of Pennies |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

Testing Ponds

Pond 1–

Pond 2–

Pond 3–

Pond 4-

**Homework – due tomorrow:**

Create a graph of the data above. You can use which ever type of graph you think is best. This graph must be done on a separate sheet of paper. You can draw it by hand or use the computer. Please make sure it is clear and easy to read.