

# FLOAT A BOAT

## BOUYANCY

TEACHER JOHN STRAIN



### Challenge:

Learn English vocabulary to understand buoyancy. Then use your knowledge to build a tinfoil boat and test different designs to see how many coins you can load without sinking your boat.

### Material:

Data Sheet - 30 cm ruler - Tin foil (20 cm x 20 cm) - Coins - Hand towels - Tub  $\frac{1}{2}$  full of water

## WHAT TO DO?

### Each student will:

1. Shape your tin foil to make a boat and draw your design on the *data table*.
2. Predict how many coins your boat will hold. Write it on the *data table*.
3. Float your boat. Put 1 coin at a time on your boat.
4. Count how many coins your boat holds and record on your *data table*  
Do not count the coin that sinks your boat.

### Round 2:

Discuss with your team the boat designs. Make 1 more boat as a team to compete against other teams. Use your data table drawings to help you.

### Round 3:

The teacher will float 2 boats of the same design in different tubs of water. One tub will be tap water. The other tub will be filled with salt water. Predict how many coins the boat will hold. Predict how many coins can be held if the boat size was doubled

## DATA TABLE

<b>Draw Your boat</b> <b>Label the:</b> <i>Height, Length and Width</i>	<b>Predict how many coins your boat will hold.</b>	<b>Actual number of coins your boat held.</b>
1.	1.  _____  _____	1.  _____
2.	2.  _____  _____	2.  _____
3.	3.  _____  _____	3.  _____
4.	4.  _____  _____	4.  _____
<b>Team</b>	<b>Team</b>	<b>Team</b>
	_____  _____	_____