

## WILL IT SINK IN THE SINK?



HAVE YOU EVER NOTICED THAT SOME THINGS SINK AND OTHER THINGS FLOAT? GATHER A COLLECTION OF OBJECTS (WITH THE ADMIRAL'S PERMISSION), FILL UP A SINK OR LARGE BOWL WITH WATER AND TEST YOUR ITEMS.

BUOYANCY MEANS HAVING THE ABILITY TO FLOAT. LIST YOUR ITEMS IN THE CORRECT CATEGORY.

BUOYANT

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NON BUOYANT

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WERE YOU SURPRISED WITH SOME OF YOUR RESULTS? WHAT WERE SOME CHARACTERISTICS OF THE "FLOATERS"? DID ALL HEAVY OBJECTS SINK AND LIGHT OBJECTS FLOAT? EXPLAIN WHY SOME THINGS FLOAT AND OTHERS SINK. TRY THIS ACTIVITY AGAIN WITH THE SAME OBJECTS, BUT POUR SALT IN THE WATER UNTIL IT BECOMES CLOUDY THEN RETEST YOUR OBJECTS. DID YOU GET THE SAME RESULTS? WERE THERE SOME NEW FLOATERS? WHY?



ILL HAVE A  
Root Beer  
FLOAT!





## WILL IT SINK IN THE SINK?

### PART 2

LET'S TRY ANOTHER EXPERIMENT TO LEARN MORE ABOUT WHY THINGS SINK OR FLOAT. FIRST, CUT TWO 4 INCH X 4 INCH SQUARES FROM ALUMINUM FOIL. SHAPE ONE OF THE SQUARES INTO A BOAT AND WAD THE OTHER INTO A BALL. FILL A SINK OR BOWL FOR TESTING. WHAT DO YOU THINK WILL HAPPEN WHEN THEY ARE PLACED IN THE WATER?

YOUR PREDICTION:

WHAT WILL HAPPEN? \_\_\_\_\_  
\_\_\_\_\_

ARE THE SQUARES EQUAL IN SIZE AND WEIGHT? \_\_\_\_\_

YOUR RESULTS:

WERE THE RESULTS OF THE TWO FOIL SHAPES DIFFERENT OR THE SAME? \_\_\_\_\_

WHY? \_\_\_\_\_  
\_\_\_\_\_

EVEN THOUGH THE FOIL SQUARES WERE IDENTICAL IN WEIGHT AND SIZE, THE FOIL BALL SANK BECAUSE IT HAD LESS SURFACE AREA TO SPREAD OUT ITS WEIGHT.

NOW TRY ANOTHER EXPERIMENT. CUT OUT A 10 INCH X 10 INCH FOIL SQUARE AND SHAPE IT INTO THE SAME SHAPE AS THE 4X4 BOAT YOU MADE.

TRY ADDING PENNIES ONE AT A TIME TO EACH BOAT. KEEP A COUNT OF PENNIES UNTIL THE BOATS SINK. WERE THERE ANY SURPRISES? WHICH BOAT HAD A GREATER CAPACITY TO HOLD PENNIES?

