

Name _____ Period _____ Date _____

Brain Building Broadcast: Sink or Float

Watch the video located at any one of the following addresses:

<http://goo.gl/4sZ66>

<http://vimeo.com/50257379>

<http://www.youtube.com/watch?v=gTel-ahWYCs&feature=g-all-u>



This video depicts a game show featuring several prominent staff members at South. Watch the show and use the form below to play along at home as you watch the staff members play. Predict whether you think the object will sink or float. Give yourself the appropriate number of points if you have guessed correctly.

Round 1

Object	Circle Your Prediction	Point Value	Circle the Result	Your Current Score
Rubber Ducky	Sink / Float	100 Pts.	Sink / Float	
Golf Ball	Sink / Float	100 Pts.	Sink / Float	
Basket Ball	Sink / Float	100 Pts.	Sink / Float	

1. (Multiple-Choice) Based on the commercial break, you can remember the equation for density by saying "I ♥ density!" What is the equation for density?

a. $\frac{Volume}{Mass} = Density$

b. $Mass \times Volume = Density$

c. $\frac{Mass}{Volume} = Density$

d. $Volume \times Mass = Density$

Round 2

Object	Circle Your Prediction	Point Value	Circle the Result	Your Current Score
Wiffle Ball	Sink / Float	200 Pts.	Sink / Float	
Can of Pepsi	Sink / Float	200 Pts.	Sink / Float	
Can of Diet Pepsi	Sink / Float	200 Pts.	Sink / Float	

2. (Multiple-Choice) You pull the cork out of a bottle of sparkling grape juice. The cork has a volume of 12 cm^3 and it has a mass of 3 grams. What is the density of the cork?

- a. 4 g/cm^3
- b. $.25 \text{ g/cm}^3$
- c. 15 g/cm^3
- d. 9 g/cm^3

Final Round

Object	Circle Your Prediction	# of Points You Will Risk	Circle the Result	Your Final Score
Bowling Ball	Sink / Float		Sink / Float	

3. (Circle the correct bold words) Objects that sank have a density (**greater than** / **less than**) water.

4. Circle ***all*** the objects from the game show that have a ***density less than water***.

Rubber Duck

Diet Pepsi

Golf Ball

Wiffle Ball

Basketball

Bowling Ball

Pepsi