

## Will it Float?

## Grade 2: Properties of Liquids and Solids

1. If they are made of the same material why does the clay (or playdough) boat float but the ball sinks?

The clay boat floats, while the ball sinks, because the weight of the clay in the boat is spread out over a larger surface area and has air in the middle which helps keep it afloat.

2. Do you think the boat will eventually sink if we add a lot of heavy items to it? Why?

Yes, because it will eventually be too heavy to float. Bonus: If we wanted it to continue to float we would have to make the surface area of the boat larger so that the weight would be spread out more.

3. Do you think the boat would still sink if it was placed in milk, soap or oil? Why? If you can, test this out!

Example: I think the boat will float in soap because soap is thicker than water. When I tested it, the boat was able to float.

4. Draw a picture of what you would do if you wanted to float in water?

Should draw a person lying down (like a Starfish), taking up as much surface area as possible.

5. Find 5 objects in your home (make sure you have permission to use them). Hypothesize (guess) whether it will sink or float. Fill a bowl with water and test it out! Fill in the chart below as you go!

Object	Hypothesis (What do you think will happen?) (It will float/It will sink)	Did it Float? (Yes or No)
Example: Marble	It will Sink	No

6. Why do you think the objects that floated stayed above water? What made them different from the ones that sank?

This answer should be based on the objects they chose and the results they got, therefore, answers may vary.

Example: Almost all the objects that were heavier sank and all the ones that were lighter were able to float.