

Topic: Materials

Does an Orange Float or Sink?

<http://www.sciencekids.co.nz/experiments/orangefloatorsink.html>

Does an orange float or sink when placed in water? Seems like a fairly straight forward question, but is it? Give this fun density science experiment for kids a try and answer the question while learning a unique characteristic of oranges.

What you'll need:

- An orange
- A deep bowl or container
- Water

Instructions:

1. Fill the bowl with water.
2. Put the orange in the water and watch what happens.
3. Peel the rind from the orange and try the experiment again, what happens this time?

What's happening?

The first time you put the orange in the bowl of water it probably floated on the surface, after you removed the rind however, it probably sunk to the bottom, why?

The rind of an orange is full of tiny air pockets which help give it a lower density than water, making it float to the surface. Removing the rind (and all the air pockets) from the orange increases its density higher than that of water, making it sink.

Density is the mass of an object relative to its volume. Objects with a lot of matter in a certain volume have a high density, while objects with a small amount of matter in the same volume have a low density.