

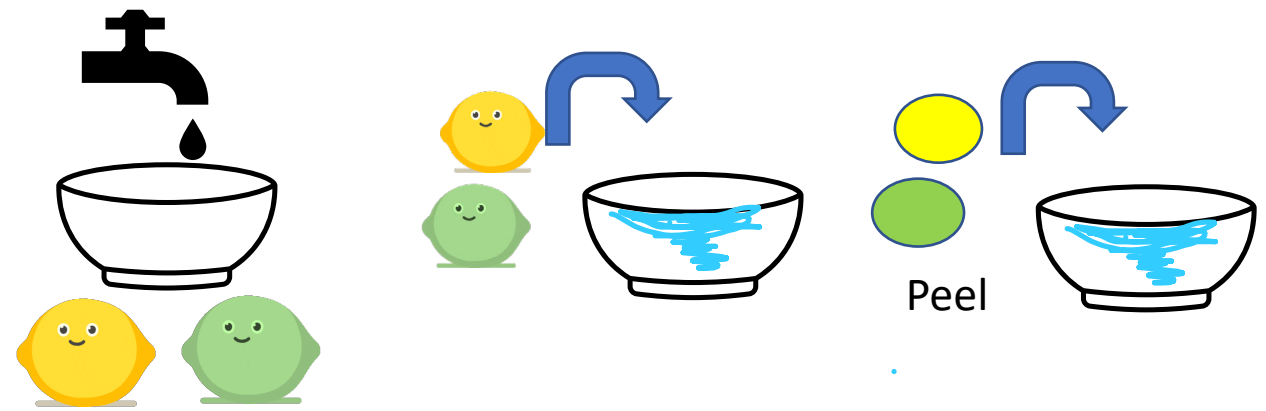
Lemon versus Lime

What you need:

- Lemons and limes
- Basin filled with warm water (room temp)
- Peeler

What you do:

- Drop the lemon into the basin filled with water. What happens?
- Drop the lime into the basin filled with water. Is there a difference?
- Take the lemon and lime out of the water and peel, try to remove as much pith as possible.
- Drop the peeled lemon and lime back into the basin of water.
- What happens now?



The Science

An object will float if it is less dense than the liquid it is placed in and will sink if it is denser than the liquid it is placed in. Lemons and limes both have densities that are very close to water, so you would expect that they would both float. However, limes are slightly denser than lemons, which is why they will sink when unpeeled and lemons float. Peeling the fruit affects the density of the lemon, it will now sink slightly. But maybe not as much as the unpeeled or peeled lime.

