

SNACKS



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snacks by subject

snack supplies

snacks from a - z

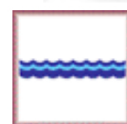
Condiment Diver

The world's simplest Cartesian diver

Squeezing a plastic bottle filled with water and a condiment packet makes the packet sink. Letting go of the bottle makes the packet rise.

materials

- Squeeze condiment packet (soy sauce, ketchup, etc.)
- Clear plastic bottle with tight-fitting lid
- A glass or cup of water



Fluids



Mechanics

assembly

First, you have to figure out if your condiment packet is a good Cartesian diver candidate. Fill a glass with water and drop in your packet. The best packets are ones that just barely float.

to do and notice

After you have found the proper packet, fill an empty, clear plastic bottle to the top with water. Shove your unopened condiment packet into the bottle. Replace the cap... and you're done! Squeeze the bottle to make the diver sink, and release to make it rise. Amazing!



what's going on?

Many sauces are denser than water, but it is the air bubble at the top of the sauce that determines whether the packet will sink or swim. Squeezing the bottle causes the bubble to shrink. This smaller bubble is less buoyant and the packet sinks.



etcetera

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