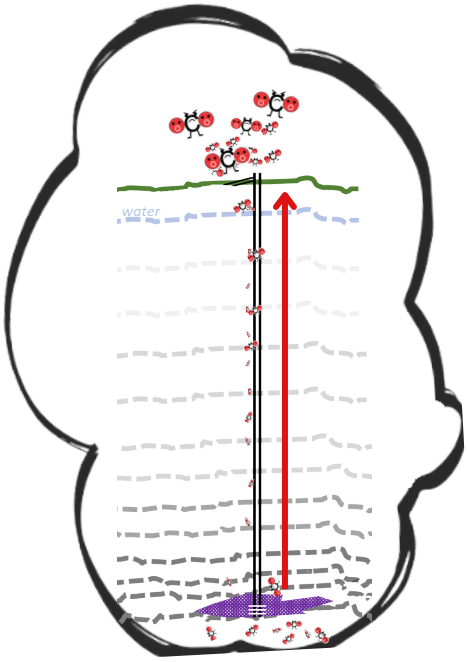
So, how is it that a fluid like CO_2 will stay in place once stored underground?

Won't it bubble up or move around over time? If not now, then in the future?



THE SCIENCE OF SMALL SPACES

Well, to explain it simply, it all has to do with ...

Here, let me show you. Put some clothes on.

K ... now what?

What th— why did you pour coffee on my shirt?!

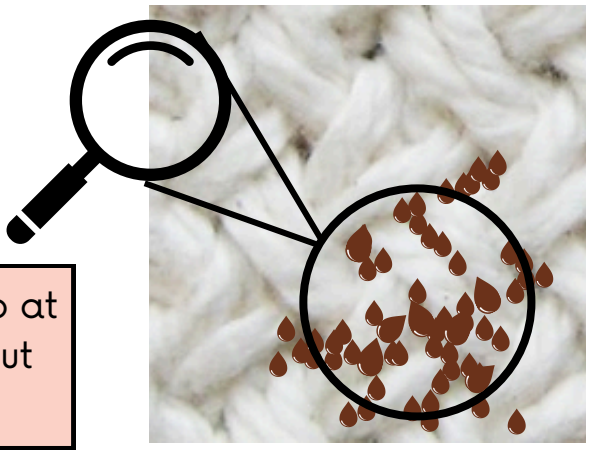
Let's take a closer look.

Now my shirt is wet!

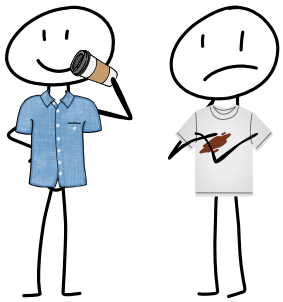
See the coffee spill on the shirt? What can you observe?

That better not stain.

When you look up close, you can see small spaces between the fabric that the drink clings on to.



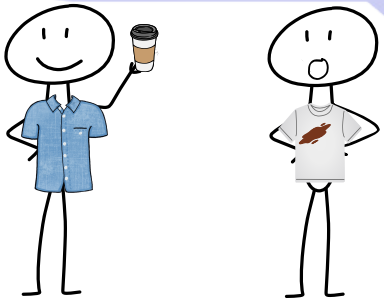
You can try to dab it out with a towel or rub at it, but you won't be able to get the drink out unless you throw it in the laundry.



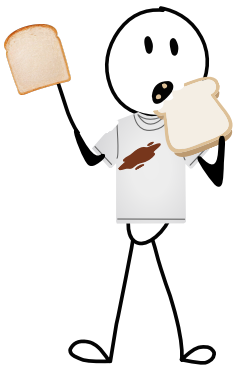
Right ... and you're saying this is because of the small spaces?

Exactly! In very tight spaces, fluids get trapped and permanently stuck.

And that's what happens with CO_2?!

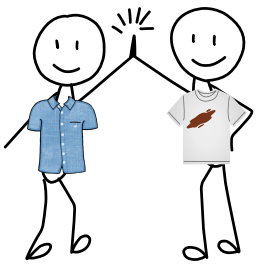


Right! Just like the coffee in the shirt, CO_2 will be trapped when injected underground. That's how we know CO_2 won't just move around—it's stuck!



You can scrape some mayo off, but most of it will be stuck in the small spaces, unable to move.
Just like CO_2!

You can also see this in other day-to-day examples like when you make a sandwich.



I get it now. Thanks!

Once you put mayo on bread, it seeps in, and you can't take it all out no matter what you do.