



Oil + Water do they mix?



Have you ever tried to mix water and oil together to see what happens?

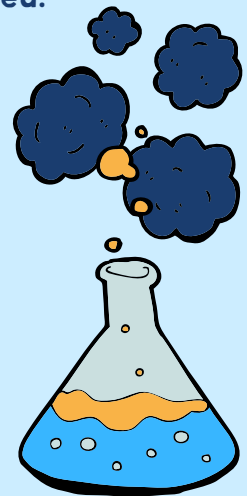
Water is made up of polar particles, which means they have a positive end and a negative end. Only other substances with a polar make up will dissolve or mix into water - for example the food colouring! Oil is non-polar and therefore will not mix or dissolve.

This lava lamp experiment is a fun and visual way to get an insight into our wastewater pipes.. Please note, we are using Asprin Tablets, which is a form of medication, therefore adult supervision is required.



What you need:

- Clear jar
- Food Colouring
- Baby Oil or Cooking Oil
- Water
- Asprin Tablets (generic is fine)



Method:

- 1.Fill the jar 1/4 of the way with water.
- 2.Add 1-2 drops of food colouring.
- 3.Fill the jar with 1 cup of oil.
- 4.Allow to settle
- 5.Drop Asprin in the water. (Adding multiple tablets will have a bigger effect.)
- 6.Observe the water being pushed to the top by the dissolving tablet.
- 7.Allow to settle.

What did we learn?

Why didn't the water mix with the oil and dissolve? Because of their different polar particles! This is why pouring oils down the drain causes big issues for our wastewater network. They pollute our systems and can become sticky and cause serious blockages!

That is why it's best to freeze the oils and fats in containers or soak up in paper towels and empty the solid oils into your general waste bin.

So next time you go to tip your oils down the drain have a think about this experiment and make a more environmentally friendly choice.

Keep our pipes free. Only flush toilet paper, poo or pee!



For more experiments or educational resources visit:
hunterwater.com.au/schools