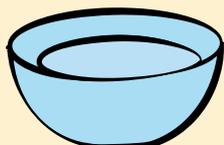




# Slime

It flows, sticks, bounces too ... It looks a bit like gooey slime ... but what is it? This is called a «*non Newtonian liquid*» and slime is one of them! Let's make some!

## What material do you need ?



A bowl



1/2 tablespoon of  
baking soda



1/2 tablespoon of  
washing-up liquid



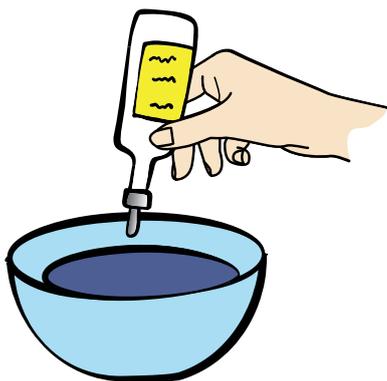
50 ml of  
water



100 ml of  
liquid glue

## Ready ? Let's experiment !

1



In a bowl, pour the water and the glue and mix together.



2

Now add half a tablespoon of baking soda.  
Mix your preparation again.



3



Now it's time for liquid detergent!  
Mix well to obtain a perfectly homogeneous  
substance. What do you observe ?



# Slime (end)

When you add the washing-up liquid, you observe that the texture of the preparation changes. Instead of having a liquid, it sticks and becomes gooey. But as you knead it well with your fingers, you may notice that it becomes less and less sticky and that you can play with it like plasticine.

4



If you want, you can add phosphorescent paint or powder to make it glow in the dark!

Put a lot of it and then leave the mixture near a light source for a while.

## Why does it work ?

When you add the liquid detergent, your preparation takes on an elastic texture that you can stretch as you want. In reality, the glue is made up of very long molecules that look like long cooked spaghetti. To transform the glue into a slime, you have to add small molecules that will create bridges between the longer ones: those of liquid detergent. These bridges snap and reform as you stretch your slime.

If you stop handling it, the slime will spread. Then it flows like water. But if you roll it into a ball and toss it from one palm of your hand to the other, it behaves like play dough. It is therefore an amazing material which, depending on its use, behaves like a liquid or like a solid. This is called a **non Newtonian liquid**.

It is neither a liquid nor a solid. Its behavior changes depending on how quickly you handle it. If you let it stand, it will behave like a liquid and it will take the form of its container. If you handle it quickly, it will behave like a solid and take the shape you give it.

In nature there are many non-Newtonian fluids. Honey or lava for example, or snail slime which is a slime that allows them to move, protect themselves from injuries, protect themselves from dehydration and better capture food!