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Invisible Ink


Stem Activities



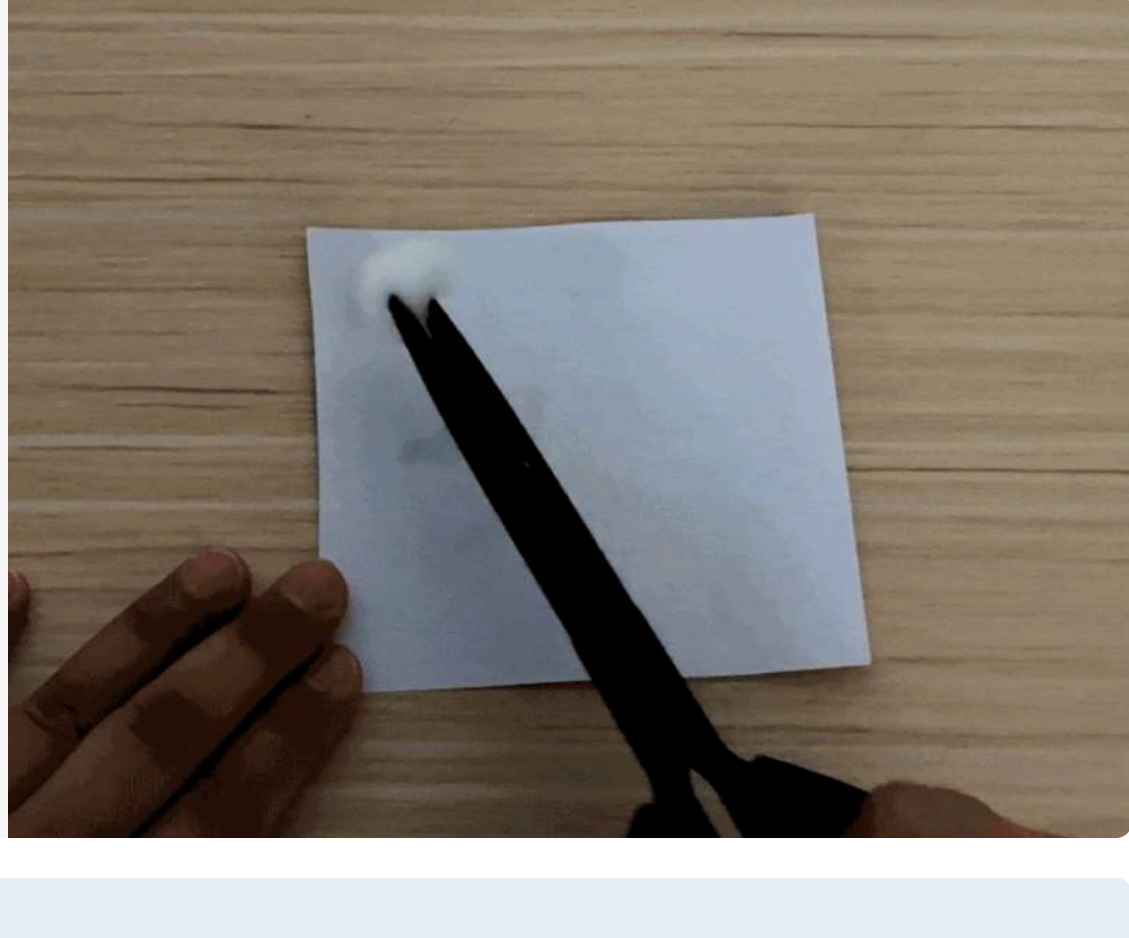
Ages: 6-8



Greater than 30 minutes



Grownup needed



Have you ever dreamed of having mysterious invisible ink that makes your drawings disappear on ordinary paper, only to be revealed through special methods? In this science experiment, we'll not only make invisible ink but also make it glow with a magical fluorescent effect. Let's see how it's done!

Materials Needed

Baking soda
Cotton balls
Water
Glass
Lemon
Knife
Paper
Highlighter pen
Spoon
Dropper
Scissors
Paintbrush



Step-by-step tutorial

Step 1

Use scissors to take apart the highlighter pen and remove the ink cartridge.



Step 2

Place the ink cartridge in the glass, use the dropper to draw up two millilitres of water, then position the cartridge vertically and drop the water into it.



Step 3

Wait patiently until the highlighter ink is washed out by the water and the cartridge becomes colourless.



Step 4

Cut the lemon using the knife.



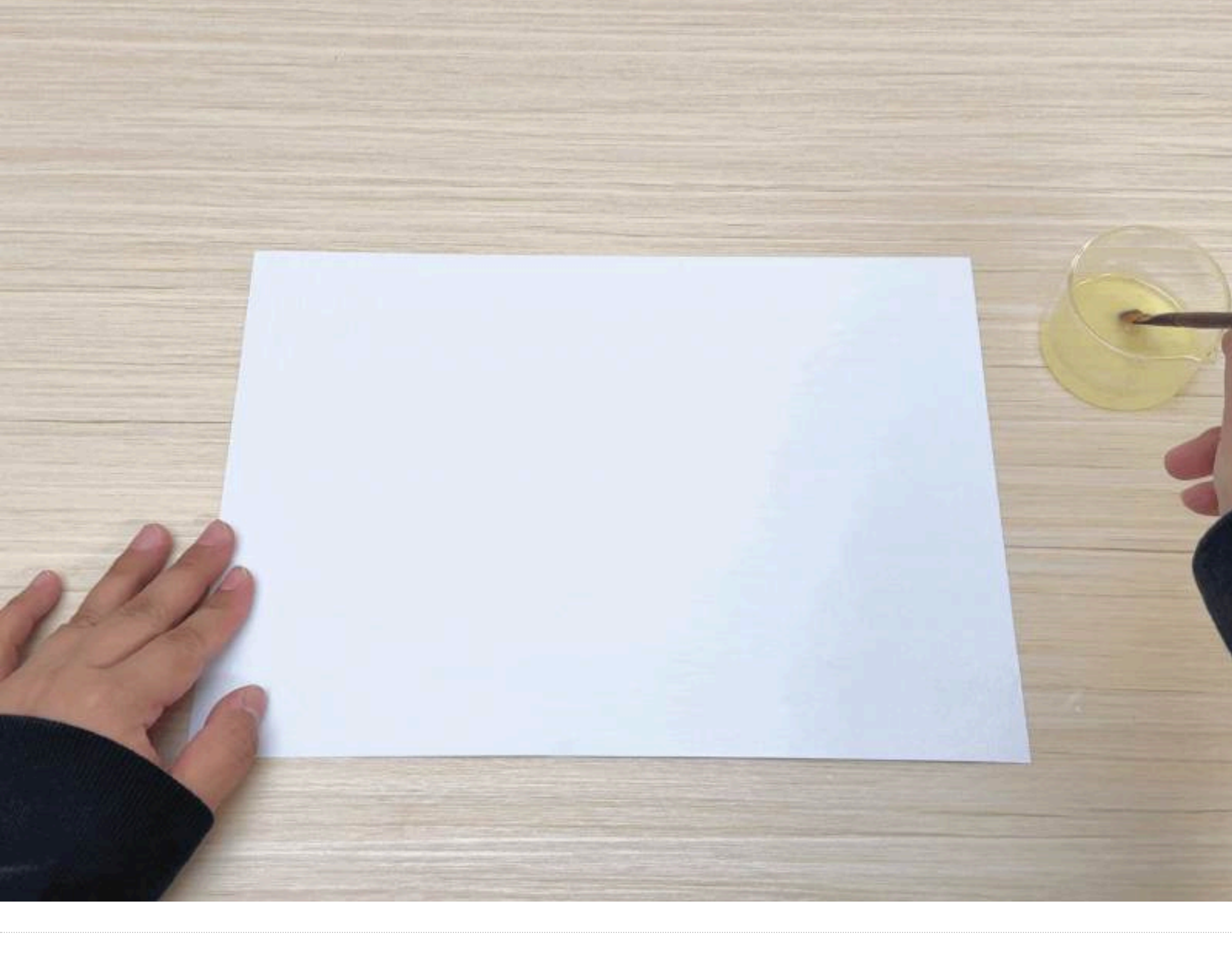
Step 5

Add lemon drops to the fluorescent ink until it becomes pale or colourless. Your invisible ink is now ready.



Step 6

Add lemon drops to the fluorescent ink until it becomes pale or colourless. Your invisible ink is now ready.



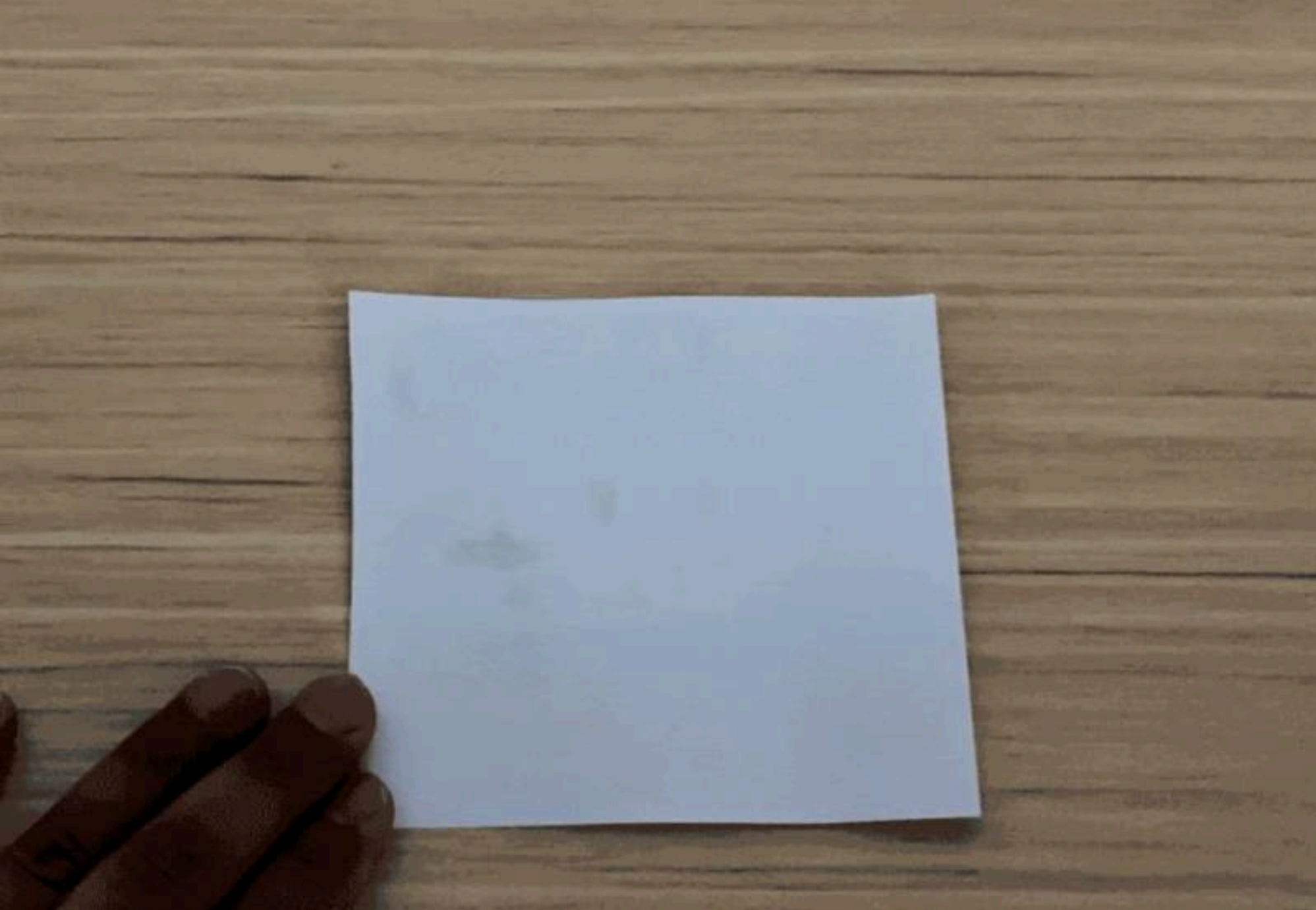
Step 7

Next, add one teaspoon of baking soda to 60ml of water and mix well.



Step 8

Use scissors to grip a cotton ball and soak it in the baking soda solution. Brush the dried paper from step 6 with the cotton ball. Watch the magic happen!



The Science Behind It:

Objects with higher density sink, while those with lower density float. Salt water has a higher density than food colouring, so the colouring floats on top of the salt water. However, since food colouring has a higher density than plain water, it slowly sinks in the cup of plain water.