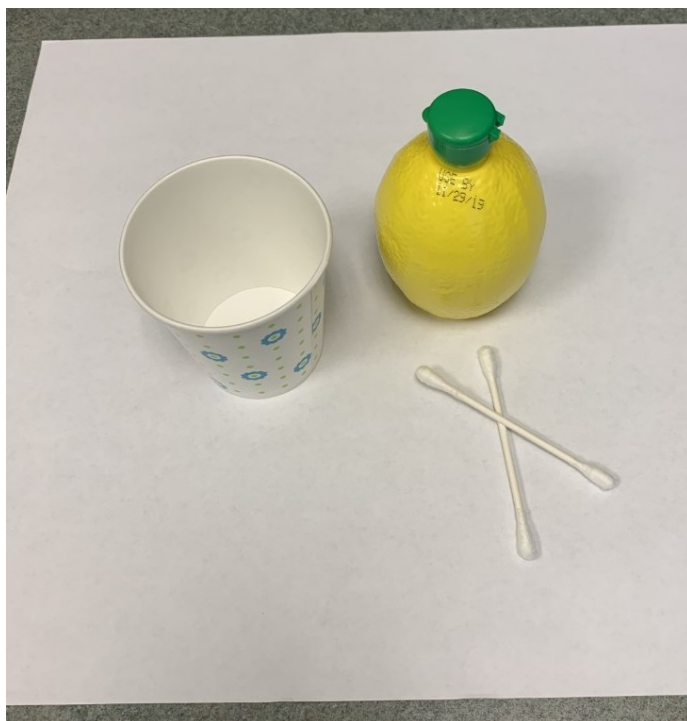


Hey guys! **Miss Leah** here. Have you ever wanted to be a spy? I did when I was a kid! There was this really cool thing you could buy at the dollar store called **invisible ink**. Well, it turns out that invisible ink goes back a lot farther than that. I'm going to show you how to make your own invisible ink!



You will need:

-Lemon juice

-Heat source

-Small cup

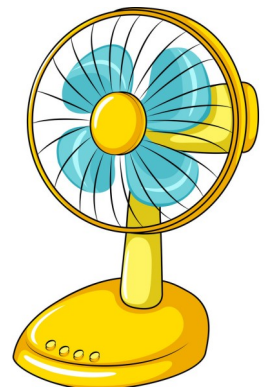
-Q-tip

-Blank paper



Step 1

Pour about one tablespoon of lemon juice into the cup (you can use bottled or fresh squeezed). Using the Q-tip, write your message onto the blank sheet of paper.



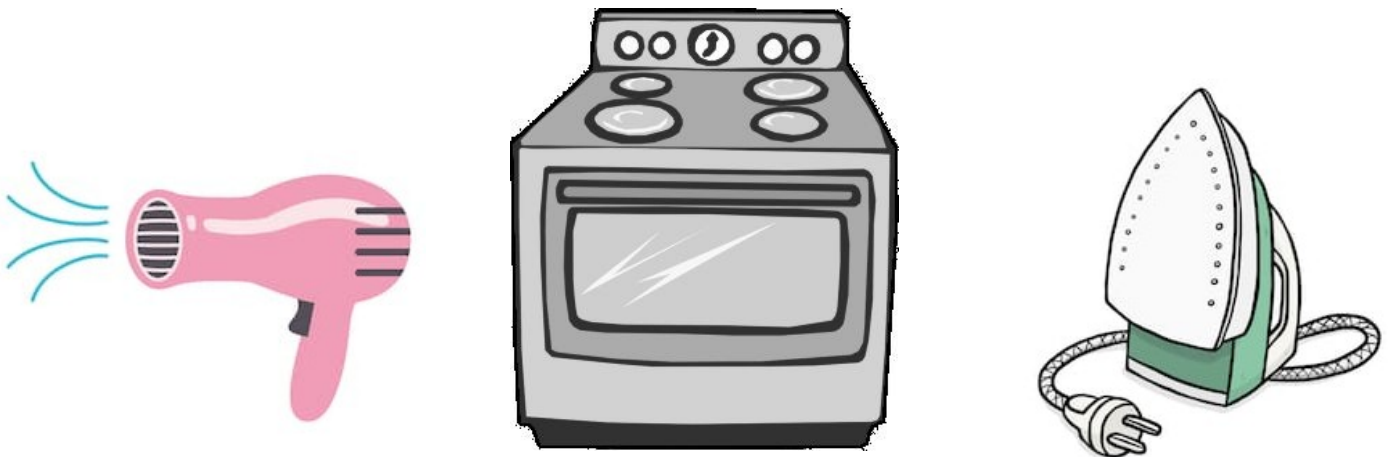
The lemon juice will take about **15 minutes** to dry.

Step 2

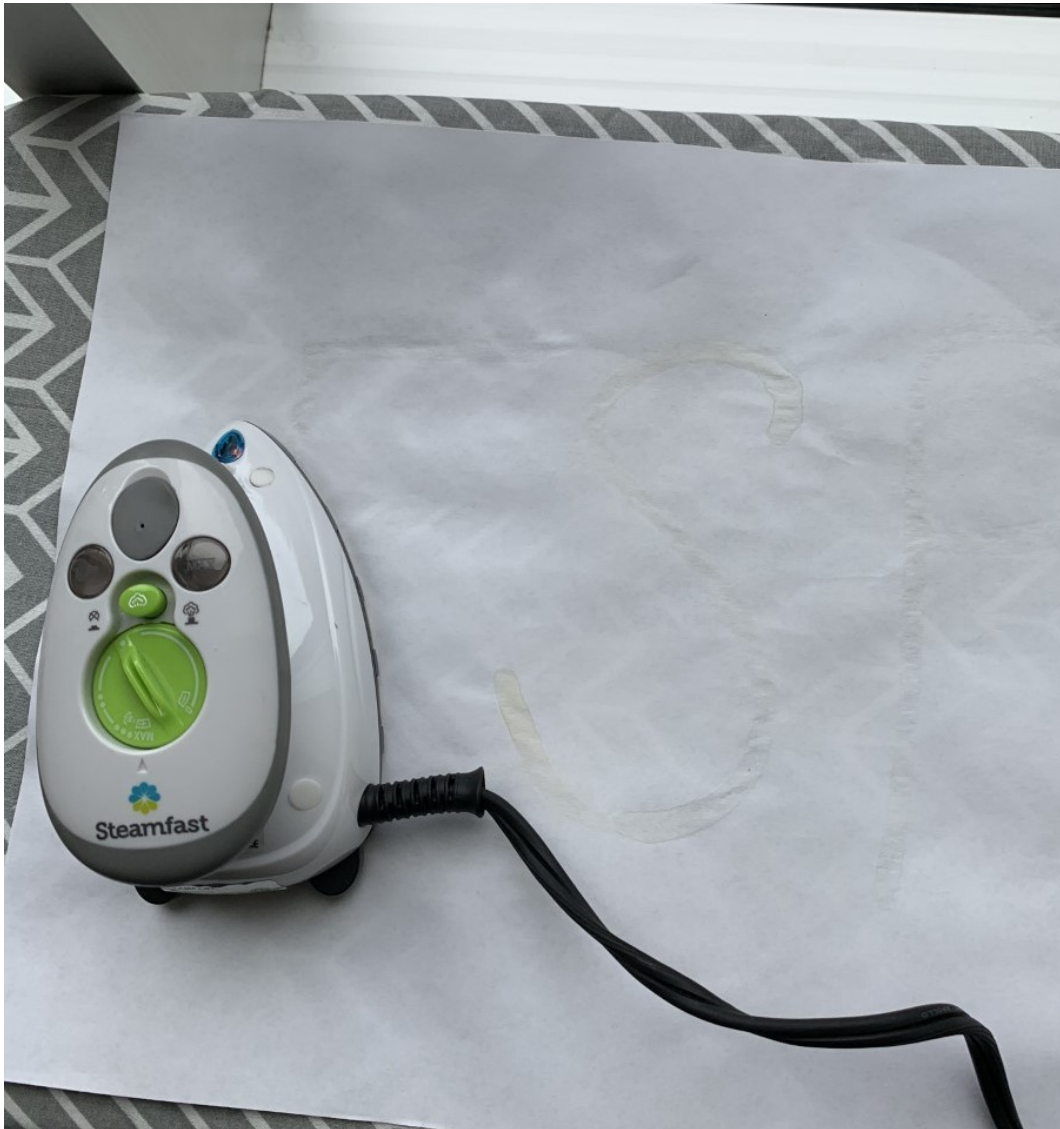
When it comes to a heat source, you have several options. The most common method is using a **hair dryer**, but this takes a while. You can also hold your paper close to an **electric burner** on the stove. Watch your fingers! Another option is placing your paper in the **oven** at 300 degrees. Watch it closely!

For some of the best results, you can run a hot **iron** over your paper. Just don't steam it!

Caution: For this awesome message reveal, have an adult help you with your heat source.

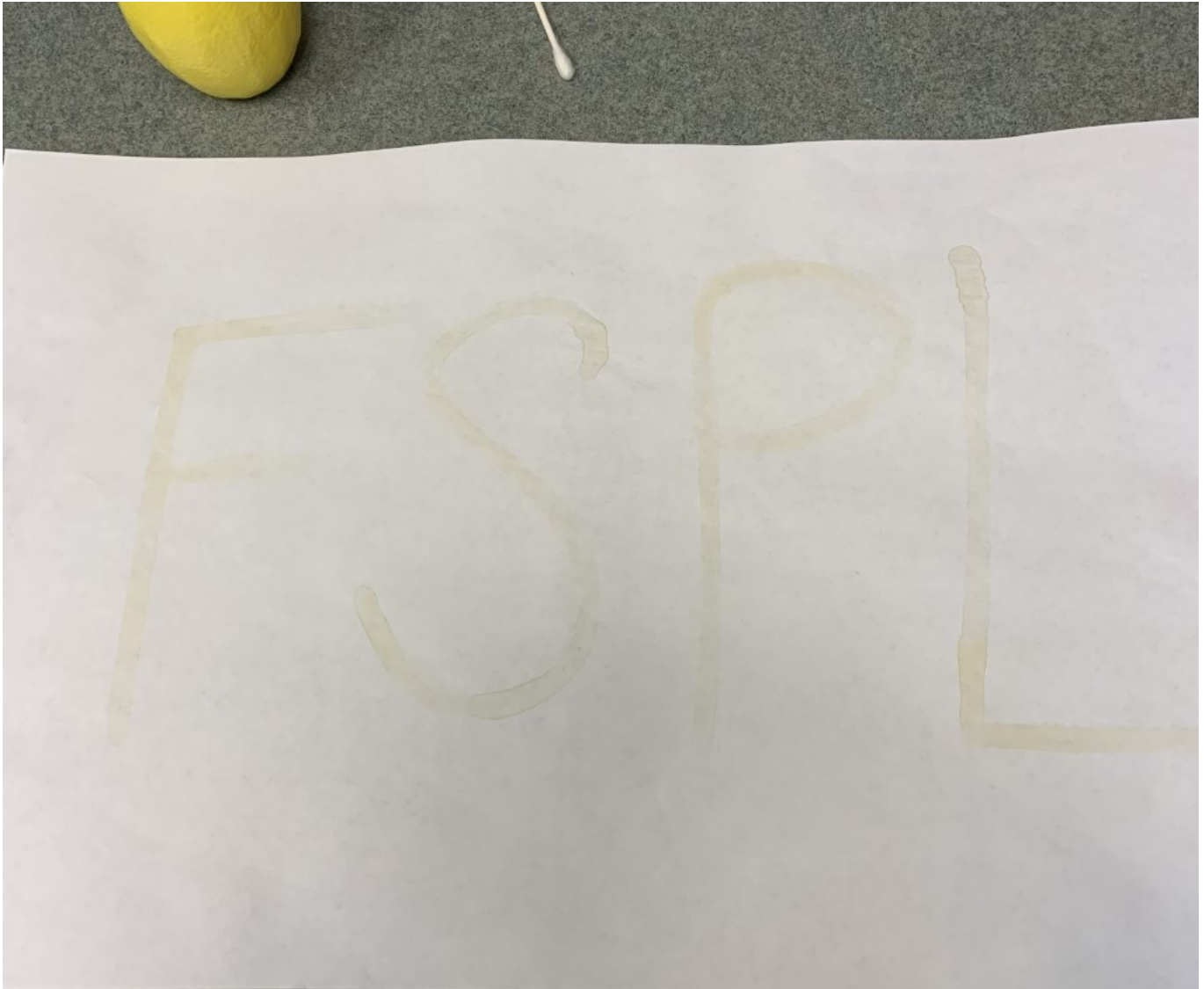


For my heat source, I chose ironing. Hold the hot iron over each section for several seconds at a time. Be careful! After a couple minutes, you'll start to see your message revealed.



Any idea what it says?

Check it out! My message says FSPL for Fort Smith Public Library. What does your message say?



What's the **STEAM** behind it?

Lemon juice has a high acidic level. The added heat causes some of the chemicals to break down, releasing carbon. When the carbon comes in contact with air, it oxidizes, causing the dried lemon juice to turn brown. Have you ever left a sliced apple out in the open for a while? What happens? Yep! It turns brown. Same principle.



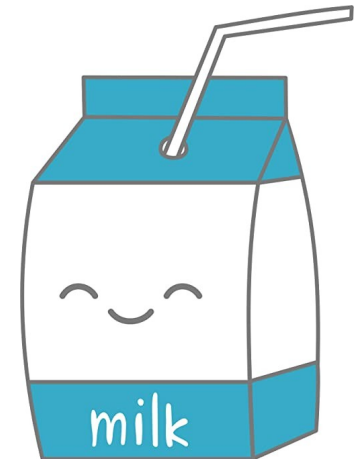
This happens with a wide variety of fruits.



Who came up with invisible ink, anyway?

Believe it or not, it's been around for a while.

A Latin naturalist named Pliny the Elder concocted his own invisible ink formula consisting of milk and lettuce extract, and that was more than 2,000 years ago!



Obviously, the methods are different now...

I hope you enjoyed this project as much as I did!
Be sure to keep up with all of our virtual events.
And remember: When life gives you lemons, make
invisible ink!



Miss Leah

