Invisible Ink Experiment

Have you ever tried making invisible ink? The Invisible Ink experiment shows you how to do it.

Would it not be cool to pass on secret messages only you and your friends can read? Invisible ink is fascinating, not just for kids but for everyone who is young at heart! You can actually get them from kiddie stores and other fun prank stores. But few people know that we can make invisible ink just by using materials that can be found in our very own kitchen!
Materials

There are a lot of ways on how we can create invisible ink. But for this Invisible Ink experiment, we will make use of the following materials:

- Milk
- Paper
- Clean paintbrush or cotton swab
- Desk lamp shade/light

Procedure

This experiment is very simple, yet very fun to do! Make sure you brought with you your friends so you can all try making invisible ink and at the same time exchange invisible messages!

First step is to get milk and dip your clean paintbrush or cotton swab in it, and using this as your ink. Write on the clean sheet of paper with the 'inked' paintbrush or cotton swab and allow it to dry. To read the hidden message, you'll have to apply heat to the paper. Turn on your desk lamp and hold the paper close to the light bulb, allowing the light bulb to heat the paper. The heat from the light bulb will cause the writings to darken, allowing you to read the invisible writings!

Discussion

There are several other materials you can use in the absence of milk. You can use lemon or lemon juice, baking soda mixed with water, vinegar or even grape juice. Basically, just anything acidic can be used as invisible ink. Also for the heating agent, you can make use of other heat sources such as sunlight or gas stove. However, you'll need the supervision of your parents if you are to make use of a gas stove as source of heat for this experiment.

Milk, lemon, vinegar, grape juice or any other acidic liquid, weakens the paper when applied. When you apply heat to it, the portion where you wrote your message oxidises and burns
faster than the surrounding paper dry from the ink. The said portion will turn brown, thus revealing your secret message.

Decoding

There is another way to decode the secret message and make it appear, without having to apply heat. You can do this by putting salt on the ink after writing on the paper. Wait for about 60 seconds before you wipe the salt off the paper and then colour over the writing with a crayon. See the message appear!

You can also reveal the message by applying grape juice over the message. Notice that the writings will change in colour when grape juice is applied!

Source URL: https://explorable.com/invisible-ink-experiment

Links: