

Important: Parents/carers read before students try this at home.

IMPORTANT!

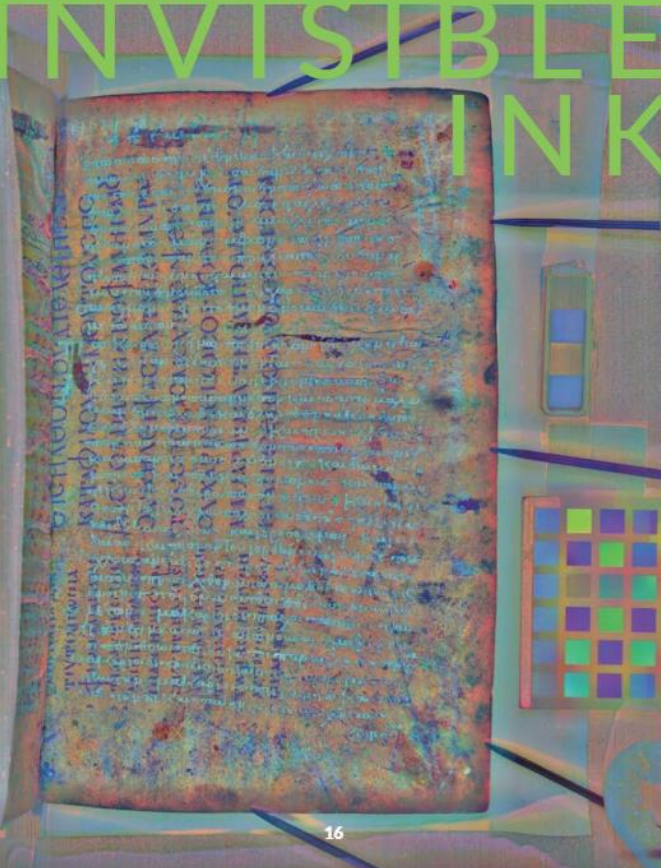
Supervision is required for this activity. Make sure your children do not hold the paper too close to the heat source, or for too long, as they might hurt themselves or burn the paper.



STEM Activity: Invisible Ink



WRITE A SECRET
MESSAGE WITH










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Cambridge University Library's exhibition, *Ghost Words: Reading the past*, takes a closer look at some of the lost words scraped off parchment and hidden beneath newer text, in objects known as palimpsests. These ghost words, which remained undiscovered for centuries, are being uncovered using a modern digital technique known as spectral imaging.

With this activity, you can create and reveal your own hidden message using this DIY invisible ink! What will your secret message say? And who will get to read it?

WHAT YOU NEED:

-  Half a lemon
-  Water
-  Cotton bud or paint brush
-  Spoon
-  Bowl
-  Plain white paper
-  Lamp / torch / radiator

METHOD:

1. Squeeze the lemon juice into the bowl with a few drops of water, and stir with the spoon.
2. Dip your cotton bud or paint brush into the lemon mixture and write your message onto the paper.
3. Wait for the lemon juice to dry so that it disappears completely.
4. When the paper is completely dry, heat it by holding it close to a torch or bulb, or over a warm radiator, to reveal your secret message!

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Image composite: credit 'Cambridge University Libraries'

BEHIND THE SCIENCE

How does this invisible ink work? When the lemon solution is heated, the juice oxidises and turns brown, revealing the hidden message!

Discover more lost words... by visiting our exhibition! Explore *Ghost Words: Reading the past* for free and from the comfort of your own home through the library's virtual exhibition platform. Head to www.lib.cam.ac.uk/ghostwords for details. #ULghostwords

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