

## Before Paper

Before paper was invented, humankind wrote, drew, and marked on other materials: stone, clay, metal, bark, leaves, animal hides, and more! The methods and materials used by various cultures often depended on a variety of things.

Here are some factors that contributed to the need for paper, can you think of more?

## Environment

The ecosystem of an area impacts the materials available in that area. For example, some Indigenous and First Nations cultures used white birch bark as paper because the bark was easy to harvest without harming the trees and the bark is white in color, as the name suggests, making it an excellent surface to mark on. But white birch trees do not thrive in hot climates, so it would not have been an option at the time for the Myaamia and Shawnee people living in what is now Miami.

## Labor

The amount of labor required to create a writing surface impacted which materials and methods continued to be used. Clay tablets started to become more popular as writing surfaces, replacing carved stone tablets, because the soft clay material could be marked with little effort. Then the clay tablet could be baked or fired to increase its durability.

## Portability

Some writing surfaces were used for trade and commerce. As trade routes expanded through globalization and colonialism, writing materials needed to become more portable. Imagine going to the grocery store and receiving the Rosetta Stone (weighing in at 1,676 pounds or 760 kilograms) instead of a paper receipt! Leaves such as palm leaves were much lighter to carry and took up less space than stone or clay tablets.

## Climate

The climate of an area also impacted the longevity of pre-paper materials. Egypt is famous for creating a well-known pre-paper writing surface: papyrus. Papyrus was made from a sustainable plant and the resulting writing surface was portable and could be turned into scrolls which meant each piece could contain more writing. However, papyrus can become brittle and deteriorate in the wrong climate, making it a poor choice for a global writing surface.

## Ephemerality

Not all writing needed to be permanent, so before paper was invented, many cultures were looking for a material that could be discarded or reused. This is one of the reasons some people turned to using animal hides (termed either “parchment” or “vellum”). Writing could be scratched off the surface of the skin and then the skin could be reused, making it a palimpsest. Some cultures used wax tablets that could be resurfaced to solve the problem of needing ephemeral writing surfaces as well.

## Cost

Because writing was becoming more common, writing surfaces needed to evolve as well to accommodate the demand. Many of the pre-paper surfaces such as engraved metal and parchment were very expensive to make either because of their material cost or their labor cost.

## Flexibility

As societies advanced, more information was being written down and shared. This meant that some of the pre-paper writing surfaces were now too limiting. For example, writing done on palm leaves was restricted by the size of the plants used and parchment was only as large as the animal that the skin came from. Early bookbinding helped but was limited by the materials: palm leaf books could only be as big as the leaves, and papyrus and amate bark scrolls were hard to reference.



## Now consider all of the factors mentioned:

Paper as we know it today is portable, fairly inexpensive to make and to purchase, made from sustainable materials that are readily available. Plus it can be ephemeral when needed but holds up to various climates, it can hold a lot of information, and it can be bound into books or used for so many other things!

**Paper is an amazing material that solves so many problems!**