

# HIEROGLYPHICS

Hieroglyphic writing first began around 5,000 years ago. Egyptians wrote in hieroglyphs up to about 400 AD. Hieroglyphs are like word pictures. There are more than 2,000 hieroglyphic characters.

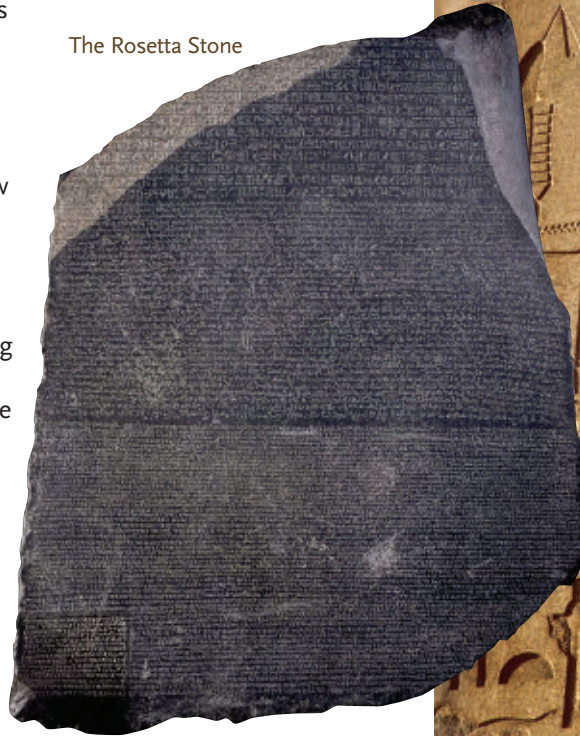
It has been almost 2,000 years since people used hieroglyphics to communicate. So how do we know how to read the characters? In 1799, in a town in Egypt called Rosetta, a soldier unearthed a large black stone. The stone came to be known as the Rosetta Stone because of where it was found. On the stone, there were three different types of writing that seemed to say the same thing and one was definitely Greek. Even though people could read the Greek words, many years went by before anyone could understand the hieroglyphics. Finally, in 1822, a Frenchman named Jean François Champollion cracked the code.

The Rosetta Stone is 114.4 centimeters high, 72.3 centimeters wide, and 27.9 centimeters thick. It weighs approximately 1,676 pounds. Since 1802, the Rosetta Stone has been kept at the British Museum in London, England. If you visit the museum, you can see this incredible artifact on display.


There were a few different types of hieroglyphs. Some stood for entire words, others were used for individual sounds, and still others represented groups of sounds or syllables. Egyptians also used hieroglyphs for math.


The basic hieroglyphs are referred to as the alphabet. Egyptians used them to spell just as we use our alphabet to spell words.


The Rosetta Stone




Let's look at the hieroglyphs used for individual sounds. Sometimes, the same hieroglyph was used for different letters because they sound the same.

P  P = POP

S  W = SAW

T H  = THE

The  could be a short "a" sound, a short "e" sound, or a short "o" sound.



Try these hieroglyphic puzzles. Remember! Think about how the letter sounds when you try to decode the hidden messages. Use the symbols to fill in the blank.

How did King Tut write his name?

LONG                      SHORT                      SHORT                      SHORT  
T U T A N K H A M U N

## HIEROGLYPHIC MATH

I	∩	ϩ
1	10	100

$IIII∩ = \square$

$∩ - II = \square$

$∩∩∩ \times III = \square$

$II∩ϩ = \square$

$ϩ + IIII = \square$

$ϩϩ \div IIII = \square$

$∩∩ϩ = \square$






$∩∩ - III = \square$

$∩∩ \times ϩ = \square$


$I + ∩ = \square$


$ϩϩ \times ∩ = \square$


$ϩ∩∩ IIII \div IIII = \square$


 VULTURE SHORT SHORT SHORT A E O	 ARM LONG A	 LOWER LEG B	 FOLDED CLOTH SOFT SOFT C S	 BASKET WITH HANDLE HARD C K	 HAND D	 PAIR OF REEDS LONG VOWEL E Y (LONG E)	 VIPER F V
 COBRA SOFT G J	 JAR STAND HARD G	 TWISTED WICK H	 SINGLE REED HARD VOWEL I Y Y (LONG I)	 LION L	 OWL M	 RIPPLE OF WATER N	 CHICK LONG SHORT O U W
 REED MAT P	 BASKET + CHICK Q	 MOUTH R	 DOOR BOLT SHARP S Z	 GARDEN POOL SH	 BUN T	 REED + CHICK LONG U	 BASKET + CLOTH X


Use the hieroglyphs to decode this secret message!











Hieroglyphs Today?

While no one communicates using hieroglyphs today, scientists and mathematicians use symbolic representations all the time. The key to becoming fluent in science and math is to understand the signs and symbols used in the fields.

Just as Ancient Egyptians could look at a hieroglyph and immediately know what it meant, scientists and mathematicians can instantly translate the symbolic representations of their work.

Can you match these symbols commonly used in science and math with their meaning?

- $\infty$  Square root
- $\Sigma$  Ohms
- $\pi$  Change
- $\sqrt{\quad}$  Wavelength
- $|\dots|$  Sum
- $\Delta$  Infinity
- $\lambda$  Pi
- $\Omega$  Absolute Value

