MAYAN NUMBERS
BEGINNER

Most **people today** count using a decimal system; using groups of ten.

Using one symbol, **you** can only count to 9.

The **Mayans** counted in groups of twenty.

The **Mayans** could count to 19 using one symbol

HOW TO READ THE NUMBERS

● = 1   ▬ = 5

Problem 1

● ● ●   1 + 1 + 1 = ?

Problem 2

●
▬

1 + 5 = ?

Problem 3

● ●
▬
▬

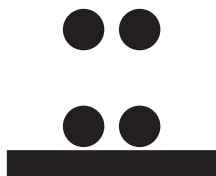= ?

Problem 4

● ● ● ●
▬
▬
▬

= ?

A NEW NUMBER

⬭ = 0

To count above 9, **we** add a 1 to the LEFT of a zero: 1 0. Which means 1 group of ten, and zero more.

When the **Mayans** count above 19, they added a 1 ABOVE a zero: ● Which means one group of twenty and zero more. ⬭

Example
Here is our number:

●●
●●
▬▬▬▬

On the top we have two groups of twenty.

On the bottom we have seven extra.

So, (2 x 20) + 7 = ?

Problem 1

●
▬▬▬▬
▬▬▬▬
●●●

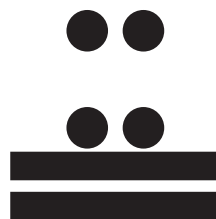Eleven groups of twenty.

Plus 3.

= ?

Problem 2

▬▬▬▬
▬▬▬▬
⬭

= ?

Problem 3

●●
●●
▬▬▬▬

= ?

NOTE: This will only get you to 399. If you want to count further, go to our website or ask about our advanced Mayan counting sheet at the front desk.

Mayan Numbers Advanced 1

Every time we add a new digit to the LEFT of another digit, we increase it exponentially by 10s.

So if we see the number "123" it means 1 group of 100 (or 10 x 10), 2 groups of 10, and 3 more.

Every time the Mayans add a new number group ABOVE another, it increases exponentially by 20s.

So if we see this number it means 1 group of 400 (20 x 20), 2 groups of 20, and 3 more.

Example
Here is our number:

There are three groups, so:

On the top there are three groups of 400 (20 x 20).

In the middle, there are zero groups of 20.

On the bottom there are 18 extra.

So, $(3 \times 20 \times 20) + (0 \times 20) + 18 = ?$

Problem 1

= ?
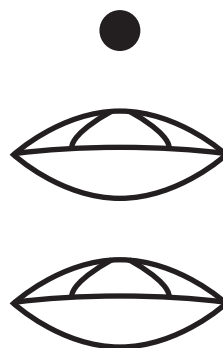
Problem 2

= ?

Problem 3

= ?

MUSEUM OF WORLD TREASURES

The number 1,234 means 1 group of 1,000 (10 x 10 x 10), 2 groups of 100 (10 x 10), 3 groups of 10, and 4 more.

This number is 1 group of 8,000 (20 x 20 x 20), 2 groups of 400 (20 x 20), 3 groups of 20 and 4 more.

Example

There are four groups, so:

11 groups of 8,000 (20 x 20 x 20).

1 group of 400 (20 x 20).

5 groups of 20.

0 extra.

So, (4 x 20 x 20 x 20) + (1 x 20 x 20) + (5 x 20) + 0 = ?

Problem 1

= ?

Problem 2

= ?

SEE THE PATTERN?

Here are some different ways to visualise the relationship of the number groups:

etc...			
Fifth Group	x 160,000	x $(20)^4$	x 20 x 20 x 20 x 20
Fourth Group	x 8,000	x $(20)^3$	x 20 x 20 x 20
Third Group	x 400	x $(20)^2$	x 20 x 20
Second Group	x 20	x $(20)^1$	x 20
Bottom Group	x 1	x $(20)^0$	x 1