National Museums Scotland

The Rhind Mathematical Papyrus

Much of our knowledge about Egyptian maths comes from a document known as "The Rhind Mathematical Papyrus". It was acquired in 1862-3 by Scottish archaeologist Alexander Henry Rhind.

The 5 metre papyrus is full of mathematical problems and their answers. It might have been used to teach scribes common mathematical calculations, so that they could be helpful when dealing with numbers and accounts. Some of the problems teach the scribe how to divide rations among workers, to calculate the angle of a pyramid or to work out how much grain could be stored in a specific building. The papyrus was written by a scribe called Ahmose because he "signed" his work, but he wrote that he had copied it from a much older document.

FACT:
A.Henry Rhind was the first archaeologist to excavate in Egypt. Rhind made some amazing discoveries, including an enormous tomb, built just after Tutankhamun's reign. However, he didn't work on his own, he was assisted by a skilled Egyptian team led by an expert excavator named Ahmed Abd er-Rasul.

Challenge: Can you solve this problem like the one in the Rhind Mathematical Papyrus?

Two houses each contain two cats. Every cat manages to catch two mice. How many objects are there all together? (houses + cats + mice)

When you've finished, Write your answer in hieroglyphs next to 'demedge' which means total in ancient Egyptian.
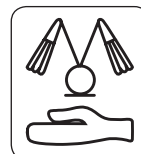
Hieroglyph 'demedge'.

Total: _____

All Class Challenge: Can you solve this problem from the Rhind Mathematical Papyrus as a class?

Seven houses each contain seven cats. Every cat manages to catch seven mice. Each mouse eats seven ears of wheat. If all the ears of wheat were planted, they would each produce seven tubs of grain. How many objects are there altogether (houses + cats + mice + ears of wheat+ tubs of grain)?

Let's break it down!

How many houses? _____

How many cats _____

How many mice? _____

How many ears of wheat? _____

How many tubs of grain? _____

Now add up all these numbers. _____

When you've finished, Write your answer in hieroglyphs next to 'demedge' which means total in ancient Egyptian.

Total: _____

Congratulations if you solved the problem – you would have made a great scribe in ancient Egypt!

Answers:

All Class Challenge

Houses = 7
Cats = 49
Mice = 343
Ears of wheat= 2401
Tubs of grain = 16807

Total: 19607

Challenge:

Houses = 2
Cats = 4
Mice = 8

Total: 14