Il Giardino di Archimede
Un Museo per la Matematica

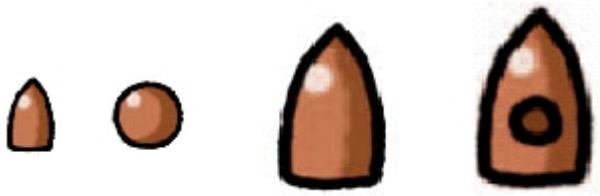
LEONARDO DA VINCI

Istruzione e cultura

PROJECT PIT.AGORA' – PROGRAMME LEONARDO D.V. TOI 2010
Code CUP : G12F10000140006
Data monitoring card - laboratory Egyptians - Primary School
school:..... teacher:.....
class:.....
student:.....

You have learned the way the ancient Sumerians counted**.**

1. Which ones among the following pebbles do you remember? Write below the corresponding values.



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2. How many  can you use instead of one  ? .....

Draw them here:

	 .....

3. How many  instead of one  ?

Draw them here:

	 .....

4. How many  instead of one  ?

Draw them here:


.....

5. How many  instead of one  ? .....

Draw them here:


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6. How many  instead of one  ?

Draw them here:

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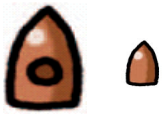
7. Write the value of the following groups of pebbles.

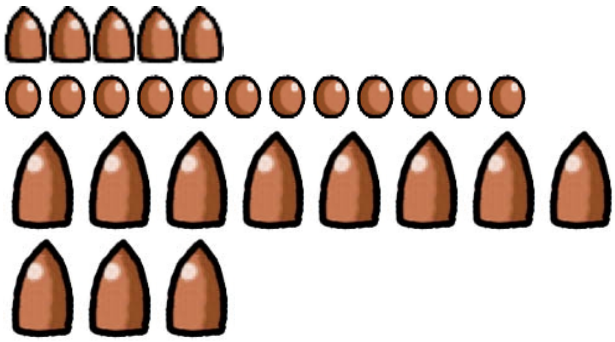
8. Write the following numbers by using the sumerian pebbles and our system:

	With the sumerian pebbles (draw)	With our figures
seven		
twelve		
fifty nine		
sixty		
sixty two		

seventy		
eighty four		
one hundred		
one hundred and twenty		
three hundred and one		
six hundred		
seven hundred and twenty two		
one thousand and two hundred		

9. Look at the number below. Can you represent them with less pebbles, making some “changes”? If this is the case, draw the new representation on the right:



10. Which is the largest number that can be written by using only this pebble  ?
Draw it, but remember that when there are too many pebbles you must change.

.....

Which is the largest number that can be written by using only this pebble  ?
Draw it, but remember that when there are too many pebbles you must change.

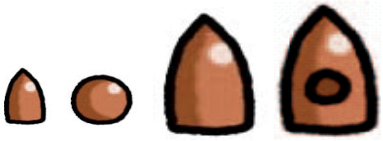
.....

11. Which is the largest number that can be written by using only these two pebbles? Draw it:


.....

12. Which is the largest number that can be written by using only these two pebbles? Draw it:


.....

13. Which is the largest number that can be written by using only these four pebbles? Draw it:


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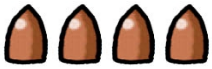
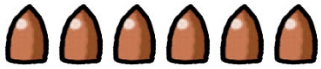
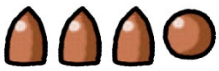
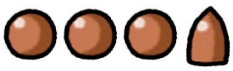
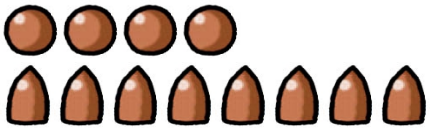
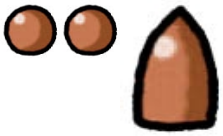
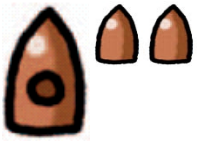
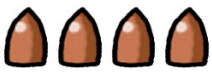
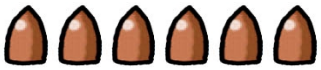
14. By inserting the appropriate symbol (=, > or <) show which of the two groups of pebbles has a larger value.

	<	
		
		
		
		
		

15. Draw the pebbles corresponding to the sum of the couples of numbers below :

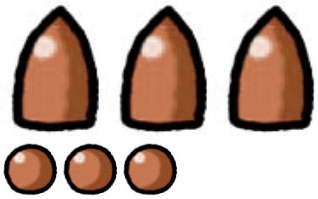
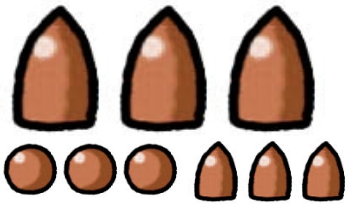
		result
		

		result
		

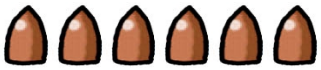
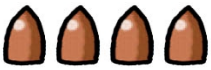
		result
		

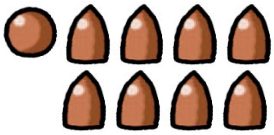
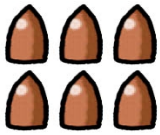
		result

		result
		

16 . Draw the pebbles corresponding to the subtraction of the second number from the first

		result
		

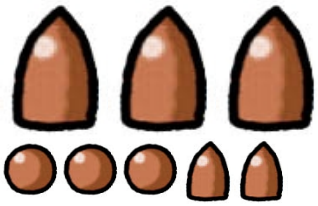
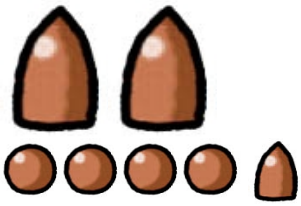
		result
		

		result
		

		result

		result
		

		result
		

16. Describe the procedure for adding  and 

using the sumerian pebbles.

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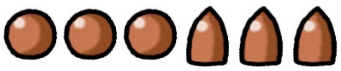
17. Describe the procedure for subtracting  from 

using the sumerian pebbles.

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18. Did you know that there have been different ways of writing numbers and making calculations?
No Yes. Which
ones? .....

19. With respect to our system of writing numbers, the Sumerian system is
[ ] - easier
[ ] - funnier
[ ] - more complicate
[ ] - more boring
[ ] - ....

20. With respect to our system of writing numbers, the Sumerian system is better
because .....
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is worst because .....
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21. In your opinion, in what operations the Sumerian system is better than ours?
[ ] - Writing numbers [Yes] [No] because:.....
.....
.....
[ ] - Summing [Yes] [No] because:.....
.....
.....

[ ] - Subtracting [Yes] [No] because:.....

.....

.....

22. Knowing the Sumerian system was useful because (you can check more boxes):
[ ] - not at all
[ ] - on the contrary, it made me more confused in what I already knew
[ ] - I understood better the use of base ten
[ ] - I understood better what does it mean representing a number
[ ] - I understood the difference between the value of a number and its representation (that can be done in different ways)
[ ] - I understood what does it mean that our system of writing numbers is 'positional'
[ ] - I understood that there are several ways of making calculations
[ ] - I did exercise with mental calculations
[ ] - I learned some calculating "tricks"

16. How much did you like this experience? Give a note from 0 to 9:

nothing at all [0] [1] [2] [3] [4] [5] [6] [7] [8] [9] very much