3

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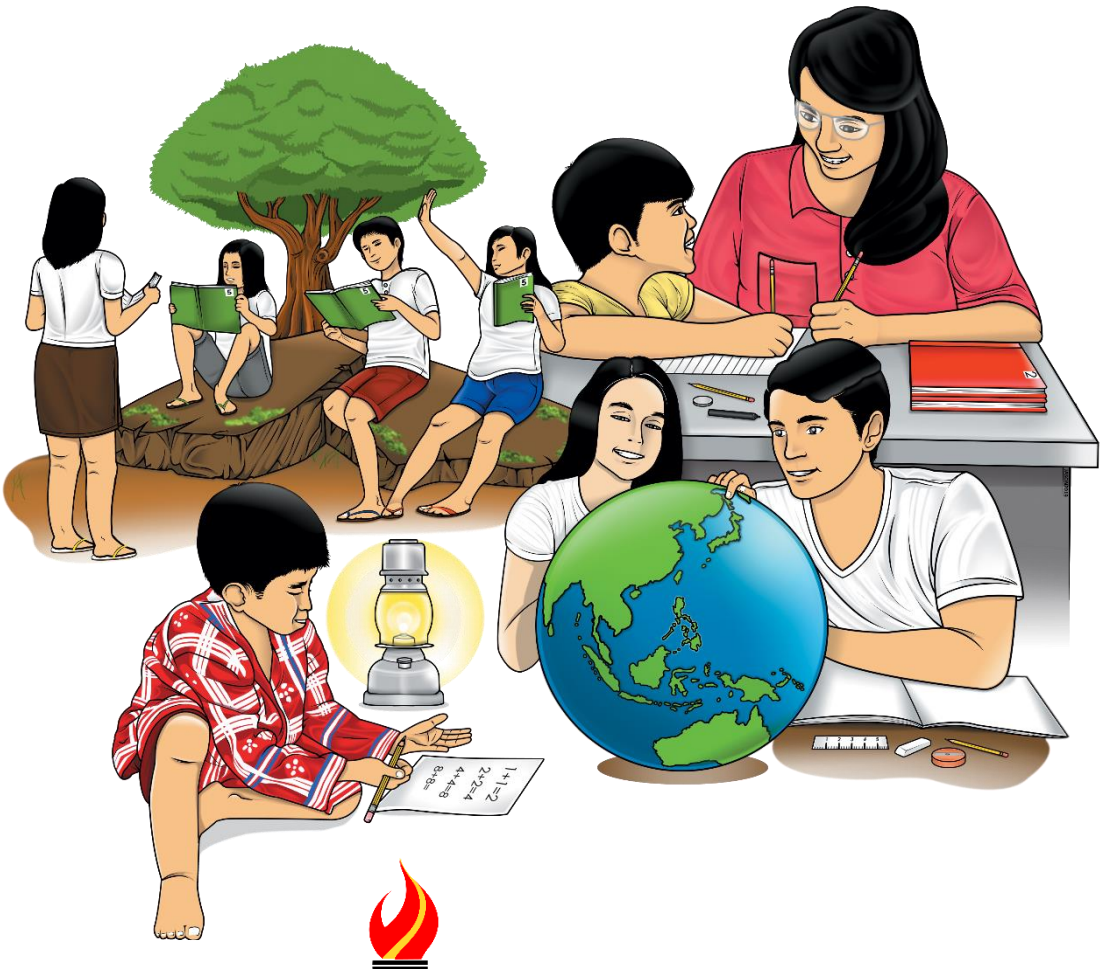
Mathematics

Quarter 1 – Module 1:
Visualizing Numbers up to 10 000



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Mathematics

Quarter 1 – Module 1:
Visualizing Numbers up to 10 000

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Introductory Message

This Self-Learning Module (SLM) is prepared so that you, our dear learners, can continue your studies and learn while at home. Activities, questions, directions, exercises, and discussions are carefully stated for you to understand each lesson.

Each SLM is composed of different parts. Each part shall guide you step-by-step as you discover and understand the lesson prepared for you.

Pre-tests are provided to measure your prior knowledge on lessons in each SLM. This will tell you if you need to proceed on completing this module or if you need to ask your facilitator or your teacher's assistance for better understanding of the lesson. At the end of each module, you need to answer the post-test to self-check your learning. Answer keys are provided for each activity and test. We trust that you will be honest in using these.

In addition to the material in the main text, Notes to the Teacher are also provided to our facilitators and parents for strategies and reminders on how they can best help you on your home-based learning.

Please use this module with care. Do not put unnecessary marks on any part of this SLM. Use a separate sheet of paper in answering the exercises and tests. And read the instructions carefully before performing each task.

If you have any questions in using this SLM or any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator.

Thank you.

What I Need to Know

This module helps you comprehend whole numbers which can be applied to different learning situations. The language used recognizes your diverse vocabulary backgrounds. The lessons then are organized according to the sequence standards which can be found also in the Mathematics Grade 3 learning materials.

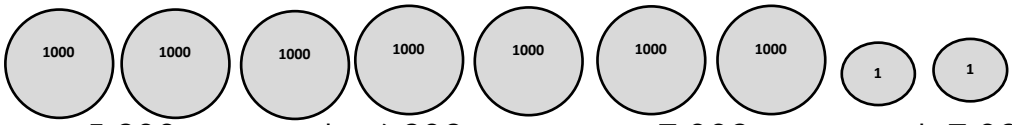
After going through this module, you are expected to visualize numbers from 1 001 to 10 000 (M3NS-Ia-1.3).

Enjoy your journey. Good luck!

What I Know

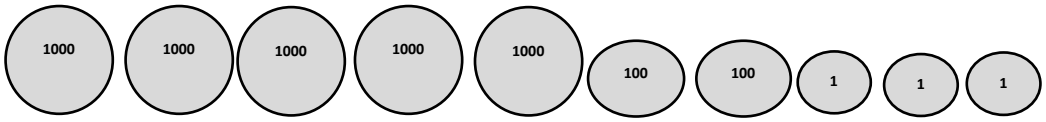
Read each question carefully. Encircle the letter of the correct answer.

1. Which number is correctly represented by the set of number discs?



a. 5 200 b. 6 202 c. 7 002 d. 7 020

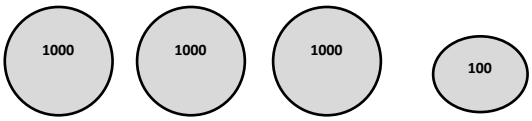
2. Which number is correctly represented by the set of number discs?



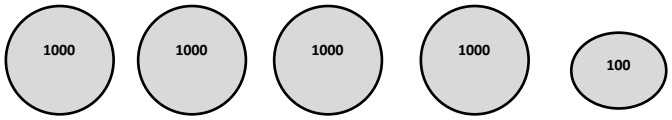
a. 4 223 b. 4 302 c. 5 103 d. 5 203

3. Which set of number discs represents 4 500?

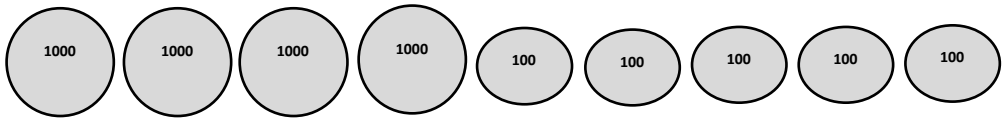
a.



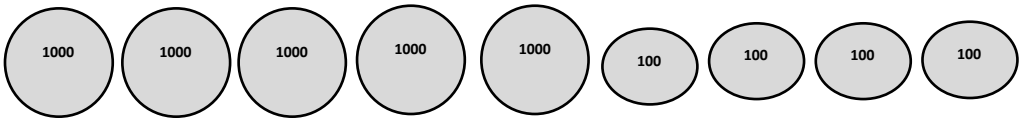
b.



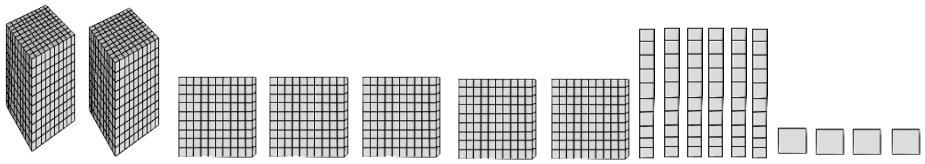
c.

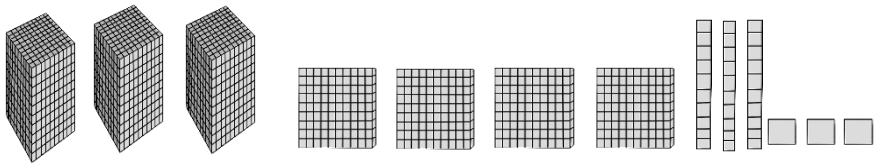


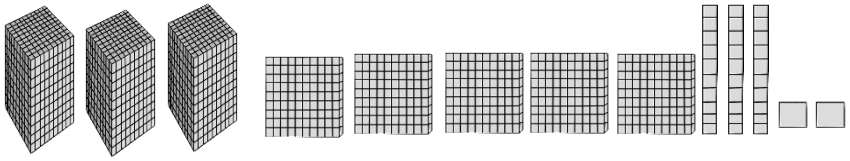
d.

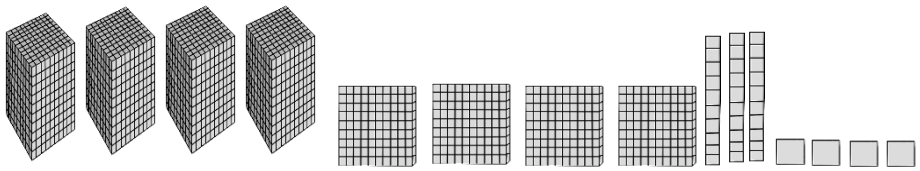


Which set of blocks, flats, longs, and squares shows 2 564?

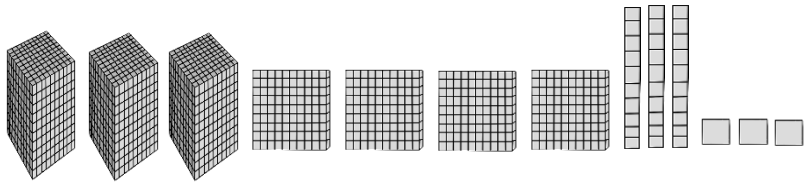
a. 

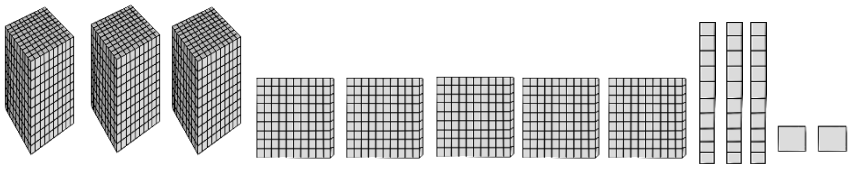
b. 

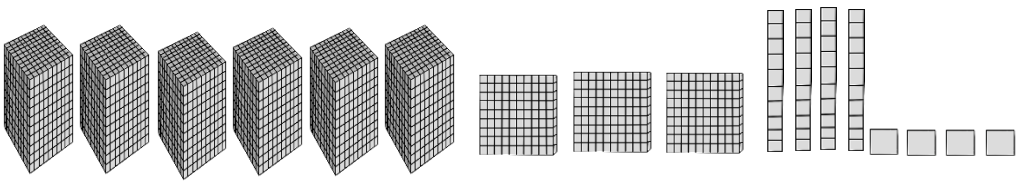
c. 

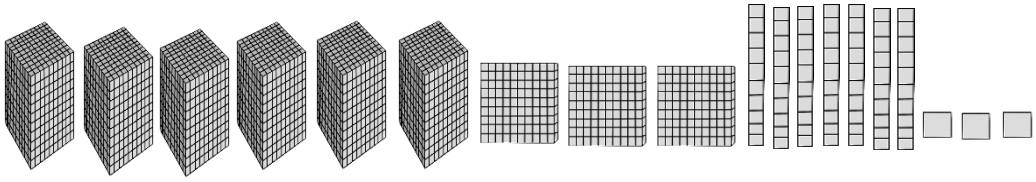
d. 

5. Which set of blocks, flats, longs, and squares is equal to six thousand, three hundred seventy-three?

a. 

b. 

c. 

d. 

Lesson	Visualizes numbers from 1 001 to 10 000

Typhoon Pablo hit the Province of Davao Oriental on December 4, 2012. Groups of volunteers came to distribute relief goods to the victims. They donated a total of 4 372 sacks of rice. The recipients were grateful for the help extended.

Have you seen a mountain of sacks of rice? Can you imagine how plenty 4 372 sacks of rice is?

What's In

Let us read the numbers below.

Think about this!

Can you tell the digits in **ones** and **tens** place?

Two-digit numbers:

67	sixty-seven
34	thirty-four
86	eighty-six
59	fifty-nine
25	twenty-five

Three-digit numbers:

549	five hundred forty-nine
297	two hundred ninety-seven
653	six hundred fifty-three
784	seven hundred eighty-four
962	nine hundred sixty-two

Think about this!

Can you tell the digits in **thousands** and **hundreds** place?

Four-digit numbers:

Six thousand, two hundred sixty	6 260
One thousand, five hundred twenty-eight	1 528
Two thousand, three hundred fifty-nine	2 359
Nine thousand, six hundred forty-two	9 642
Eight thousand, nine hundred thirty-five	8 935

Notes to the Teacher

Review the learner on symbols that represent the numbers from ones, tens, hundreds, and thousands.

What's New

Let us go back to the situation presented previously. How many sacks of rice were distributed to the victims of Typhoon Pablo?

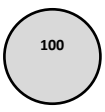
Answer: There were 4 372 sacks of rice being distributed to the victims.

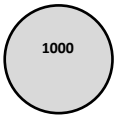
How many digits are there? What is the biggest place value of the given number?

Representation using number discs is one way to visualize numbers.

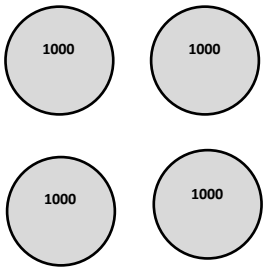
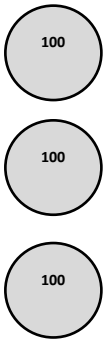
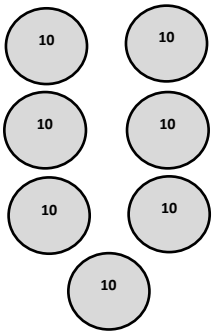
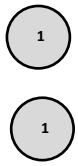
 = one (1)

 = ten (10)

 = hundred (100)

 = thousand (1 000)

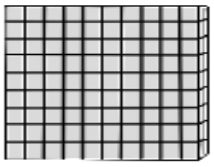
Observe how the number discs represented the number of sacks of rice distributed to the victims of Typhoon Pablo.

			
Four 1 000	Three 100	Seven 10	Two 1
Total value: 4 000	Total value: 300	Total value: 70	Total value: 2
4 372			

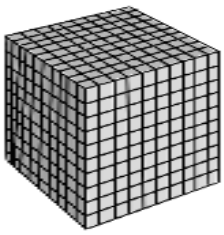
Representation using blocks and grids is another way to visualize 4 372.

1 square = one (1)

10 squares = 1 long (1 ten)

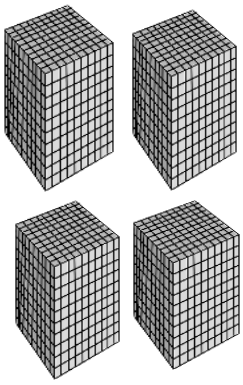
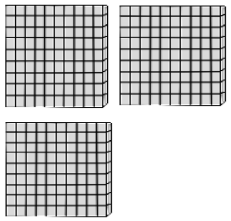
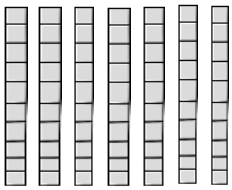


10 longs (10 tens) = 1 flat (1 hundred)



10 flats (10 hundreds) = 1 block (1 thousand)

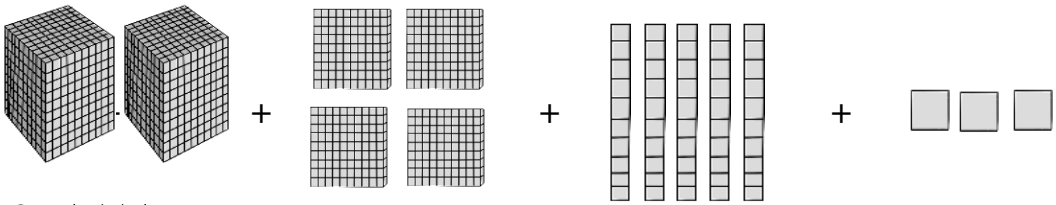
Using blocks, flats, longs, and squares to represent the number of sacks of rice distributed to the victims during the Typhoon Pablo is shown below.

			
Four 1 000	Three 100	Seven 10	Two 1
Total value: 4 000	Total value: 300	Total value: 70	Total value: 2
4 372			

Visualizing other numbers using blocks, flats, longs, and squares:

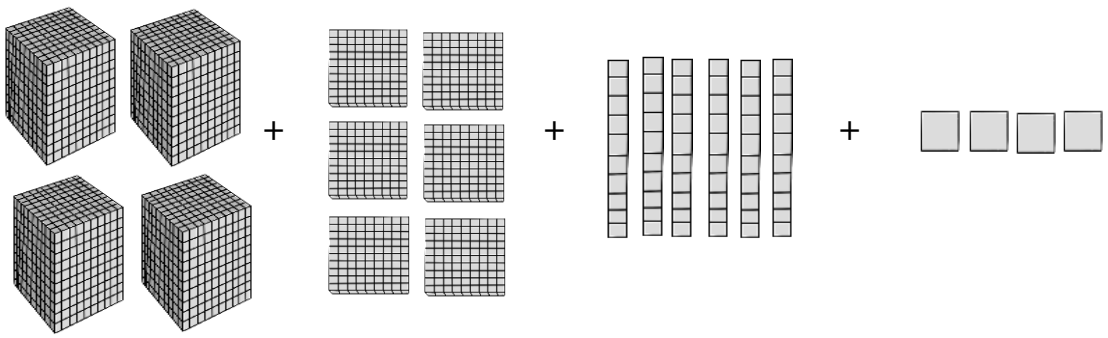
1. 2 453

2 000	+	400	+	50	+	3
2 blocks	+	4 flats	+	5 longs	+	3 squares



2. 4 664

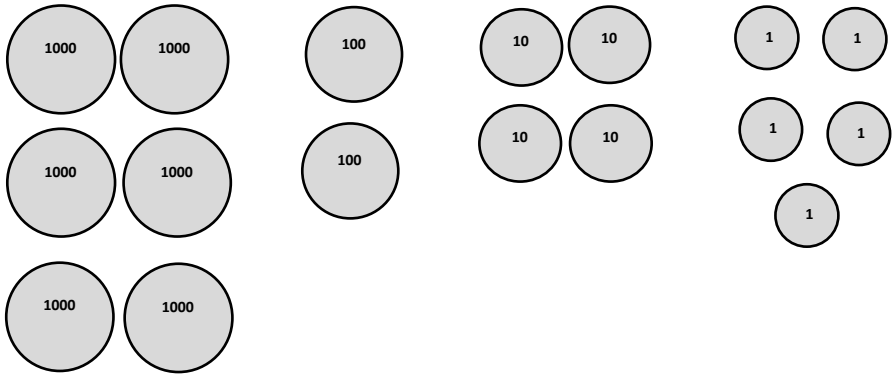
4 000	+	600	+	60	+	4
4 blocks	+	6 flats	+	6 longs	+	4 squares



What is It

We visualize numbers by using representations. In this lesson, we use number discs, blocks, flats, longs, and squares to represent numbers. We can also use tables, charts, and other things in visualizing numbers.

Arealen used 6 pieces of 1 000 discs, 2 pieces of 100 discs, 4 pieces of 10 discs, and 5 pieces of 1 disc to represent the number. What number is shown by Arealen's number discs?



6 000 + 200 + 40 + 5 = 6 245

To visualize numbers and to get the value being visualized, simply collect all the same number disc by 1 000, by 100, by 10 and by 1.

In the given example above, we have

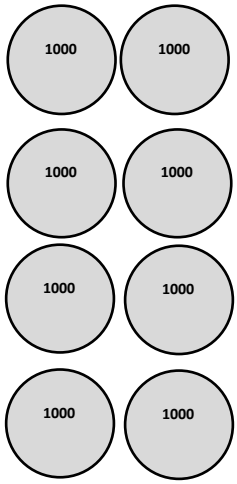
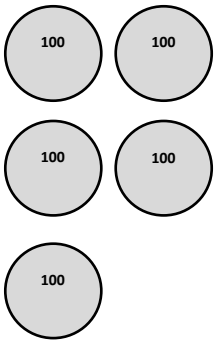
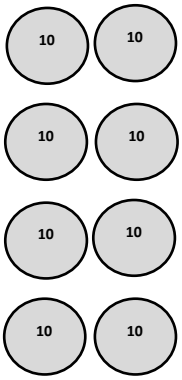
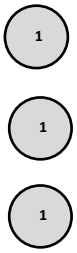
1 000 disc	–	6	(thousands place) =	6 000
100 disc	–	2	(hundreds place) =	200
10 discs	–	4	(tens place) =	40
1 disc	–	5	(ones place) =	5

The number being shown is: **6 245**

What's More

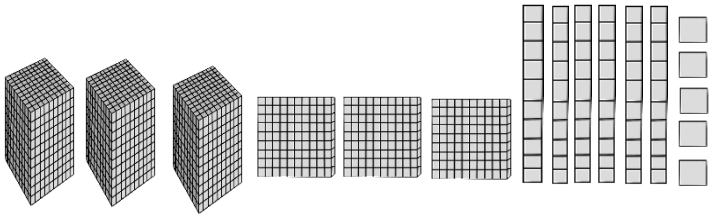
Activity 1

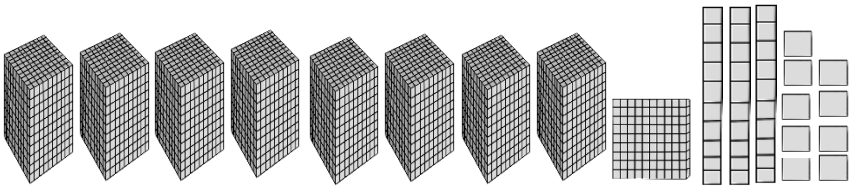
What number is represented by these number discs? Write your answer in your paper.

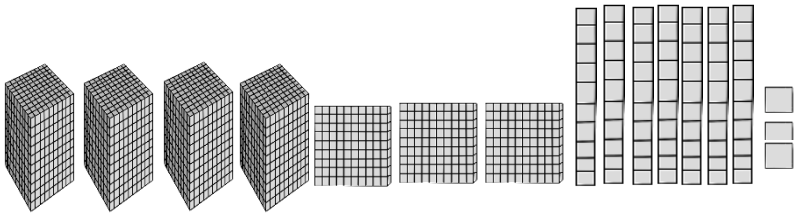
			
There are __ 1000	There are __ 100	There are ___ 10	There are ___ 1
Total value: _____	Total value: _____	Total value: _____	Total value: _____
Answer: _____			

Activity 2

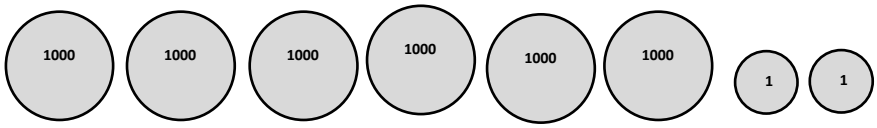
Write the number represented by each set of numbers discs, blocks, flats, longs, and squares.

1.  _____

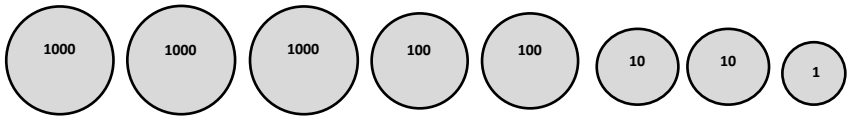
2.  _____



3. _____

4. 

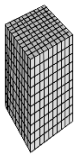
_____

5. 

_____

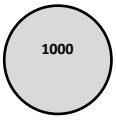
What I Have Learned

In visualizing numbers 1 001 up to 5 000, we can use the following representation:

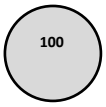
 blocks (thousands) ,  flats (hundreds),

 longs (tens) and square (ones).

Number discs is another way of visualizing numbers.



for thousands,



for hundreds,

for tens and

for ones.

What I Can Do

Activity 3

Use blocks, flats, longs, and squares to illustrate the following numbers.

1. 9 215

2. 3 428

3. 4 614

Use number disc to illustrate the following numbers.

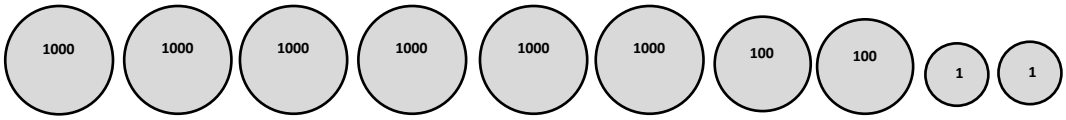
4. 1 709

5. 10 000

Assessment

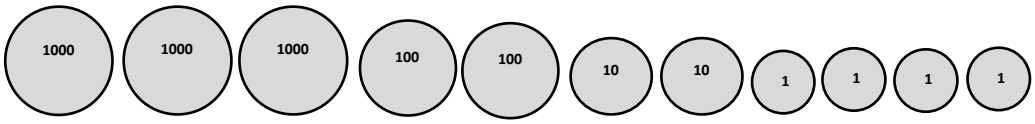
Directions: Multiple Choice. Read each question carefully. Select the letter of the correct answer.

1. Which number is correctly represented by the set of number discs below?



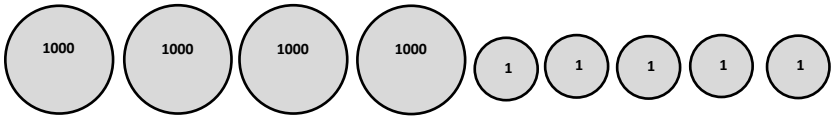
a. 8 200 b. 6 202 c. 6 002 d. 8 002

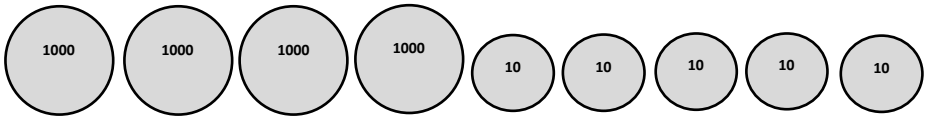
2. Which number is correctly represented by the set of number discs below?

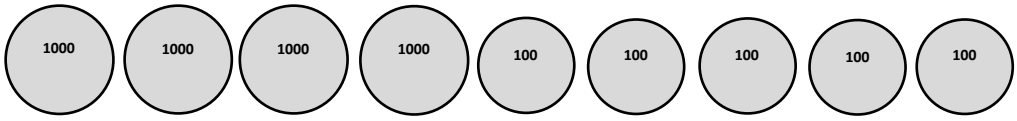


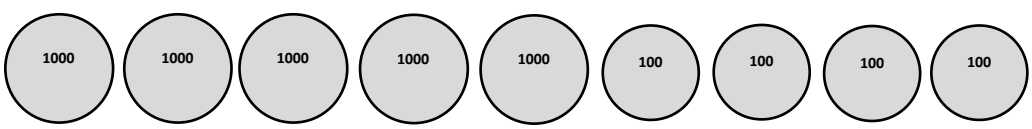
a. 3 223 b. 2 342 c. 4 204 d. 3 224

3. Which set of number discs represents 4 500?

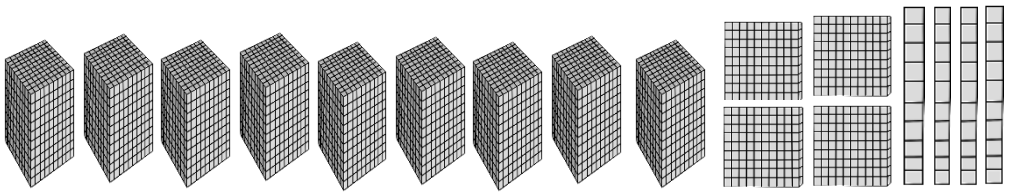
a.


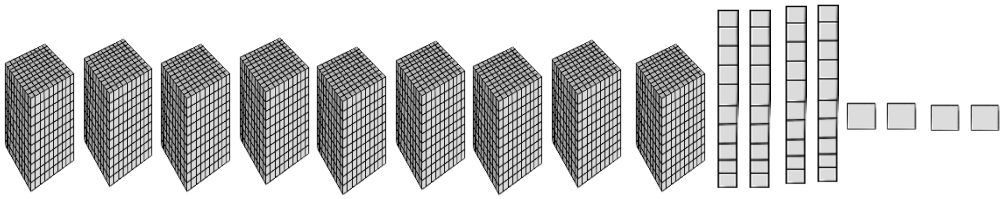
b.


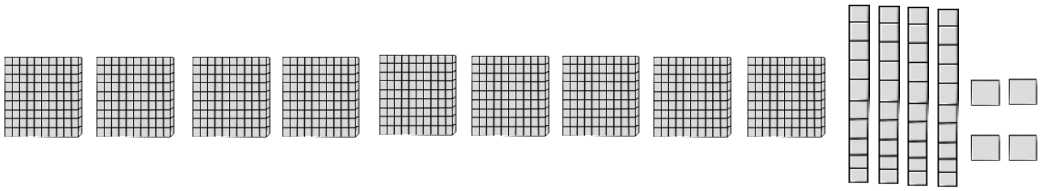
c.


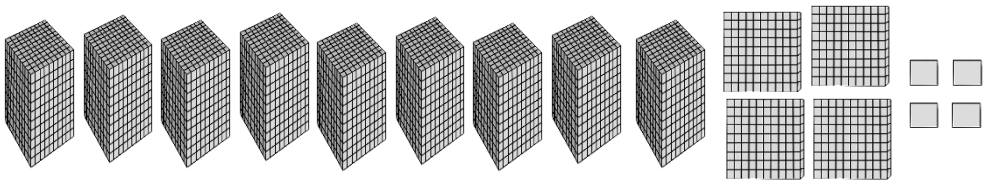
d.


4. Which set of blocks, flats, longs, and squares shows 9 044?

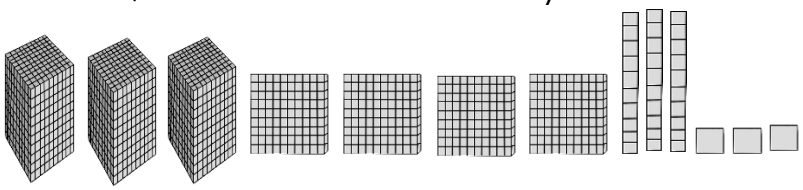
a. 

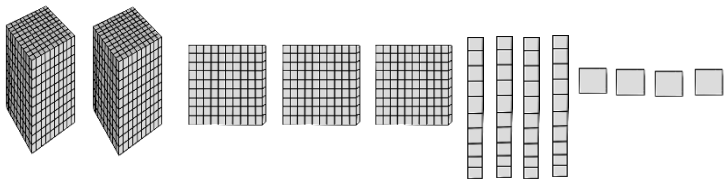
b. 

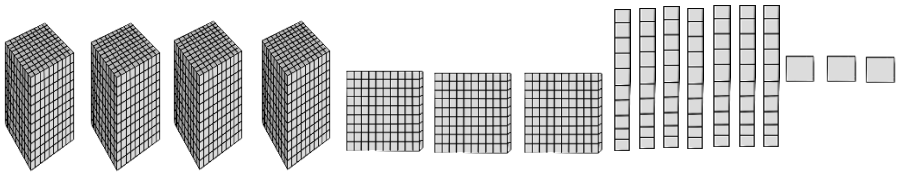
c. 

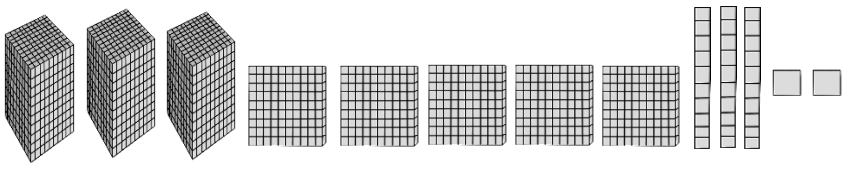
d. 

5. Which set of blocks, flats, longs, and squares is equal to four thousand, three hundred seventy-three?

a. 

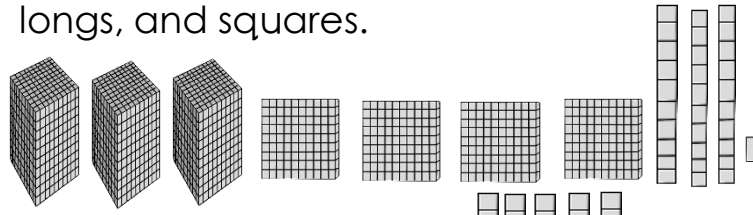
b. 

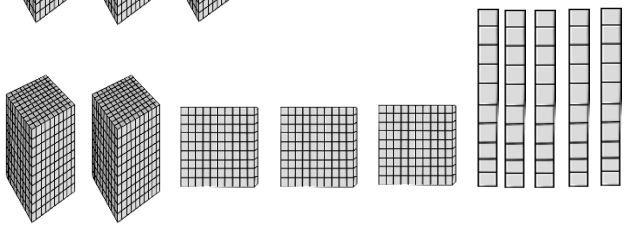
c. 

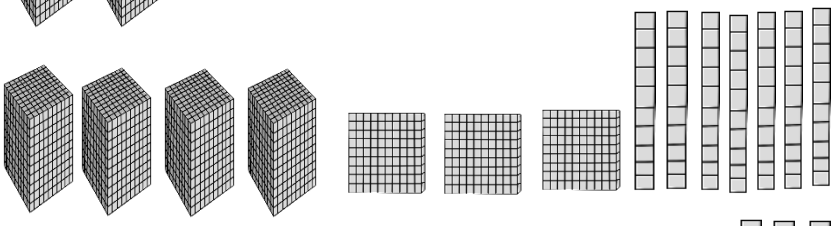
d. 

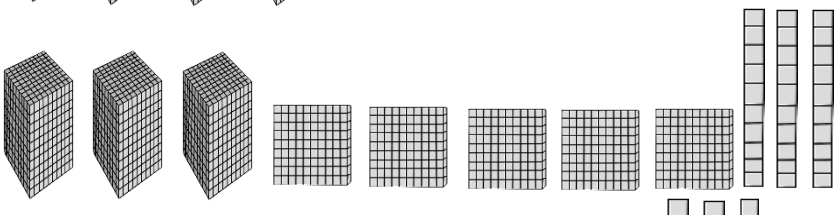
Additional Activities

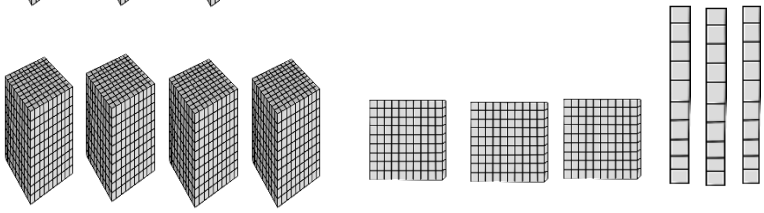
A. Write the number represented by each set of blocks, flats, longs, and squares.

1.  _____

2.  _____

3.  _____

4.  _____

5.  _____

B. Read the following items. Then, write your answer to each item in your notebook.

1. There were 9 843 avid fans who were watching the SEA Games at the Philippine Arena in Bulacan. Draw number discs to show the given number.

2. How will you show the number 8 534 using blocks and grids?

Answer Key

What I Know

1. C
2. D
3. C
4. B
5. C

What's In

What's More

Activity 1

8 000, 500, 80 and 3

8 583

Activity 2

1. 3 365
2. 8 139
3. 4 373
4. 6 002
5. 3 221

What I Can Do

Activity

1. 9 blocks, 2 flats, 1 long and 5 squares
2. 3 blocks, 4 flats, 2 longs and 8 squares
3. 4 blocks, 6 flats, 1 long and 4 squares
4. 1 1000-disc
   7 100-disc
   9 1-disc
5. 10 1000-disc

Assessment

1. B
2. D
3. C
4. B
5. C

Additional Activity

A.

1. 3 433
2. 2 354
3. 4 373
4. 3 532
5. 4 334

B.

1. 9 thousands discs, 8 hundreds discs, 4 tens discs and 3 ones discs.
2. 8 blocks, 5 flats, 3 longs and 4 squares

References

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Chingcuangco, Ofelia G., Henry P. Contemplacion, Eleanor I. Flores, Laura N. Gonzaga, Carolina O. Guevara, Robesa R. Hilario, Gerlie M. Ilagan, Maritess S. Patacsil, Ma. Corazon C. Silvestre, Remylinda T. Soriano, Victoria C. Tafalla, Teresita P. Tagulao, and Dominador J. Villafria. Mathematics 3 *Kagamitan ng Mag-aaral sa Sinugbuanong Binisaya*. Book Media Press, Inc. 22-E. Boni Serrano Ave., Q.C. In joint venture with Printwell, Inc. 38 Dansalan St., Mandaluyong City. 2014, 1-10.

Visualizing Numbers up to 10 000, Math for Grade 3. BEAM LG Gr. 3 Module 1/Whole Numbers. Accessed May 15, 2020. https://www.youtube.com/watch?v=cy5t7ctg9Lprg&feature=share. https://lrmds.deped.gov.ph/com. https://www.youtube.com/watch?v=1tq5ZHjRL98&feature=share, Visualizing Numbers.

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